2010

THE WEST IN CANADA RESEARCH SERIES | GOING FOR GOLD PROJECT

State of the West

2010 WESTERN CANADIAN DEMOGRAPHIC AND ECONOMIC TRENDS

BY ROBERT ROACH, SENIOR RESEARCHER AND DIRECTOR OF THE WEST IN CANADA PROJECT

Canada West FOUNDATION

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THE WEST IN CANADA PROJECT

Canada is a wonderfully diverse country with its people spread across the second largest nation-state in the world. There are many things that tie us together as Canadians, but there is no doubt that each part of the country is unique and brings a different set of characteristics and perspectives to the national table. Understanding and integrating this diversity is a challenge as big as Canada itself.

Western Canada—British Columbia, Alberta, Saskatchewan, and Manitoba—forms one of many distinct regions within Canada. The West is no more homogenous than any other region or sub-region, but there is an abundance of features that tie the four western provinces together in special ways. Shedding light on this region, communicating its frustrations and aspirations to the national community, seeking ways to build on the common ground found in the West, weaving the region into the national whole, and highlighting public policy innovation in the West are the goals of the West in Canada Project. The project, like Canada West Foundation, is based on the idea that strong and prosperous regions make for a strong and prosperous Canada.

GOING FOR GOLD PROJECT

The Canada West Foundation's Going for Gold Project is focused on options for improving western Canada's economic competitiveness in the global economy. The Going for Gold Project has been made possible with the support of:

Western Economic Diversification Canada | Diversification de l'économie de l'Ouest Canada

Canada

For more information about the Canada West Foundation research initiatives, please contact Will Kimber, Vice-President, Research at kimber@cwf.ca.

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ABBREVIATIONS

Alberta	AB
British Columbia	BC
Manitoba	MB
New Brunswick	NB
Newfoundland and Labrador	NL
Northwest Territories	NT
Nova Scotia	NS
Nunavut	NU
Ontario	ON
Prince Edward Island	PE
Quebec	QC
Saskatchewan	SK
Yukon	YT
BC, Alberta, Saskatchewan, Manitoba	West
Rest of Canada (Canada less the West)	ROC

Preface

Canada is a land of incredible diversity. This diversity includes a vast and varied geography, one of the most multi-cultural societies in the world, a wide range of economic activity, different political cultures and unique local histories. The concerns of prairie farmers are different from those of Toronto bankers. The economic realities of Nova Scotia are different from those of Manitoba. Life in Vancouver is different from life in Quebec City. The list goes on.

As a result, while there is much that links this great country together, it is critically important that we work hard to understand its unique components. There are many ways to do this, but one that works very well is to group the provinces into a series of regions. This sidesteps the problems caused by analyzing Canada as a whole. National statistics and studies are valuable, but the regional diversity that characterizes Canada tends to get lost in national summaries. Studies that include all 13 provinces and territories, while also useful, suffer from either information overload or from being spread too thin as they try to cover the full width and breadth of the country.

Given this, there is room for studies that chop up the country into more digestible units, of which western Canada is one. The four western provinces are linked by history, geography, politics, internal migration and economics. At the same time, the region, like Canada, is extremely diverse. As a result, it offers both a logical grouping of places and people and more than enough differentiation to keep things interesting.

Understanding the four western provinces is important because it is useful to be aware of all parts of the country, because western Canada is instrumental to Canada's present and future economic success and because there is much that the region has to offer to Canada and to the world.

Western Canada is home to 3 in 10 Canadians, it is the gateway to Asia, it contains vast stocks of natural resources and it has thriving urban areas. Two-thirds of Canada's Aboriginal people live in the West, many of Canada's largest corporations are located in the region and half of the nation's NHL franchises are in western cities.

The West is most definitely not a distant frontier or hinterland to be exploited for the benefit of those in the established towns and cities of the old dominion. It is an integral and full participant in the great experiment that is Canada. The West is many things to many people and this compendium of statistics about the region is intended to provide a basic demographic and economic context for understanding its many facets.

State of the West 2010 is dedicated to the many people who call the West home and to those who have supported and continue to support the efforts of the Canada West Foundation to showcase the West, to give voice to its concerns and aspirations, and to make Canada stronger by increasing understanding of the people and places that comprise it.

Robert Roach

CALGARY, AUGUST 2010

CHAPTER 1

Population Change in the West

3 IN 10
Canadians live in one of the four western provinces.

The West's share of the national population has increased from 26.6% in 1971 to

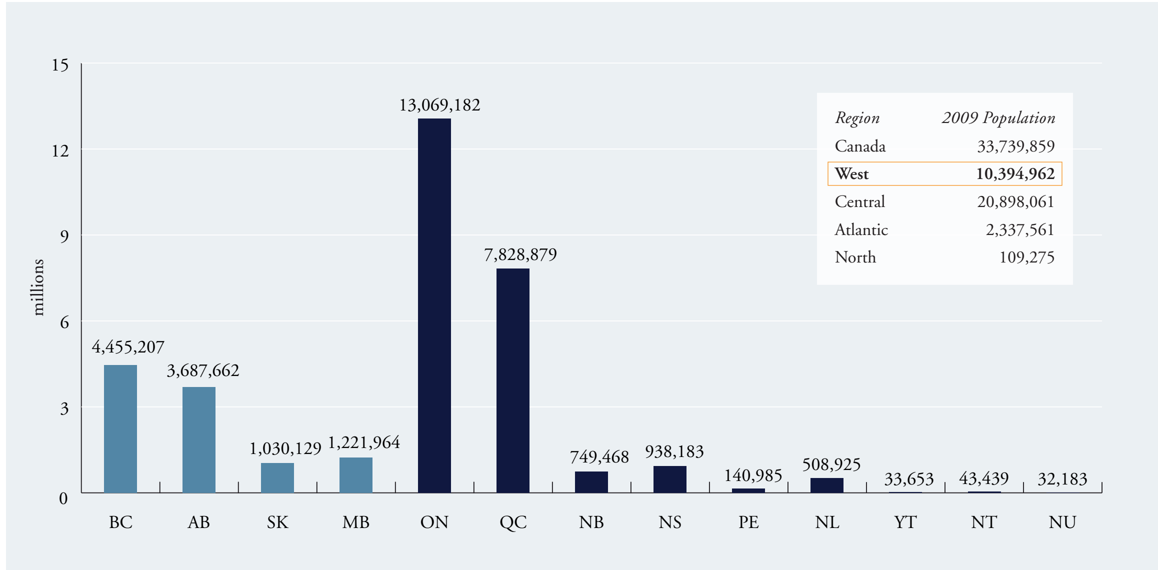
30.8% IN 2009.

HIGHLIGHTS

- The West's population broke the 10 million mark in 2007; the West was home to 10.4 million people as of 2009.
- The West would be 80th on the list of the world's largest countries (Canada is 36th).
- Natural increase (births minus deaths) is projected to decline significantly by 2031.
- The West's population has been growing faster than the population in the rest of the country. Despite this, the West's share of the national population is not projected to grow by very much in the years ahead.
- BC and Alberta have been growing much faster than Saskatchewan and Manitoba.
- A strong economy has helped reverse the shrinking of Saskatchewan's population that was happening in the early part of the 2000s.
- As in the rest of the country (except the Northwest Territories and Nunavut) and in many industrialized states, the fertility rate in western Canada is below the generational replacement level of 2.1.
- The West, like the rest of Canada, is aging. Over 1 in 10 western Canadians are 65 years of age or over.

Canada's population is unevenly distributed across the provinces

FIGURE I: CANADA'S POPULATION BY PROVINCE/TERRITORY 2009



Source: Statistics Canada Cansim Table 051-0001 and author's calculations.

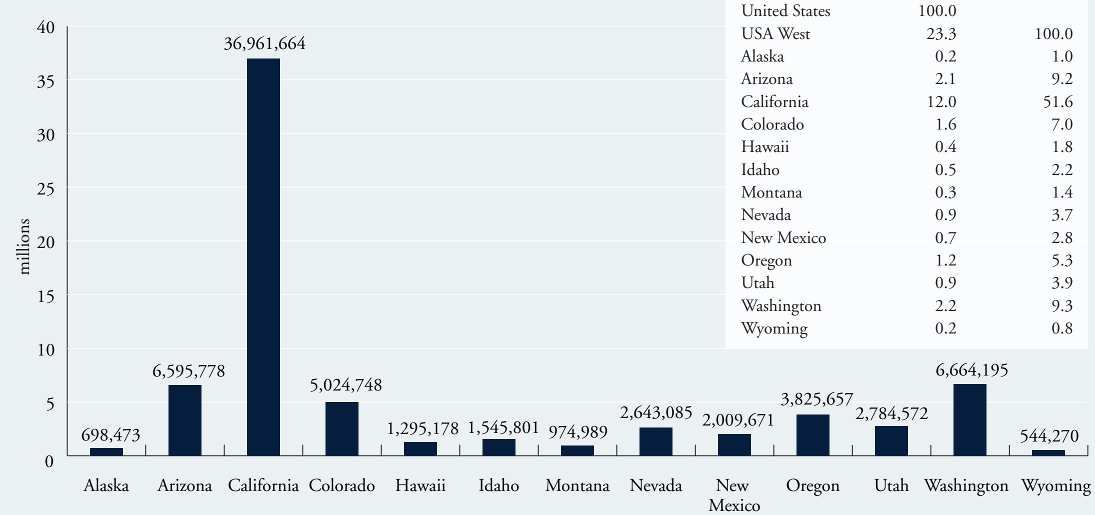
Canada's population is not spread evenly across the country. Ontario dominates the provinces in terms of population with over 13 million residents. Central Canada (Ontario + Quebec) dominates Canada at double the size of the next largest region (the West). The three northern territories cover a huge area, but are very sparsely populated. The uneven nature of Canada's population distribution presents numerous challenges to the federation as it attempts to balance representation by population with the interests of the less populated parts of the country.

At just over 10 million people, western Canada can be thought of as having both a relatively large population and a relatively small population. When compared to a country like Ireland which has a population of about 4.2 million, western Canada seems quite large. However, when compared to the New York metropolitan area (19 million) or the country of Japan (127 million), it seems quite small. One thing is clear: a combined regional market of over 10 million people is more impressive to investors than four provincial markets of between 4.5 and 1 million.

Canada is 36th on the list of countries by population. Western Canada would sit at 80th, just behind Belgium (10.8 million), Portugal (10.6 million), Czech Republic (10.5 million) and Tunisia (10.4 million) and just ahead of the Dominican Republic (10.1 million), Guinea (10.1 million) and Haiti (10.0 million).

The western United States is also unevenly populated

FIGURE 2: POPULATION OF THE WESTERN UNITED STATES 2009



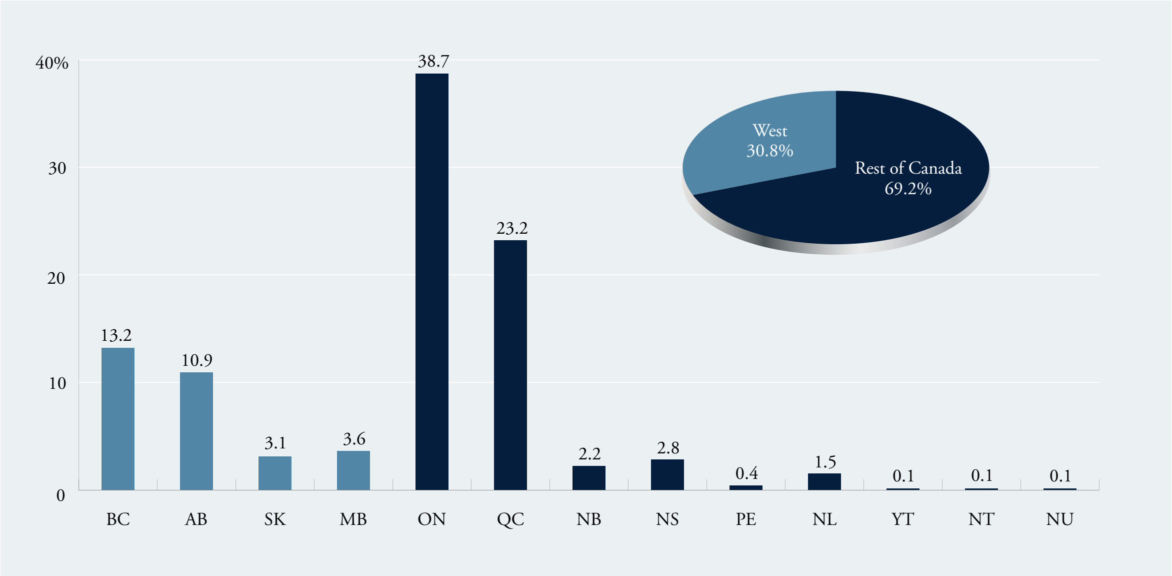
	% of USA	*% of USA West*
United States	100.0	
USA West	23.3	100.0
Alaska	0.2	1.0
Arizona	2.1	9.2
California	12.0	51.6
Colorado	1.6	7.0
Hawaii	0.4	1.8
Idaho	0.5	2.2
Montana	0.3	1.4
Nevada	0.9	3.7
New Mexico	0.7	2.8
Oregon	1.2	5.3
Utah	0.9	3.9
Washington	2.2	9.3
Wyoming	0.2	0.8

Source: US Census Bureau and author's calculations.

Like Canada, the population of the US is unevenly distributed. Focusing on the western region of the US (as defined by the US Census Bureau), we find significant variations in state population. California dominates the region with a population larger than Canada's, while three states—Alaska, Montana and Wyoming—have smaller populations than Saskatchewan. In percentage terms, California's population represents 51.6% of the western US compared to just 0.8% for Wyoming.

3 in 10 Canadians live in the West

FIGURE 3: SHARE OF CANADA'S POPULATION 2009 (% OF NATIONAL TOTAL)

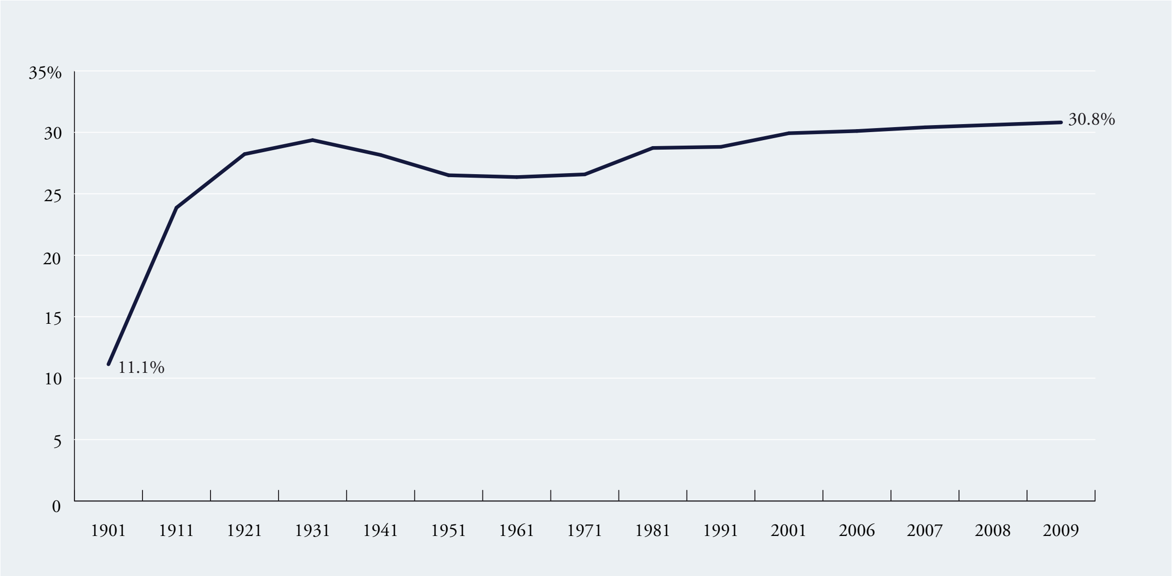


Source: Statistics Canada Cansim Table 051-0001 and author's calculations.

Western Canada is home to 30.8% of Canadians. On the one hand, this means that the West is a significant part of the Canadian family; on the other hand, it remains a minority within the country. If we think of Ontario and Quebec as central Canada, this region is home to the majority of Canadians (61.9%). Atlantic Canada (6.9%) and the North (0.3%) are dwarfed by both the West and Ontario/Quebec.

Western Canada's share of the national population has increased in recent years

FIGURE 4: WESTERN CANADA'S SHARE OF THE NATIONAL POPULATION 1901-2009 (%)



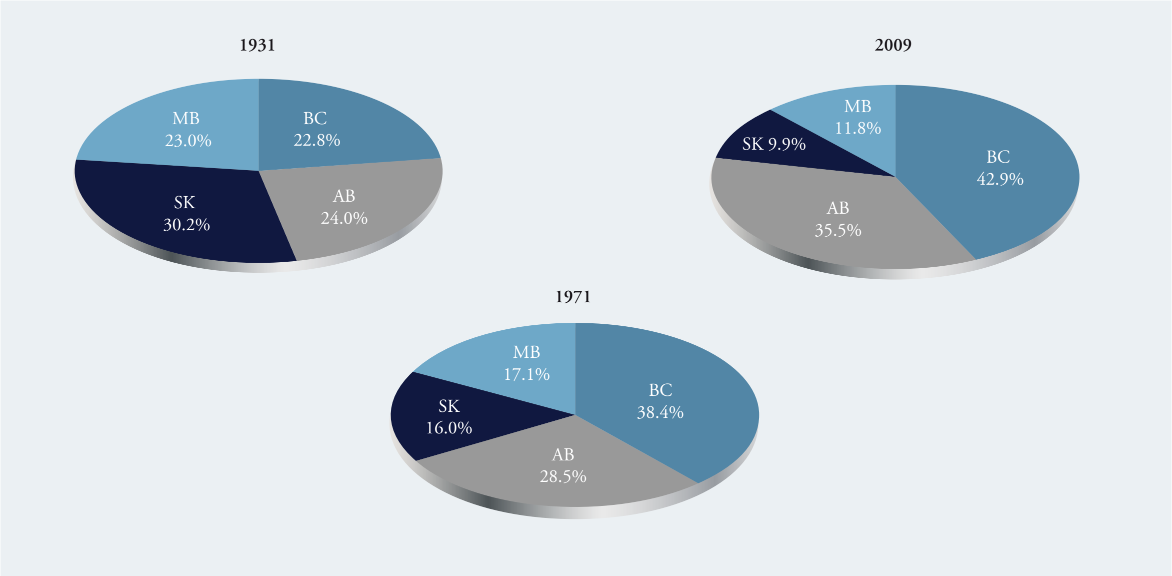
Source: Canadian Global Almanac 2003, p.44 (Census of Canada); 2001 and 2006 figures from Statistics Canada Census; 2007 to 2009 from Statistics Canada Cansim Table 051-0001; and author's calculations.

Western Canada's population was very small in 1901 at just under 600,000 people—only 11.1% of Canadians called the West home at that time. Massive waves of immigration caused the region to grow at a rapid pace. By 1931, the West had over 3 million residents and accounted for just under 30% of the national population. The region grew by a whopping 410% between 1901 and 1931 while the rest of Canada grew by a more modest 54%. Saskatchewan, for example, jumped from 91,000 people to 492,000 in the 10 years between 1901 and 1911.

The West's demographic fortunes took a turn for the worse during the Great Depression. The region continued to grow (though Saskatchewan saw its population shrink), but the rest of Canada grew faster. Hence, the West's share of the national population dropped to 26.4% as of the 1961 Census. Ten years later, the West was once again growing faster than the rest of the country and its percentage of the national population began to rise. This time, however, the rise has been much less dramatic than in the first part of the 20th Century. In terms of population growth, Canada is currently tilted west, but the incline is modest rather than steep.

BC and Alberta have much larger populations than Saskatchewan and Manitoba

FIGURE 5: PROVINCIAL SHARE OF WESTERN CANADA'S POPULATION

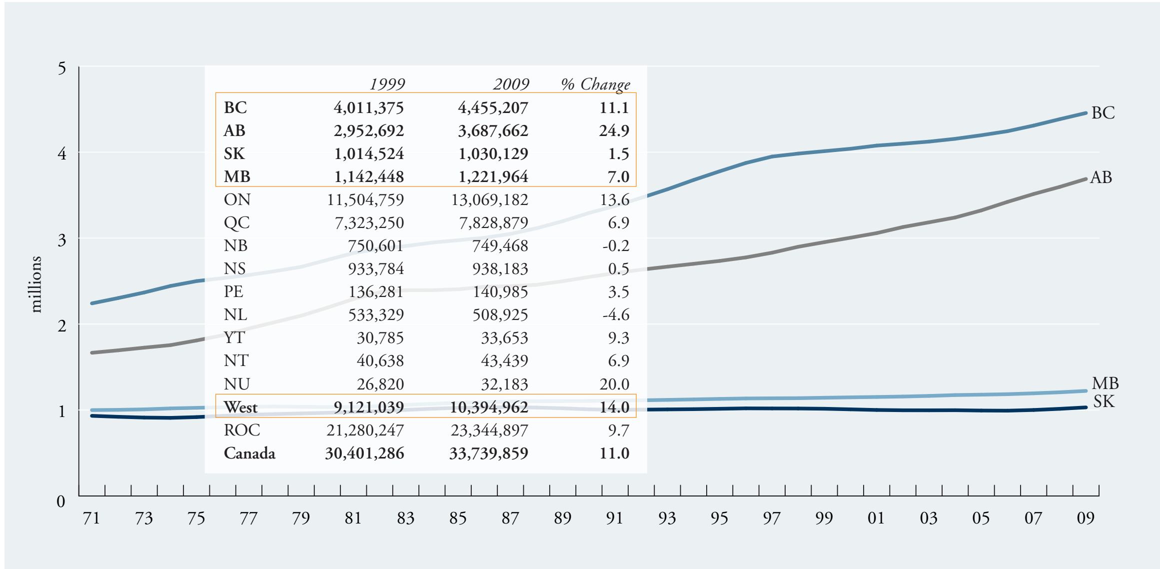


Source: Canadian Global Almanac 2003, p.44 (Census of Canada), Statistics Canada Cansim Table 051-0001 and author's calculations.

Saskatchewan was once the largest province in the West with 922,000 people in 1931. At the start of the Great Depression, BC had not yet emerged as the western province with the largest population and Manitoba and Alberta were roughly the same size. By 1971, relatively strong population growth in BC and Alberta saw them break away from Saskatchewan and Manitoba. Fast forwarding to the present, BC now accounts for 42.9% of the region's population compared to just 9.9% for Saskatchewan. BC's and Alberta's combined share of the regional population has gone from 46.8% in 1931 to 78.4% today.

Population growth in the West has been concentrated in BC and Alberta

FIGURE 6: POPULATION OF THE WESTERN PROVINCES 1971-2009 (AND ALL PROVINCES 1999-2009 WITH % CHANGE)



	1999	2009	% Change
BC	**4,011,375**	**4,455,207**	**11.1**
AB	**2,952,692**	**3,687,662**	**24.9**
SK	**1,014,524**	**1,030,129**	**1.5**
MB	**1,142,448**	**1,221,964**	**7.0**
ON	11,504,759	13,069,182	13.6
QC	7,323,250	7,828,879	6.9
NB	750,601	749,468	-0.2
NS	933,784	938,183	0.5
PE	136,281	140,985	3.5
NL	533,329	508,925	-4.6
YT	30,785	33,653	9.3
NT	40,638	43,439	6.9
NU	26,820	32,183	20.0
West	**9,121,039**	**10,394,962**	**14.0**
ROC	21,280,247	23,344,897	9.7
Canada	**30,401,286**	**33,739,859**	**11.0**

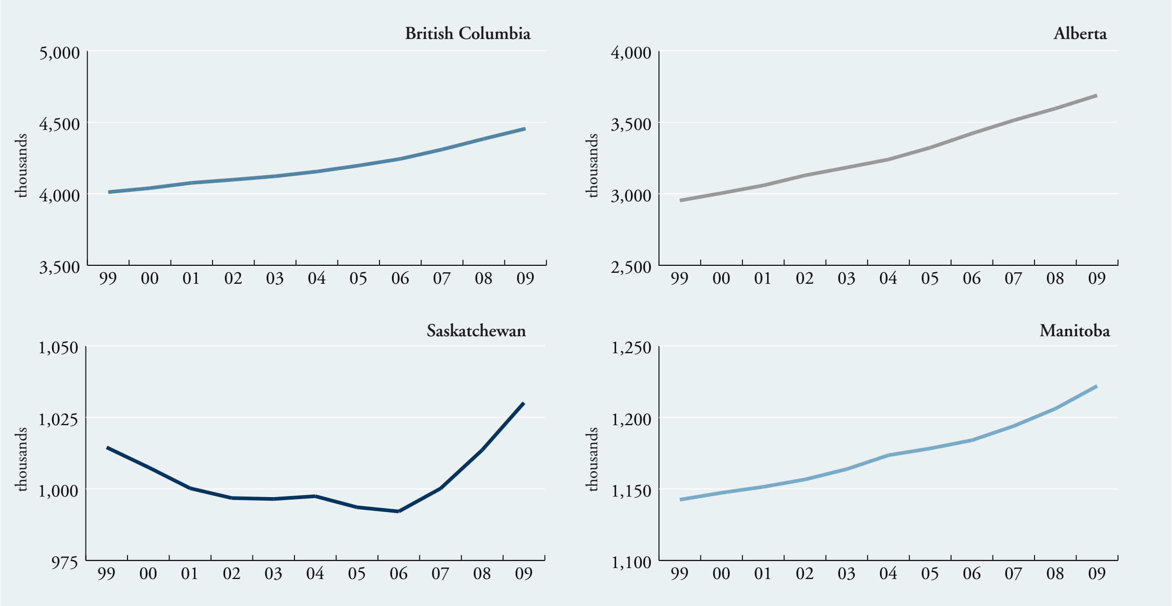
Source: Statistics Canada Cansim Table 051-0001 and author's calculations.

When it comes to population growth over the last four decades, there is a clear division within the West with BC and Alberta on one side and Saskatchewan and Manitoba on the other. Between 1971 and 2009, Saskatchewan grew by 10.5% and Manitoba grew by 22.3%. These growth rates, however, are quite modest compared to the 98.9% for BC and the 121.4% for Alberta. The Canadian average for this period is 53.6%.

Looking at the last 10 years, western Canada grew by 14% compared to 9.7% for the rest of Canada. Alberta led the provinces by growing 24.9%. Both Newfoundland and Labrador and New Brunswick were smaller in 2009 than they were in 1999.

Saskatchewan has reversed its population decline

FIGURE 7: POPULATION OF THE WESTERN PROVINCES 1999-2009



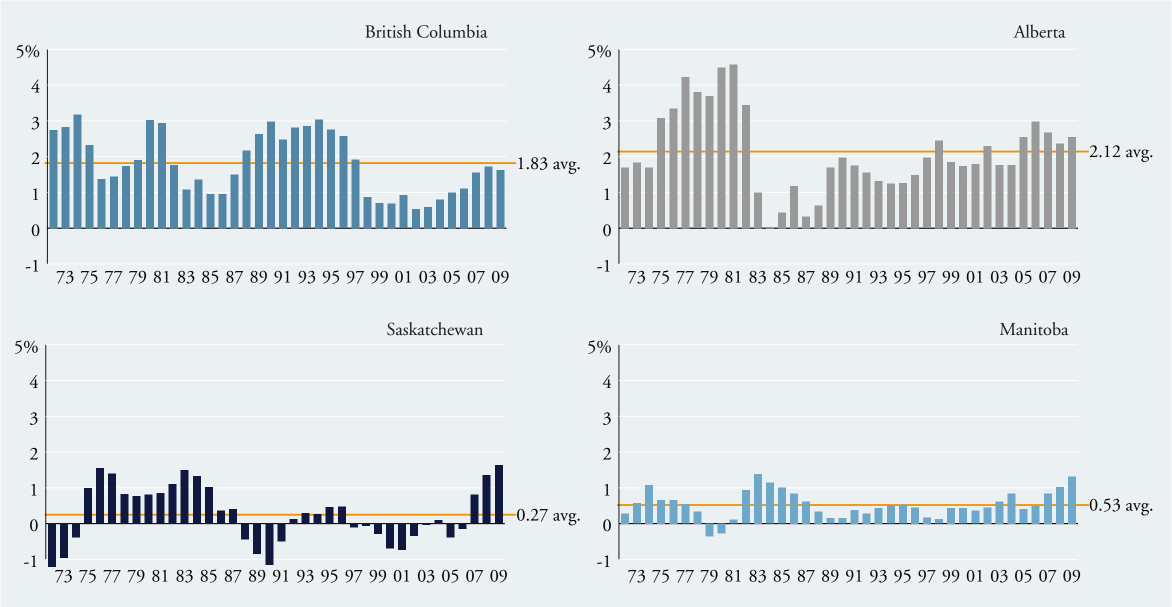
Source: Statistics Canada Cansim Table 051-0001.

Saskatchewan has seen its annual population estimate shrink 16 times since 1971. Manitoba's population contracted twice during this period (1979 and 1980). While Alberta and BC have experienced unbroken growth.

A strong economy has helped reverse the shrinking of Saskatchewan's population that started in the late 1990s and continued into the 2000s. While significant, the absolute numbers are still relatively small (Saskatchewan's population increased by 16,509 between 2008 and 2009 whereas Alberta's grew by 91,795).

Annual population change in the West has been marked by periods of high growth and periods of low growth and even decline

FIGURE 8: PERCENT CHANGE IN POPULATION 1972-2009



Source: Statistics Canada Cansim Table 051-0001 and author's calculations.

Population growth in the West averaged 1.5% per year from 1972 to 2009 compared to 1.0% in the rest of Canada. Alberta led the region with an annual growth rate of 2.1% followed closely by BC at 1.8%. The divide in the region is again evident given the relatively modest rates of growth in Saskatchewan and Manitoba. Despite this, all four western provinces have experienced wild swings from periods of high growth to periods of low growth or even decline with the peaks and valleys tending to track economic conditions in the provinces.

The negative economic effects of the National Energy Program and falling oil prices are, for example, apparent in the sudden drop in Alberta's population growth after 1982. Strong economic performance in Saskatchewan in recent years is reflected in the switch from population decline in 2005 and 2006 to population growth in the last three years. These fluctuations put tremendous pressure on public policy as it tries to adjust to different growth scenarios.

Population projections put the population of the West at between 12.9 and 15.4 million by 2036

FIGURE 9: PROJECTED POPULATION IN 2036 (THOUSANDS)

	Low-growth Scenario	*Medium-growth Scenario (M1)*	*Medium-growth Scenario (M2)*	*Medium-growth Scenario (M3)*	*Medium-growth Scenario (M4)*	*High-growth Scenario*
BC	**5,785.8**	**6,355.8**	**6,495.7**	**7,102.0**	**6,117.1**	**6,955.6**
AB	**4,563.5**	**4,963.7**	**5,603.5**	**4,718.0**	**5,713.7**	**5,383.2**
SK	**1,120.0**	**1,207.0**	**1,380.0**	**1,134.5**	**1,136.7**	**1,298.2**
MB	**1,434.3**	**1,579.7**	**1,551.5**	**1,525.5**	**1,519.2**	**1,735.7**
ON	16,135.9	17,746.8	17,176.7	17,231.0	17,445.3	19,440.0
QC	8,578.4	9,272.4	9,130.6	9,313.1	9,366.6	10,001.0
NB	772.3	822.2	759.8	847.9	765.3	873.5
NS	987.0	1,054.6	952.4	1,077.8	980.9	1,123.5
PE	160.9	174.3	153.7	179.0	164.7	188.1
NL	483.4	513.7	488.7	536.4	485.1	544.5
YT	36.0	38.8	43.9	44.5	40.1	41.8
NT	48.6	52.7	52.8	58.4	52.6	56.9
NU	36.3	40.0	40.0	40.6	41.5	44.2
West	**12,903.60**	**14,106.20**	**15,030.70**	**14,480.00**	**14,486.70**	**15,372.70**
ROC	27,238.80	29,715.50	28,798.60	29,328.90	29,342.00	32,313.30
Canada	40,142.4	43,821.7	43,829.3	43,808.9	43,828.7	47,686.0

FIGURE 10: PROJECTED SHARE OF THE POPULATION IN 2036 (%)

	Low-growth Scenario	*Medium-growth Scenario (M1)*	*Medium-growth Scenario (M2)*	*Medium-growth Scenario (M3)*	*Medium-growth Scenario (M4)*	*High-growth Scenario*
BC	**14.4**	**14.5**	**14.8**	**16.2**	**14.0**	**14.6**
AB	**11.4**	**11.3**	**12.8**	**10.8**	**13.0**	**11.3**
SK	**2.8**	**2.8**	**3.1**	**2.6**	**2.6**	**2.7**
MB	**3.6**	**3.6**	**3.5**	**3.5**	**3.5**	**3.6**
ON	40.2	40.5	39.2	39.3	39.8	40.8
QC	21.4	21.2	20.8	21.3	21.4	21.0
NB	1.9	1.9	1.7	1.9	1.7	1.8
NS	2.5	2.4	2.2	2.5	2.2	2.4
PE	0.4	0.4	0.4	0.4	0.4	0.4
NL	1.2	1.2	1.1	1.2	1.1	1.1
YT	0.1	0.1	0.1	0.1	0.1	0.1
NT	0.1	0.1	0.1	0.1	0.1	0.1
NU	0.1	0.1	0.1	0.1	0.1	0.1
West	**32.1**	**32.2**	**34.3**	**33.1**	**33.1**	**32.2**
ROC	67.9	67.8	65.7	66.9	66.9	67.8
Canada	100	100	100	100	100	100

Note: M1 – Medium-growth, historical interprovincial migration trends (1981 to 2008), M2 – Medium-growth, interprovincial migration trends 2006 to 2008, M3 – Medium-growth, interprovincial migration trends 1988 to 1996, M4 – Medium-growth, interprovincial migration trends 2001 to 2006.
Source: Statistics Canada Catalogue 91-520-X (online at http://www.statcan.gc.ca/pub/91-520-x/91-520-x2010001-eng.htm) and author's calculations.

The May 26, 2010 population projections from Statistics Canada provide an indication of the population growth we can expect to see in the West over the next 26 years. According to the six main growth scenarios prepared by Statistics Canada, the West's population is expected to reach between 12.9 and 15.4 million by 2036 (between 2.5 and 5.0 million more people).

The projections do not, however, indicate a radical shift in the relative demographic weight of the West in Canada. The West is currently home to 30.8% of the national population; the projections show that this number will be between 32% and 34% by 2036. Barring major unforeseen changes in immigration, fertility, internal migration and other factors, the West is expected to be home to roughly the same percentage of Canadians as it is today. The region's share will be slightly higher, but not by much.

Fertility rates in the West are low compared to historical levels

FIGURE 11: TOTAL FERTILITY RATE BY PROVINCE 2000-2007

	2000	2001	2002	2003	2004	2005	2006	2007
BC	**1.38**	**1.38**	**1.38**	**1.40**	**1.39**	**1.39**	**1.41**	**1.52**
AB	**1.64**	**1.65**	**1.69**	**1.74**	**1.74**	**1.75**	**1.82**	**1.90**
SK	**1.76**	**1.80**	**1.82**	**1.86**	**1.86**	**1.87**	**1.92**	**2.03**
MB	**1.80**	**1.80**	**1.80**	**1.80**	**1.77**	**1.82**	**1.87**	**1.96**
ON	1.48	1.51	1.47	1.49	1.50	1.51	1.52	1.57
QC	1.43	1.47	1.46	1.48	1.48	1.52	1.62	1.69
NB	1.39	1.38	1.39	1.41	1.40	1.41	1.46	1.52
NS	1.37	1.36	1.37	1.38	1.40	1.40	1.40	1.48
PE	1.52	1.47	1.47	1.58	1.53	1.48	1.56	1.63
NL	1.25	1.24	1.31	1.32	1.30	1.34	1.38	1.46
YT	1.60	1.56	1.56	1.52	1.67	1.48	1.69	1.58
NT	2.00	1.82	1.89	2.05	2.03	2.11	2.07	2.11
NU	3.16	3.03	3.04	3.10	2.96	2.74	2.84	2.97
Canada	1.49	1.51	1.50	1.53	1.53	1.54	1.59	1.66

Source: Statistics Canada Cansim Table 102-4505 and author's calculations.

FIGURE 12: FERTILITY RATES IN OECD COUNTRIES 2006

Israel	2.88	Sweden	1.85	Spain	1.38
South Africa	2.73	Finland	1.84	Portugal	1.36
India	2.54	UK	1.84	Hungary	1.35
Brazil	2.27	Australia	1.81	Italy	1.35
Turkey	2.18	Belgium	1.80	Czech Republic	1.33
Mexico	2.17	China	1.78	Germany	1.33
US	2.10	Netherlands	1.72	Japan	1.32
Iceland	2.07	**OECD avg.**	**1.65**	Slovenia	1.31
New Zealand	2.01	Luxembourg	1.64	Russian Federation	1.30
France	1.98	**Canada**	**1.59**	Poland	1.27
Chile	1.96	Estonia	1.55	Slovak Republic	1.24
Ireland	1.90	Switzerland	1.44	Korea	1.13
Norway	1.90	Austria	1.41		
Denmark	1.85	Greece	1.41		

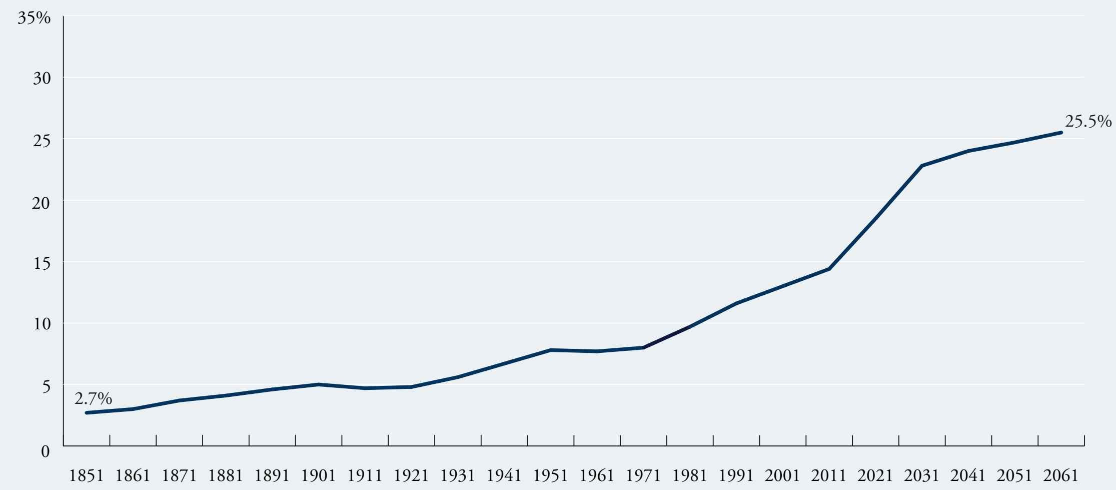
Source: OECD Factbook 2009.

As is the case in many advanced industrial areas, the fertility rate in all four western provinces is below the generational replacement level of 2.1. (Fertility rates during the post-war baby boom were well over 3 children per woman.) The fertility rate in each of the western provinces has, however, been on the rise since 2000. BC has the lowest rate in the West while Saskatchewan has the highest.

The relatively modest fertility rates in the West and across the country point to the importance of migration (both internal and international) as a source of population growth.

Canada's population is aging

FIGURE 13: PROPORTION OF CANADA'S POPULATION 65 YEARS OF AGE AND OVER 1851-2061



Source: Historical Statistics of Canada, Canadian Global Almanac, Statistics Canada Census, Cansim Table 052-0005 (Scenario M1: medium-growth, historical interprovincial migration trends 1981 to 2008) and author's calculations.

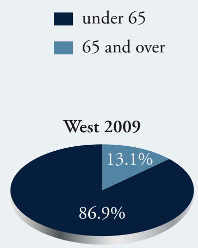
At the time of Confederation, Canada had a much younger population than it does today or is projected to have in the future. Fewer children and longer life spans have seen, and will see, the proportion of the population aged 65 and over increase significantly. Less than 5% of the population was 65 years of age or older prior to the 20th Century. By the middle of the 21st Century, 25% of Canadians will be considered "seniors."

The baby boom that followed World War II temporarily arrested the aging trend (as did massive waves of immigration in the early 1900s), but barring another baby boom or huge spike in the number of relatively young immigrants, the senior population will grow even faster once the boomers start turning 65 in 2011.

This shift will have profound implications for Canadian society as the aging of the population increases demand for products and services tailored to seniors. Major public policy areas such as health care, housing and income support will feel the effects of an older population.

All four western provinces are aging, but at slightly different rates

FIGURE 14: PROPORTION OF THE POPULATION 65 YEARS OF AGE AND OVER 1971, 2009 AND 2036 (%)



	1971	2009	2036
BC	9.3	14.7	23.8
AB	7.2	10.4	21.0
SK	10.2	14.7	23.3
MB	9.6	13.8	21.4
West	8.9	13.1	22.5
ROC	7.7	14.2	24.2
Canada	8.0	13.9	23.7

Source: Statistics Canada Cansim Tables 051-0001 and 052-0005 and author's calculations.

FIGURE 15: PROPORTION OF THE POPULATION 65 YEARS OF AGE AND OVER, OECD COUNTRIES 2005 (%)

Japan	20	Switzerland	16	New Zealand	12
Italy	19	Hungary	16	Iceland	12
Germany	19	Denmark	15	Slovak Republic	12
Greece	18	Norway	15	Ireland	11
Sweden	17	Luxembourg	14	Korea	9
Belgium	17	Czech Republic	14	Turkey	6
Portugal	17	Netherlands	14	Mexico	6
Spain	17	**OECD Avg.**	14		
Austria	17	Poland	13		
France	16	Canada	13		
Finland	16	Australia	13		
UK	16	US	12		

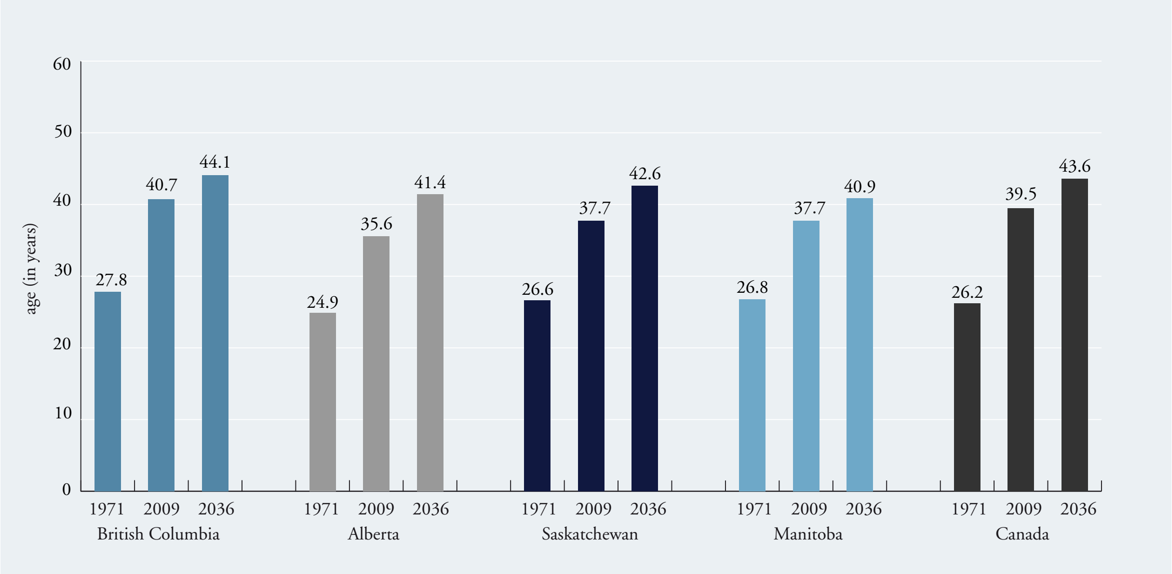
Source: OECD Factbook 2009.

Alberta has a smaller proportion of its population in the seniors category than the other western provinces. This is expected to remain the case in the future with Manitoba running a very close second by 2036. On a regional basis, western Canada has a slightly smaller proportion of seniors than the rest of the country. Atlantic Canada leads the nation with 15.5% of its current population 65 years of age or over. While the differences are minor and the percentage of seniors will rise all across the country, the regions with smaller proportions of seniors will face less upward pressure on public expenditures related to seniors.

Both western Canada and the rest of the country are in line with the rising percentage of elderly people in OECD countries. As of 2005, the OECD average was 14%. Japan has the largest percentage of seniors in its population at 20% compared to just 6% in Mexico and Turkey.

Just as the proportion of seniors is rising, so is the median age

FIGURE 16: MEDIAN AGE OF THE POPULATION 1971, 2009 AND 2036

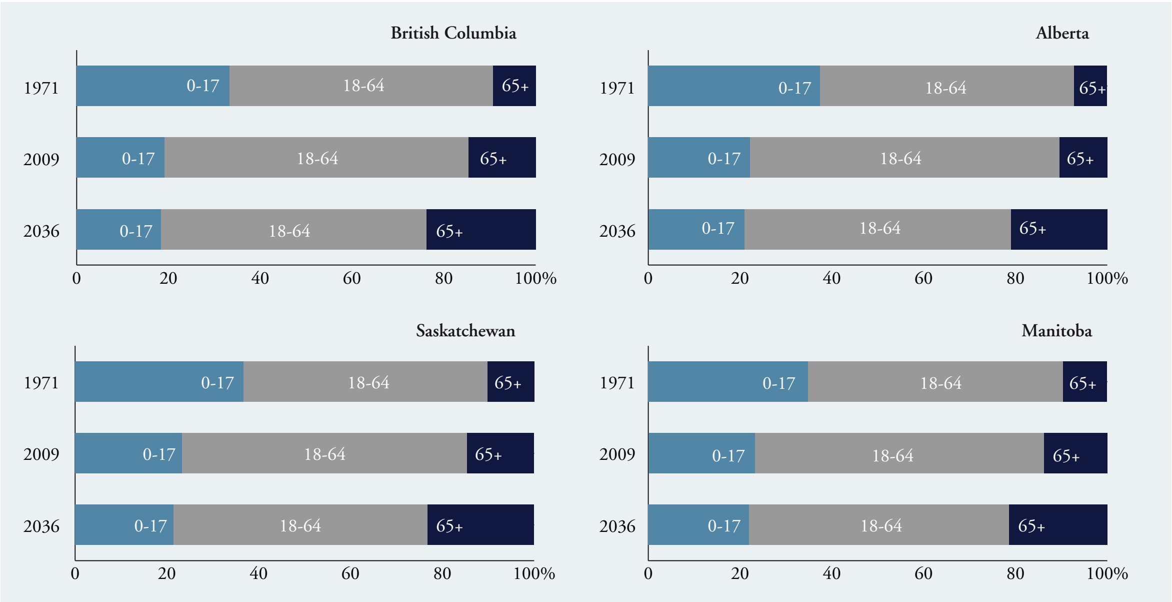


Note: Median age is the point where exactly one-half of the population is older, and the other half is younger. Projection data is for the M1 scenario – Medium-growth, historical interprovincial migration trends (1981 to 2008).
Source: Cansim Tables 051-0001 and Catalogue 91-520-X.

The median age in all four western provinces has jumped by at least 10 years since 1971. BC is currently the "oldest" province in the West with a median age of 40.7 years and Alberta is the "youngest" at 35.6 years. Population projections indicate that Manitoba will take the title of youngest western province from Alberta by 2036. This can be explained in part by Manitoba's relatively large Aboriginal population. (The Aboriginal population is younger and more fertile than the general population.) Despite also having a relatively large Aboriginal population, other factors at work in Saskatchewan such as out migration of young people are expected to keep its median age close to the Canadian average in 2036. The Atlantic provinces will post the highest median ages in 2036.

The proportion of westerners under 18 has dropped since 1971

FIGURE 17: POPULATION UNDER 18, 18 TO 64 AND OVER 65 1971, 2009 AND 2036 (% OF TOTAL)



Note: Projection data is for the M1 scenario – Medium-growth, historical interprovincial migration trends (1981 to 2008).
Source: Cansim Table 051-0001, Catalogue 91-520-X and author's calculations.

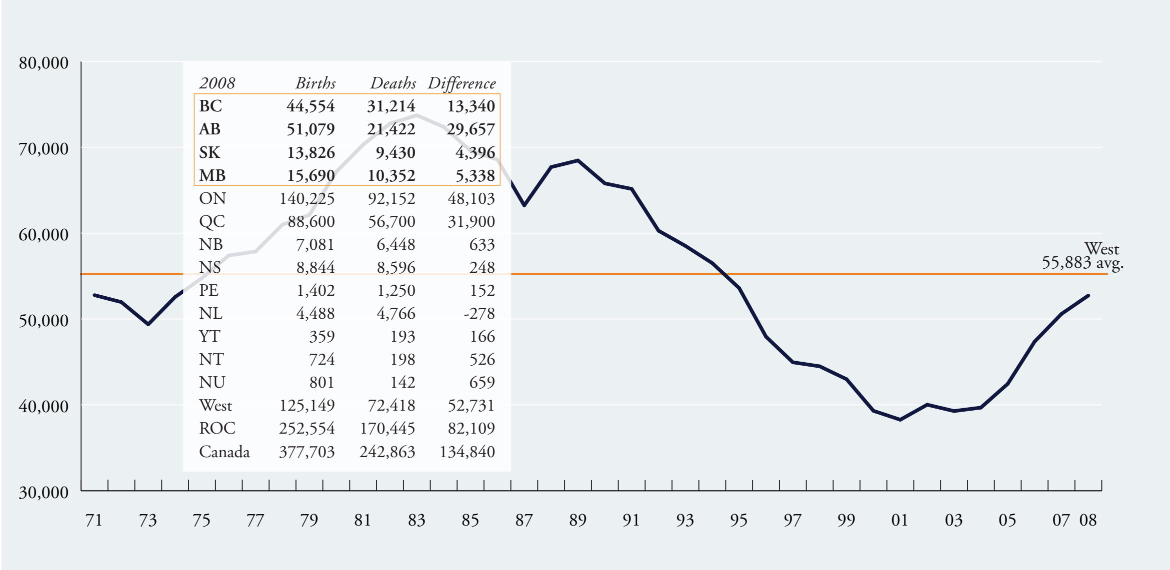
In the early 1970s, there were more Canadians under 18 relative to those 18-64 than there are today. According to projections, the under 18 category will continue to decline in relative terms. BC is projected to have the smallest percentage of its population under 18 in 2036 at 18.4% compared to between 20.9% and 21.9% in the other western provinces.

The relative size of the working age population (here defined at 18 to 64 rather than the usual 15 to 64) is larger today than it was back in 1971. The projections suggest that the ratio will drop back closer to the 1971 level. A relatively smaller working age population will exacerbate the labour shortages that have already emerged in the western Canadian economy. In 1971, there were lots of children compared to seniors but the opposite will be true by 2036 when people 65 and over outnumbered those under 18.

The implications for society and government of this reversal are numerous and significant. At present, there is a large cohort of working age Canadians to help pay for the programs that young people and seniors use. As the population continues to age, however, there will be fewer working age Canadians to help pay for the programs needed by the rising proportion of seniors and the only slightly smaller proportion of people under 18. In 1971, it was large class sizes in schools that dogged public policy; in 2036, it will be (even longer) lines for knee and hip replacements.

Natural increase (births minus deaths) is less today than in the 1980s

FIGURE 18: BIRTHS LESS DEATHS IN WESTERN CANADA 1971-2008 (AND FOR ALL PROVINCES AND TERRITORIES 2008)



2008	*Births*	*Deaths*	*Difference*
BC	**44,554**	**31,214**	**13,340**
AB	**51,079**	**21,422**	**29,657**
SK	**13,826**	**9,430**	**4,396**
MB	**15,690**	**10,352**	**5,338**
ON	140,225	92,152	48,103
QC	88,600	56,700	31,900
NB	7,081	6,448	633
NS	8,844	8,596	248
PE	1,402	1,250	152
NL	4,488	4,766	-278
YT	359	193	166
NT	724	198	526
NU	801	142	659
West	125,149	72,418	52,731
ROC	252,554	170,445	82,109
Canada	377,703	242,863	134,840

Statistics Canada Cansim Table 051-0004.

In 1984, there were 72,366 more births than deaths in western Canada. As of 2008, the difference was 52,731. By 2031, the difference, while still positive, is projected to be less than 10,000. In the rest of Canada, there will be more deaths than births by 2031. This points to the importance of international immigration and internal migration as sources of population growth and labour.

Within the West, natural increase has been the strongest in Alberta with an average net increase of 24,845 between 1971 and 2008 compared to 17,786 for BC, 6,651 for Saskatchewan and 6,901 for Manitoba. By 2031, BC will be relying entirely on external and internal migrants for population growth as 2,800 more deaths than births are projected in 2031. The same is true for Quebec and the Atlantic Provinces.

CHAPTER 2

Immigration to the West

OVER 2 MILLION
immigrants have landed in western Canada since 1971.

1 IN 5
western Canadians was born in a foreign country. BC has the second largest foreign born population in the country after Ontario.

HIGHLIGHTS

→ International immigration is a key component of population growth in western Canada and will increase in importance as natural increase (births minus deaths) continues to decline.

→ Compared to OECD countries, western Canada has a relatively high net international migration rate.

→ BC is the main destination of immigrants arriving in the West. Both BC and Manitoba attracted more of Canada's immigrants in 2008 than their share of the national population.

→ Most immigrants come to large urban areas.

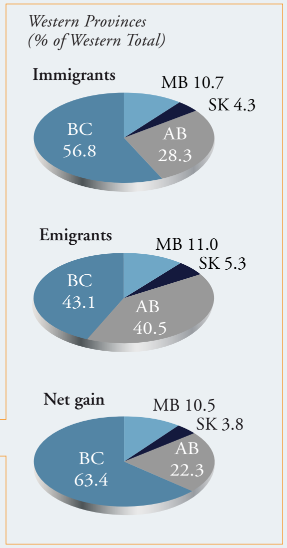
→ Two-thirds of immigrants to the West are "economic" immigrants who were selected for their skills and ability to contribute to the economy.

→ The demand for skilled immigrants to fill labour shortages will increase on a global basis and western Canada and Canada will need to raise their game if they are to attract sufficient immigrants.

Over 2 million immigrants have landed in western Canada since 1971

FIGURE 19: TOTAL IMMIGRANTS, EMIGRANTS AND NET IMMIGRATION BY PROVINCE FOR THE 1971-2008 PERIOD (NUMBER AND % OF NATIONAL TOTAL)

	Immigrants #	Immigrants %	Emigrants #	Emigrants %	Net gain #	Net gain %
BC	**1,154,487**	**16.5**	**286,178**	**14.7**	**868,309**	**17.2**
AB	**574,347**	**8.2**	**268,683**	**13.8**	**305,664**	**6.1**
SK	**86,870**	**1.2**	**35,414**	**1.8**	**51,456**	**1.0**
MB	**216,975**	**3.1**	**73,022**	**3.8**	**143,953**	**2.9**
ON	3,640,788	52.1	897,175	46.1	2,743,613	54.4
QC	1,163,128	16.7	311,248	16.0	851,880	16.9
NB	38,235	0.5	29,202	1.5	9,033	0.2
NS	72,154	1.0	26,605	1.4	45,549	0.9
PE	10,185	0.1	3,038	0.2	7,147	0.1
NL	20,766	0.3	11,632	0.6	9,134	0.2
West	**2,032,679**	**29.1**	**663,297**	**34.1**	**1,369,382**	**27.2**
ROC	4,952,633	70.9	1,282,748	65.9	3,669,885	72.8
Canada	6,985,312	100.0	1,946,045	43,808.9	5,039,267	100.0



Source: Statistics Canada Cansim Table 051-0011 and author's calculations.

Almost 7 million people moved to Canada from other countries between 1971 and 2008. At the same time, almost 2 million left Canada for foreign lands resulting in a net gain of about 5 million people.

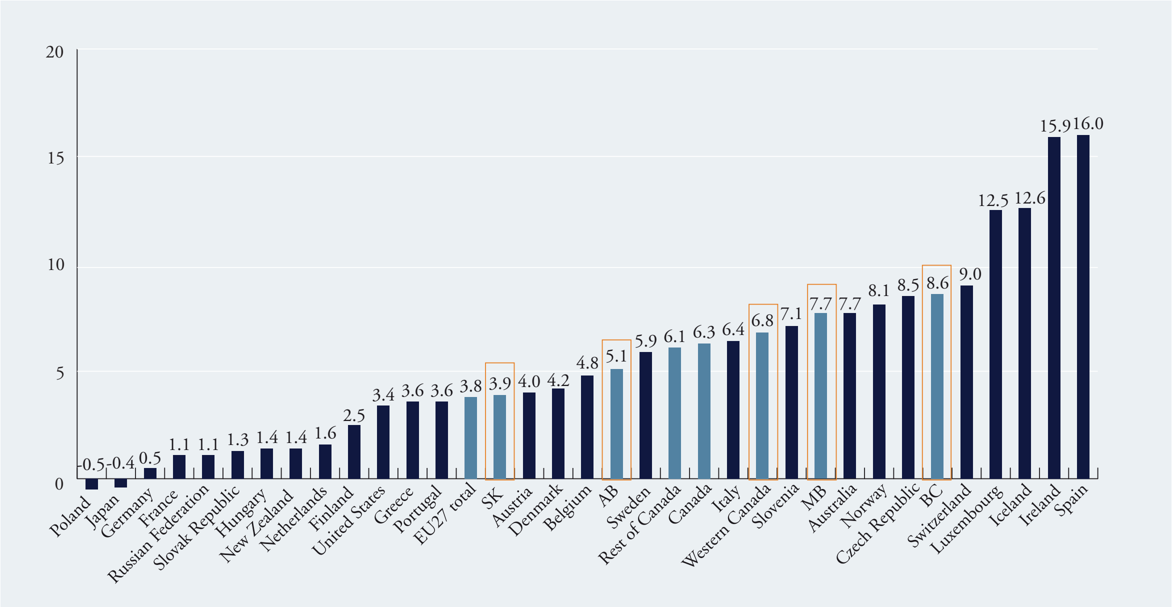
On average, 183,824 immigrants came to Canada each year from 1971 to 2008. The average for western Canada was 54,040. At the same time, an average of 51,212 people flowed out of the country each of those years (17,455 was the average for the West).

Ontario leads the country, accounting for over half of net immigration to Canada since 1971. In the West, about 2 million immigrants arrived between 1971 and 2008 while 663,297 emigrated from the region for a net gain of 1,369,382.

BC is the main destination for immigrants arriving in the West; over half (56.8%) of the immigrants to the West between 1971 and 2008 landed in British Columbia. BC's domination of immigration to the West is even more stark on a net basis; the province accounts for 63.4% of net immigration to the West over the 1971-2008 period.

Western Canada's net migration rate is higher than that of many OECD countries

FIGURE 20: NET INTERNATIONAL MIGRATION RATE 2007* (PER 1,000 INHABITANTS)



Note: * or most recent year
Source: OECD Factbook 2009, Statistics Canada Cansim Tables 051-0001 and 051-0011 and author's calculations.

Controlling for population size, BC and Manitoba lead the West in terms of net international migration. BC's rate is 8.6 net migrants per 1,000 residents and Manitoba's is 7.7. These rates are both above the national average of 6.3.

When compared to OECD countries, the West's net migration rate is in the middle of the pack. It is higher than the US rate of 3.4 but well below Spain's whopping 16 net migrants per 1,000 residents in 2007. It is important to note, however, that there is significant fluctuation in the rates over time. Ireland, for example, was losing people in the early 1990s but was a major destination as of 2007. The ability to attract skilled labour will be increasingly important as the retirement of the baby boomers reduces the labour supply in industrialized countries. Western Canada and Canada are not the only places immigrants will want to go to, so we will have to work harder to attract them.

Western Canada is currently attracting more international immigrants than its share of the national population

FIGURE 21: SHARE OF IMMIGRANTS, EMIGRANTS AND NET IMMIGRATION 2008 (NUMBER AND % OF NATIONAL TOTAL)

	Immigrants		*Emigrants*		*Net gain*		*Share of 2008 National Population (%)*
	#	%	#	%	#	%	
BC	**42,541**	**17.3**	**6,294**	**14.7**	**36,247**	**17.9**	**13.2**
AB	**23,860**	**9.7**	**5,825**	**13.6**	**18,035**	**8.9**	**10.8**
SK	**5,989**	**2.4**	**360**	**0.8**	**5,629**	**2.8**	**3.0**
MB	**13,172**	**5.4**	**1,563**	**3.6**	**11,609**	**5.7**	**3.6**
ON	107,047	43.6	20,228	47.1	86,819	42.9	38.8
QC	45,735	18.6	7,136	16.6	38,599	19.1	23.3
NB	1,922	0.8	418	1.0	1,504	0.7	2.2
NS	2,377	1.0	931	2.2	1,446	0.7	2.8
PE	1,793	0.7	37	0.1	1,756	0.9	0.4
NL	565	0.2	93	0.2	472	0.2	1.5
West	**85,562**	**34.9**	**14,042**	**32.7**	**71,520**	**35.3**	**30.6**
ROC	159,713	65.1	28,882	67.3	130,831	64.7	69.4
Canada	245,275	100.0	42,924	100.0	202,351	100.0	100.0

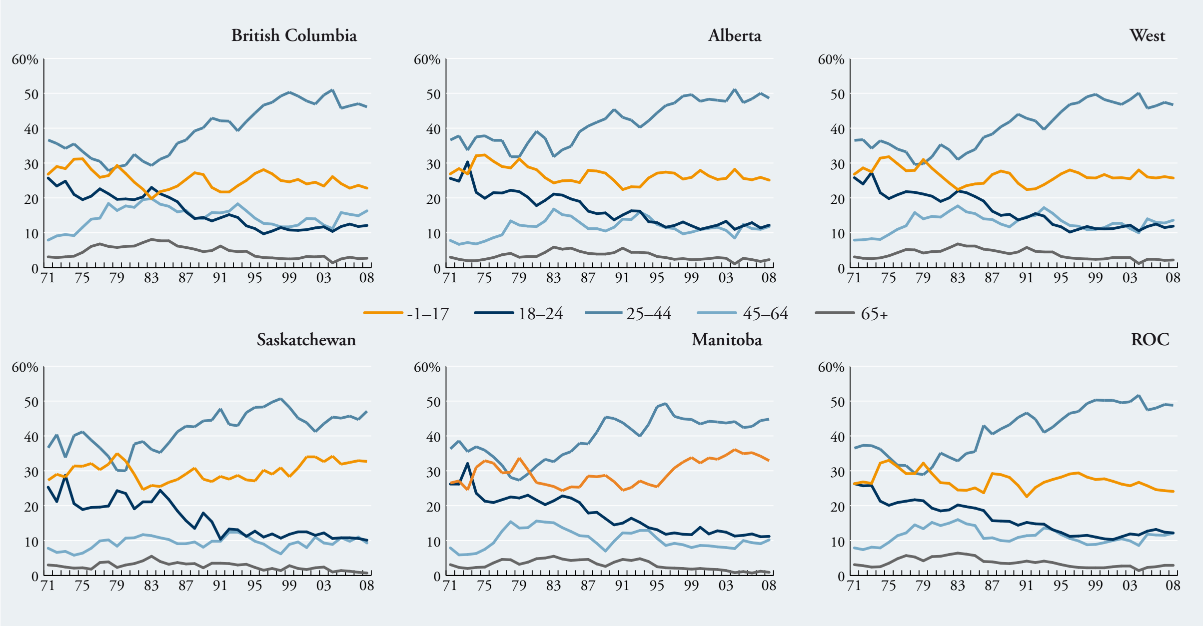
Source: Statistics Canada Cansim Table 051-0011, 051-0001 and author's calculations.

Over 85,000 people moved to western Canada from other countries in 2008 while just over 14,000 did the opposite for a net gain of 71,520 people. Ontario remains the main destination of immigrants; Ontario attracted more immigrants (107,047) than all four western provinces combined (85,562).

On a net basis, the West attracted 35.3% of immigrants to Canada in 2008, but its share of the national population was only 30.6%. A relatively strong inflow of immigrants to BC and Manitoba accounts for the West's over performance in this area with both provinces attracting a larger share of net immigration than their share of the national population.

Immigrants coming to the West today are older than in the past

FIGURE 22: IMMIGRANTS BY AGE GROUP 1971-2008 (% OF ANNUAL TOTAL)



Source: Statistics Canada Cansim Table 051-0011 and author's calculations.

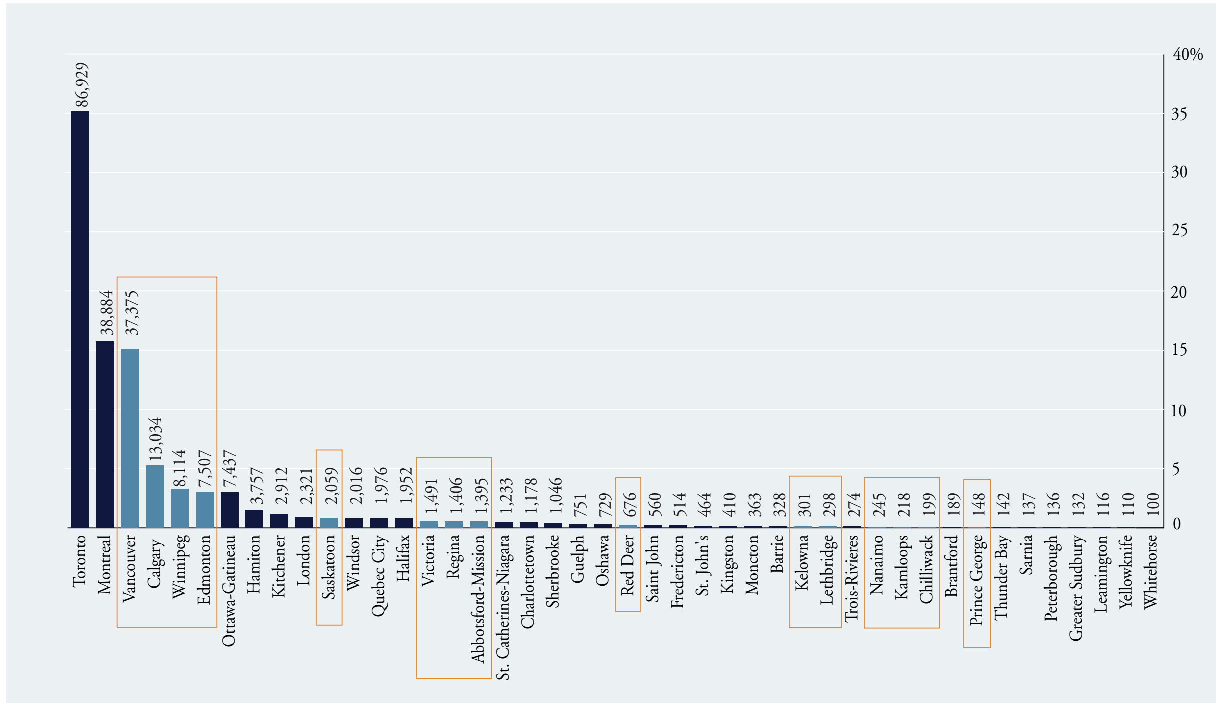
The percentage of immigrants to the West in the 18-24 age group has dropped from 25.8% to 11.9% while the percentages in the 25 to 44 and 45 to 64 age groups have both increased. The same trend is also apparent in the rest of Canada. Saskatchewan and Manitoba stand out in the region with a higher percentage of immigrants in the under 18 category (approximately 33% compared to the regional average of 25.7%).

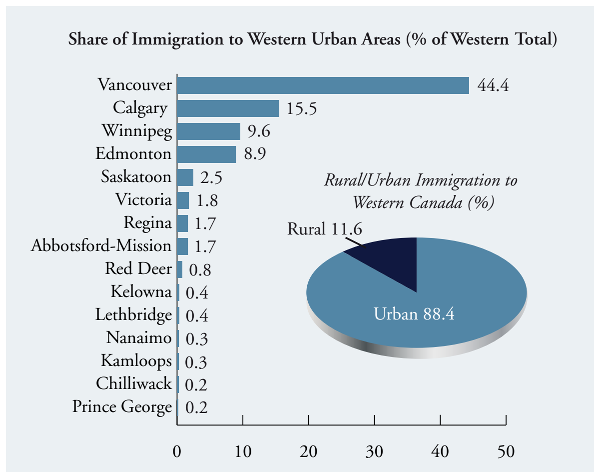
The age of emigrants leaving the West has also increased since the 1970s. In 1971, 43.7% of emigrants were under age 25. By 2008, this figure dropped to 25.5%. Emigrants are leaving at later stages of life and are taking fewer children with them.

In terms of gender, the number of males and females coming to the West since 1971 has been roughly equal with females having a slight edge (52%) over males.

The vast majority of immigrants land in an urban area

FIGURE 23: IMMIGRANTS BY URBAN AREA 2008 (NUMBER AND % OF NATIONAL TOTAL)



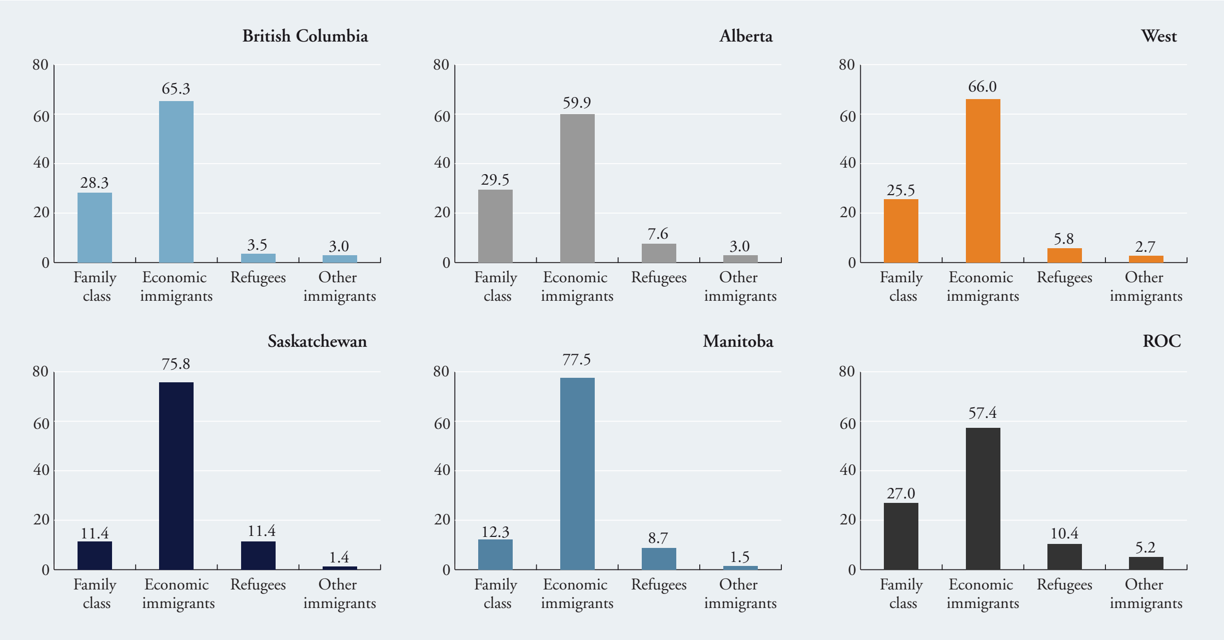


Source: Citizenship and Immigration Canada, Facts and Figure 2008.

Three cities (Toronto, Montreal and Vancouver) were the destination for two-thirds of immigrants to Canada in 2008 with Toronto alone accounting for over a third. Within the West, Vancouver dominates as a destination of new Canadians with 44.4% of immigrants to the West arriving there in 2008. Calgary is a distant second at 15.5%. At 9.6%, Winnipeg's share of the regional total is larger than it share of the regional population.

Two-thirds of immigrants to the West are classified as economic immigrants (i.e., selected for their skills and ability to contribute to the Canadian economy)

FIGURE 24: IMMIGRANTS BY CATEGORY 2008 (% OF TOTAL)



Note: **Family class:** Permanent residents sponsored by a Canadian citizen or a permanent resident living in Canada who is 18 years of age or over. Family class immigrants include spouses and partners (i.e., spouse, common-law partner or conjugal partner); parents and grandparents; and others (i.e., dependent children, children under the age of 18 whom the sponsor intends to adopt in Canada, brothers, sisters, nephews, nieces and grandchildren who are orphans under 18 years of age, or any other relative if the sponsor has no relative as described above, either abroad or in Canada). Fiancé(e)s are no longer designated as a component of the family class under the Immigration and Refugee Protection Act.

Economic immigrants: Permanent residents selected for their skills and ability to contribute to Canada's economy. The economic immigrant category includes skilled workers, business immigrants, provincial or territorial nominees and live-in caregivers.

Refugees: Permanent residents in the refugee category include government-assisted refugees, privately sponsored refugees, refugees landed in Canada and refugee dependants (i.e., dependants of refugees landed in Canada, including spouses and partners living abroad or in Canada).

Other immigrants: Permanent residents in the other immigrant category include post-determination refugee claimants in Canada, deferred removal orders, retirees (no longer designated under the Immigration and Refugee Protection Act), temporary resident permit holders, humanitarian and compassionate cases, sponsored humanitarian and compassionate cases outside the family class, and people granted permanent resident status based on public policy considerations.

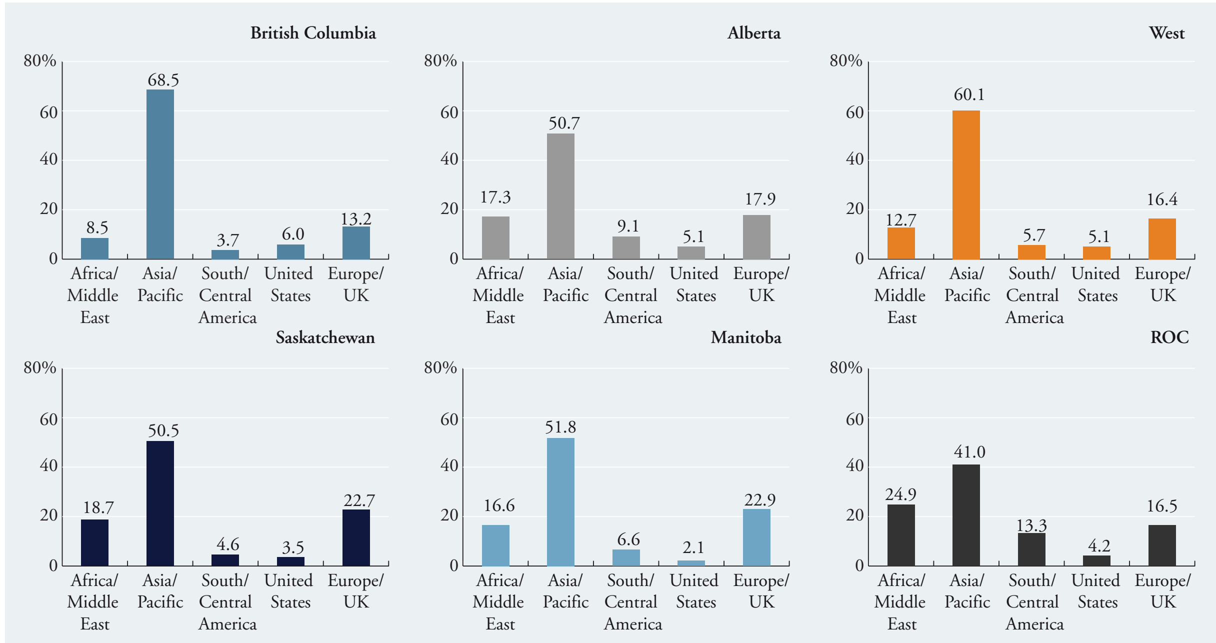
Source: Citizenship and Immigration Canada, Facts and Figures 2008.

There are four categories of immigrants: family members, economic immigrants, refugees and other. The majority of immigrants to both the West and the rest of Canada fall into the economic category. A larger proportion of immigrants to the rest of Canada are refugees (10.4% compared to 5.8% in the West).

Compared to Alberta and BC, a relatively large proportion of Manitoba and Saskatchewan immigrants are in the economic category and a relatively small proportion are in the family category.

Asian and Pacific countries are the main source of immigrants to western Canada

FIGURE 25: IMMIGRANTS BY SOURCE AREA 2008 (% OF PROVINCIAL/REGIONAL TOTAL)



I. Africa and the Middle East – Africa: Algeria; Angola; Benin, Peoples Republic of; Botswana, Republic of; Burkino-Faso; Burundi; Cameroon, Federal Republic of;Cape Verde Islands; Central Africa Republic; Chad, Republic of; Comoros; Congo, Democratic Republic of; Congo, People's Republic of the; Djibouti, Republic of; Egypt; Eritrea; Ethiopia; Gabon Republic; Gambia; Ghana; Guinea, Equatorial; Guinea, Republic of; Ivory Coast, Republic; Kenya; Libya; Lesotho; Liberia; Madagascar; Malawi; Mali, Republic of; Mauritania; Mauritius; Morocco; Mozambique; Namibia; New Caledonia; Niger, Republic of the; Nigeria; Reunion; Rwanda; Senegal; Seychelles; Sierra Leone; Somalia, Democratic Republic of;South Africa, Republic of; Tanzania, United Republic of; Togo, Republic of; Tunisia; Uganda; Zambia; Zimbabwe. Middle East: Bahrain; Cyprus; Iran; Iraq; Israel; Jordan; Kuwait; Lebanon; Palestinian Authority (Gaza/West Bank); Qatar; Saudi Arabia; Syria; United Arab Emirates; Yemen, People's Democratic Republic of; Yemen, Republic of.

II. Asia and Pacific – Asia: Afghanistan; Bangladesh; Brunei; Cambodia; China, People's Republic of; Hong Kong; India; Indonesia, Republic of; Japan; Korea, People's Democratic Republic of; Korea, Republic of; Laos; Macao; Macau; Malaysia; Mongolia, People's Republic of; Nepal; Oman; Pakistan; Philippines; SAR Myanmar (Burma); Singapore; Sri Lanka; Taiwan; Thailand; Bhutan; Tibet; Vietnam, Socialist Republic of, Pacific: Australia; Fiji; Maldives, Republic of; Nauru; New Zealand; Pacific Islands, US Trust Territory of the; Papau; New Guinea; Samoa, Western; Tonga; Vanuatu French Polynesia.

III. South America and Central America: Antigua and Barbuda; Argentina; Aruba; Bahama Islands, The; Barbados; Belize; Bermuda; Bolivia; Brazil; Cayman Islands; Chile; Colombia; Costa Rica; Cuba; Dominica; Dominican Republic; Ecuador; El Salvador; Falkland Islands; French Guiana; Grenada; Guadeloupe; Guatemala; Guyana; Haiti; Honduras; Jamaica; Martinique; Mexico; Montserrat; Netherlands Antilles, The; Nevis; Nicaragua; Panama, Republic of; Paraguay; Peru; Puerto Rico; St. Kitts-Nevis; St. Lucia; St. Vincent and the Grenadines; Surinam; Trinidad and Tobago; Uruguay; Venezuela; Virgin Islands, British; Other America (Greenland; St. Pierre and Miquelon).

IV. United States

V. Europe and the United Kingdom: Albania; Andorra; Armenia; Austria; Azerbaijan; Azores; Belarus; Belgium; Bosnia-Hercegovina; Bulgaria; Canary Islands; Croatia; Czech Republic; Czechoslovakia, Former; Denmark; Estonia; Finland; France; Georgia; Germany; Gibraltar; Greece; Hungary; Iceland; Ireland, Republic of; Italy; Kazakhstan; Kyrgyzstan; Latvia; Liechtenstein; Lithuania; Luxembourg; Macedonia; Madeira; Malta; Moldova; Monaco; Netherlands, The; Norway; Poland; Portugal; Romania; Russia; San Marino; Slovak Republic; Slovenia; Spain; Sweden; Switzerland; Tajikistan; Turkey; Turkmenistan; Ukraine; Union of Soviet Socialist Republics, Former;Uzbekistan;Yugoslavia. United Kingdom.

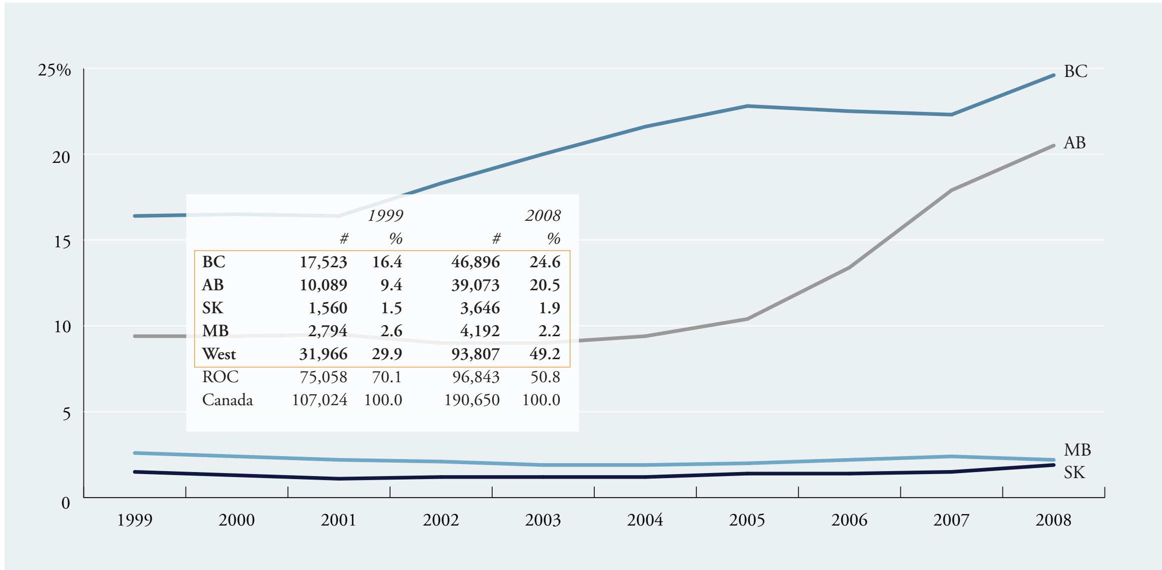
Source: Citizenship and Immigration Canada, Facts and Figures 2008.

Six in 10 immigrants to the West come from either an Asian or Pacific country compared to about 4 in 10 for the rest of Canada. The rest of Canada receives relatively more immigrants from Africa and the Middle East and South and Central America than does the West.

Within the West, BC stands out with almost 7 in 10 immigrants to the province coming from an Asian or Pacific country compared to about 5 in 10 for the prairie provinces.

The number of temporary foreign workers in the West has spiked in the last few years

FIGURE 26: TOTAL ENTRIES OF FOREIGN WORKERS 1999-2008 (% OF NATIONAL TOTAL)



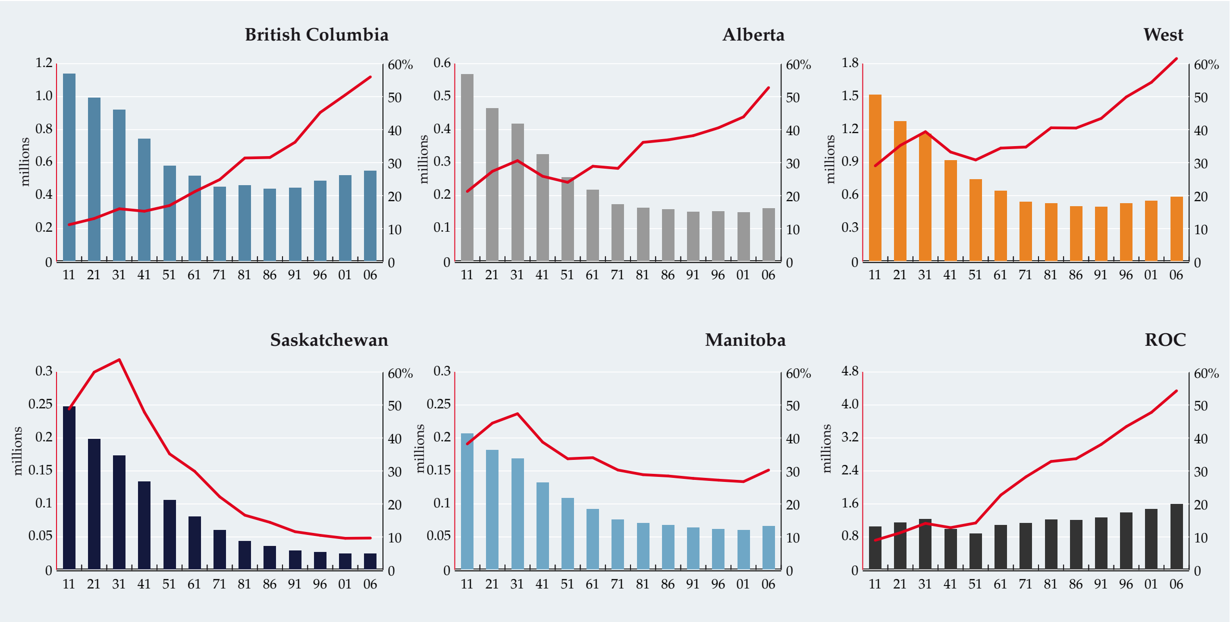
	1999 #	1999 %	2008 #	2008 %
BC	**17,523**	**16.4**	**46,896**	**24.6**
AB	**10,089**	**9.4**	**39,073**	**20.5**
SK	**1,560**	**1.5**	**3,646**	**1.9**
MB	**2,794**	**2.6**	**4,192**	**2.2**
West	**31,966**	**29.9**	**93,807**	**49.2**
ROC	75,058	70.1	96,843	50.8
Canada	107,024	100.0	190,650	100.0

Source: Citizenship and Immigration Canada, Facts and Figures 2008 and author's calculations.

In 1999, about 34,000 foreign workers came to the West compared to almost 94,000 in 2008. Over this period, the West's share of foreign workers increased from 30% in 1999 to 49% as of 2008. This shift was driven by a near quadrupling of the number of foreign workers in Alberta as well as strong growth in the population of foreign workers in BC and more modest, but still significant, growth in Saskatchewan and Manitoba. Alberta is home to about a tenth of the national population but a fifth of foreign workers went to Alberta in 2008. Between the oil sands in Alberta and the Winter Olympics in Vancouver, the need for labour in the West was high in 2008. It remains to be seen how the recession and other factors will affect the numbers in 2009 and following.

One in five western Canadians was born in a foreign country

FIGURE 27: FOREIGN BORN (IMMIGRANT) POPULATION, NUMBER (LEFT AXIS, LINE GRAPH) AND SHARE (RIGHT AXIS, BAR CHART) OF TOTAL POPULATION 1911-2006 (CENSUS DATA)

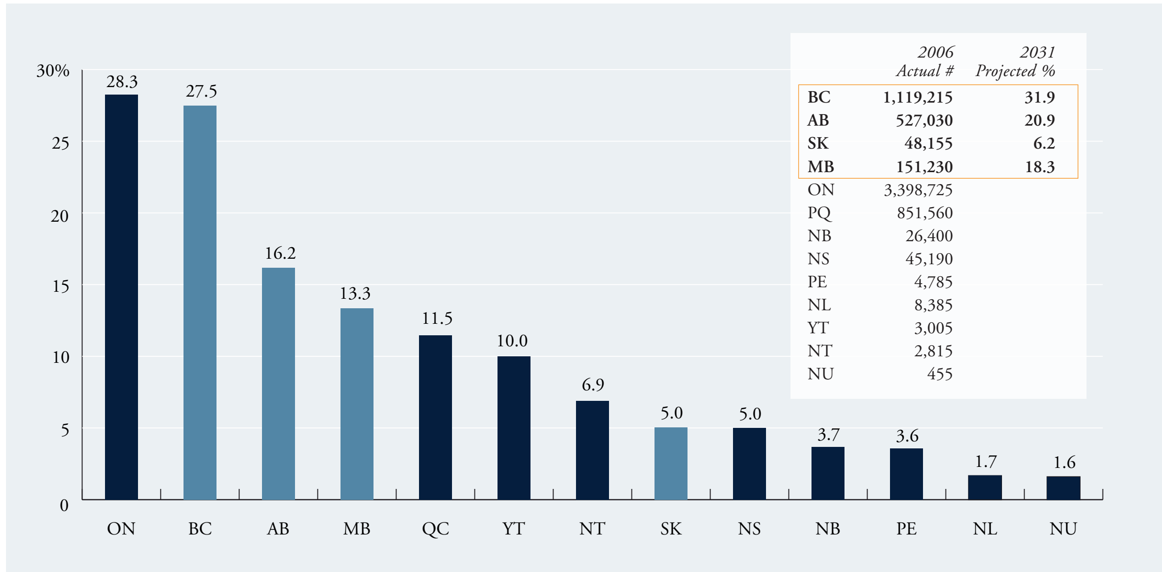


Note: The foreign born population consists of people who are, or who have been, landed immigrants in Canada. It does not include non-permanent foreign residents.
Source: Statistics Canada Census Data.

In 1911, half of western Canada's population was born in a foreign country. Although this ratio has dropped over time, the West is still home to a very large foreign born population. As of the 2006 Census, there were 1.8 million foreign born western Canadians representing almost 20% of the regional population. The foreign born population has increased in absolute terms in BC and Alberta, but fallen in Saskatchewan and Manitoba since 1911.

Ontario and BC have Canada's largest foreign born populations

FIGURE 28: FOREIGN BORN (IMMIGRANT) POPULATION (%) OF PROVINCIAL/TERRITORIAL TOTAL 2006 (CENSUS DATA)



	2006 Actual #	*2031 Projected %*
BC	**1,119,215**	**31.9**
AB	**527,030**	**20.9**
SK	**48,155**	**6.2**
MB	**151,230**	**18.3**
ON	3,398,725	
PQ	851,560	
NB	26,400	
NS	45,190	
PE	4,785	
NL	8,385	
YT	3,005	
NT	2,815	
NU	455	

Note: The foreign born population consists of people who are, or who have been, landed immigrants in Canada. It does not include non-permanent foreign residents.
Source: Statistics Canada Census, Catalogue 91-551-X (Projections of the Diversity of the Canadian Population 2006-2031) and author's calculations.

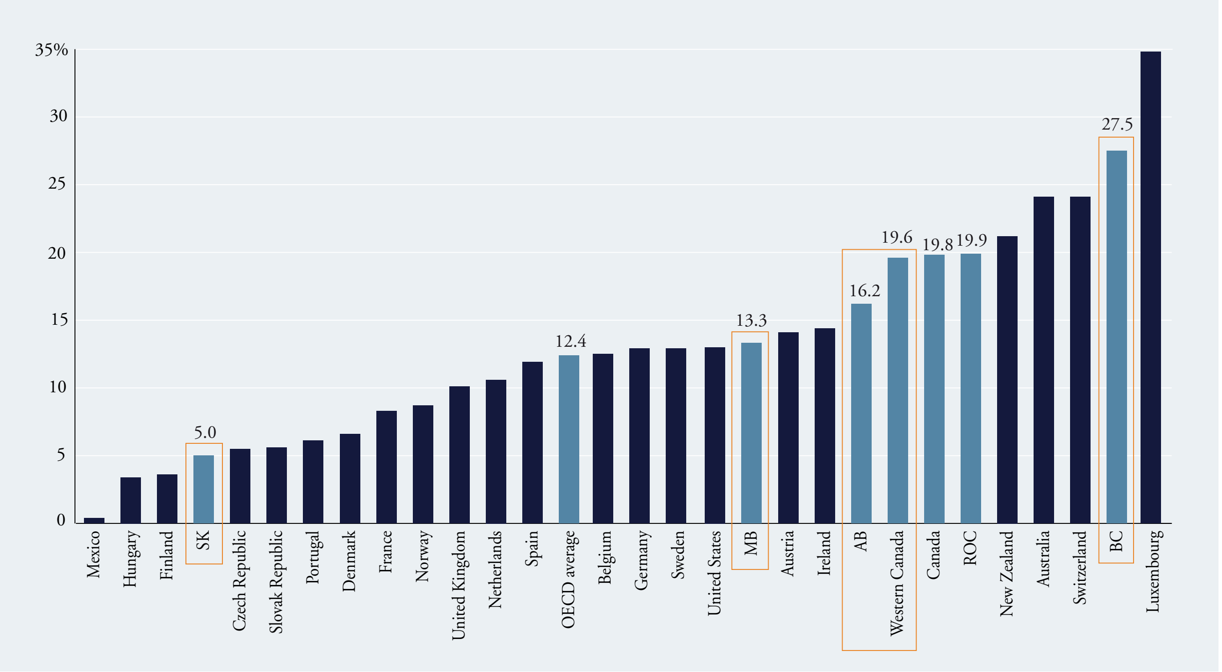
Ontario has the largest percentage of foreign born people in its population (28.3%) as well as the largest foreign born population in absolute terms at 3.4 million. BC's foreign born population is also very large at 1.1 million and 27.5% of the provincial population. Saskatchewan stands out in the West with only 5% of its population born abroad.

In addition to enriching the cultural diversity of the West, immigrants provide a strong basis upon which to encourage future inflows of immigrants. Existing immigrants and their children are able to help new immigrants get settled and make coming to Canada a less daunting experience. Foreign born residents and their families also provide important cultural and business links to the global community—links that contribute to the West's prosperity and quality of life.

As immigration continues to be a key source of population growth, the percentage of foreign born residents is projected to increase. The proportion of BC's population that is foreign born is expected to reach 31.9% by 2031. Alberta's is expected to go from 16.2% in 2006 to 20.9%, Manitoba's from 13.3% to 18.3% and Saskatchewan's from 5% to 6.2%.

Western Canada has a rich tradition of immigration

FIGURE 29: FOREIGN BORN POPULATION IN INTERNATIONAL CONTEXT 2006 (FOREIGN BORN POPULATION AS % OF TOTAL POPULATION)

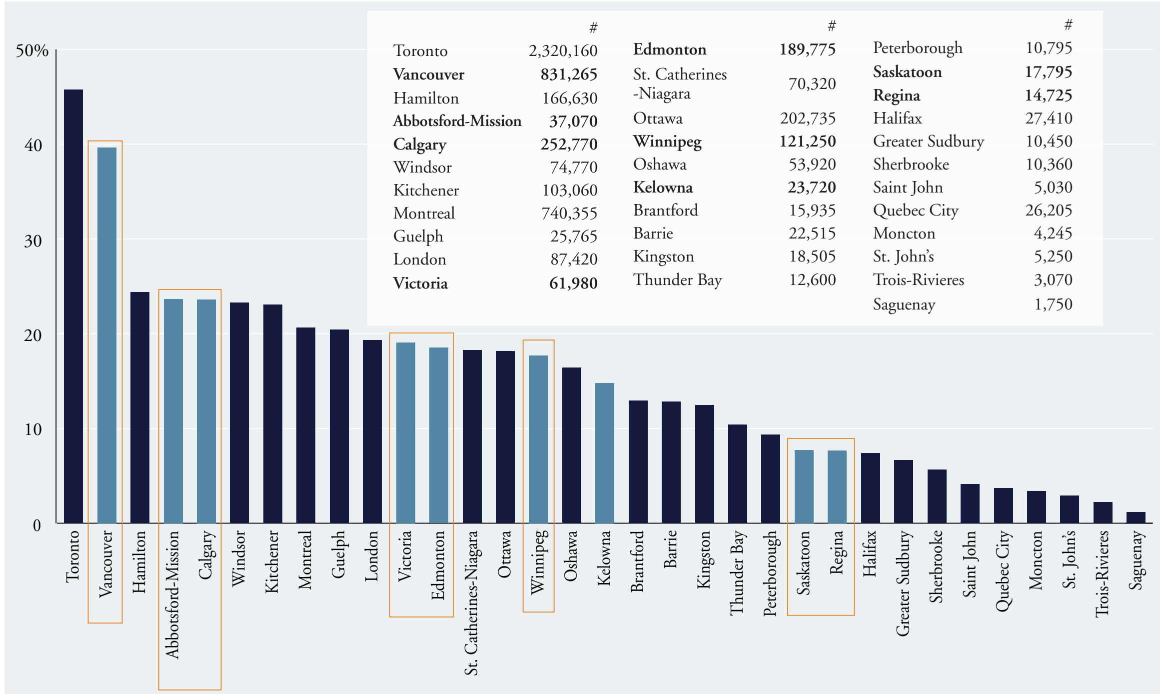


Source: Statistics Canada Census, OECD Factbook 2009 and author's calculations.

When compared to OECD countries, the western provinces (with the exception of Saskatchewan) have relatively large foreign born populations when measured as a share of total population. Manitoba, Alberta and BC all have a larger proportion of immigrants in their populations than the OECD average. BC is second only to Luxembourg in this respect.

Cities are home to most of the West's foreign born residents

FIGURE 30: FOREIGN BORN (IMMIGRANT) POPULATION BY CMA, SHARE (%) OF CMA TOTAL POPULATION AND NUMBER 2006

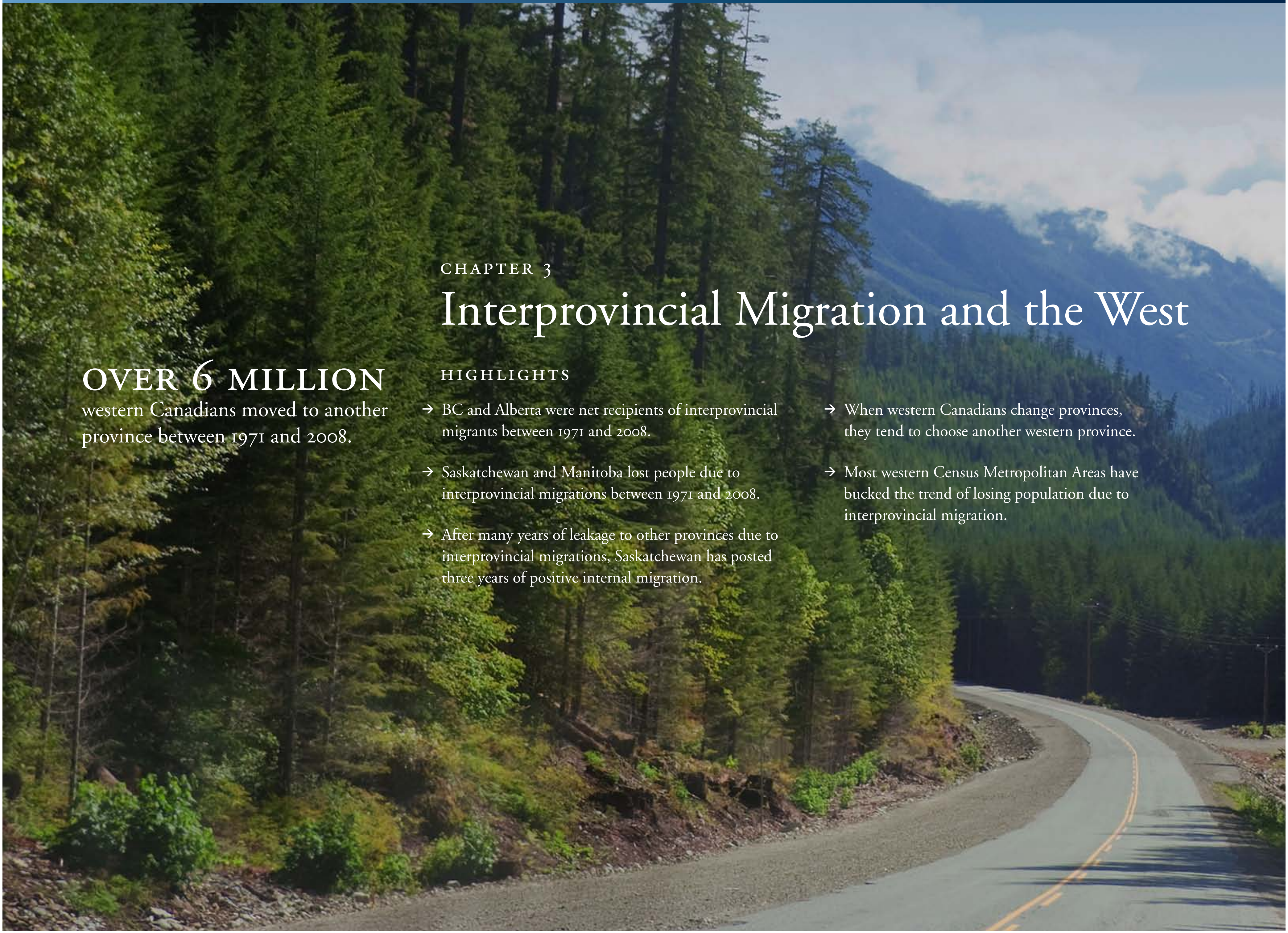


	#		#		#
Toronto	2,320,160	**Edmonton**	**189,775**	Peterborough	10,795
Vancouver	**831,265**	St. Catherines -Niagara	70,320	**Saskatoon**	**17,795**
Hamilton	166,630			**Regina**	**14,725**
Abbotsford-Mission	**37,070**	Ottawa	202,735	Halifax	27,410
Calgary	**252,770**	**Winnipeg**	**121,250**	Greater Sudbury	10,450
Windsor	74,770	Oshawa	53,920	Sherbrooke	10,360
Kitchener	103,060	**Kelowna**	**23,720**	Saint John	5,030
Montreal	740,355	Brantford	15,935	Quebec City	26,205
Guelph	25,765	Barrie	22,515	Moncton	4,245
London	87,420	Kingston	18,505	St. John's	5,250
Victoria	**61,980**	Thunder Bay	12,600	Trois-Rivieres	3,070
				Saguenay	1,750

Source: Statistics Canada Cansim Table 051-0001 and author's calculations.

Given that most immigrants to Canada land in a major urban centre, it is not surprising that the bulk of the foreign born population is found in large cities. The Toronto Census Metropolitan Area (CMA) has the largest foreign born population at 2.3 million or 45.7% of its population. Within the West, Vancouver has the largest foreign born population in both absolute and percentage terms—4 in 10 Vancouverites were born abroad. Both Calgary and Edmonton have large immigrant populations, as does Winnipeg.

When BC's four CMAs are combined, we find that 85.2% of BC's foreign born population lives in Vancouver, Abbotsford and Victoria. Similarly, 84% of Alberta's foreign born population lives in Calgary and Edmonton, 67.5% of Saskatchewan's lives in Regina and Saskatoon and 80.2% of Manitoba's live in Winnipeg.



CHAPTER 3

Interprovincial Migration and the West

OVER 6 MILLION
western Canadians moved to another province between 1971 and 2008.

HIGHLIGHTS

- BC and Alberta were net recipients of interprovincial migrants between 1971 and 2008.
- Saskatchewan and Manitoba lost people due to interprovincial migrations between 1971 and 2008.
- After many years of leakage to other provinces due to interprovincial migrations, Saskatchewan has posted three years of positive internal migration.
- When western Canadians change provinces, they tend to choose another western province.
- Most western Census Metropolitan Areas have bucked the trend of losing population due to interprovincial migration.

Interprovincial migration has favoured BC and Alberta since 1971

FIGURE 31: INTERPROVINCIAL MIGRATION SUMMARY 1971-2008

	IN	*OUT*	*NET*	*NET as % Pop. in 2008*
BC	**2,341,213**	**1,808,299**	**532,914**	**12.2**
AB	**2,685,838**	**2,162,931**	**522,907**	**14.5**
SK	**705,503**	**900,693**	**-195,190**	**-19.3**
MB	**680,209**	**869,297**	**-189,088**	**-15.7**
ON	3,000,764	2,962,945	37,819	0.3
QC	964,157	1,495,539	-531,382	-6.9
NB	518,875	540,460	-21,585	-2.9
NS	696,792	713,690	-16,898	-1.8
PE	120,590	116,931	3,659	2.6
NL	339,116	462,069	-122,953	-24.3
YT, NT and NU	212,559	232,762	-20,203	-18.6
West	**6,412,763**	**5,741,220**	**671,543**	**6.6**
ROC	5,852,853	6,524,396	-671,543	-2.9

Source: Statistics Canada Cansim Tables 051-0018, 051-0001 and author's calculations.

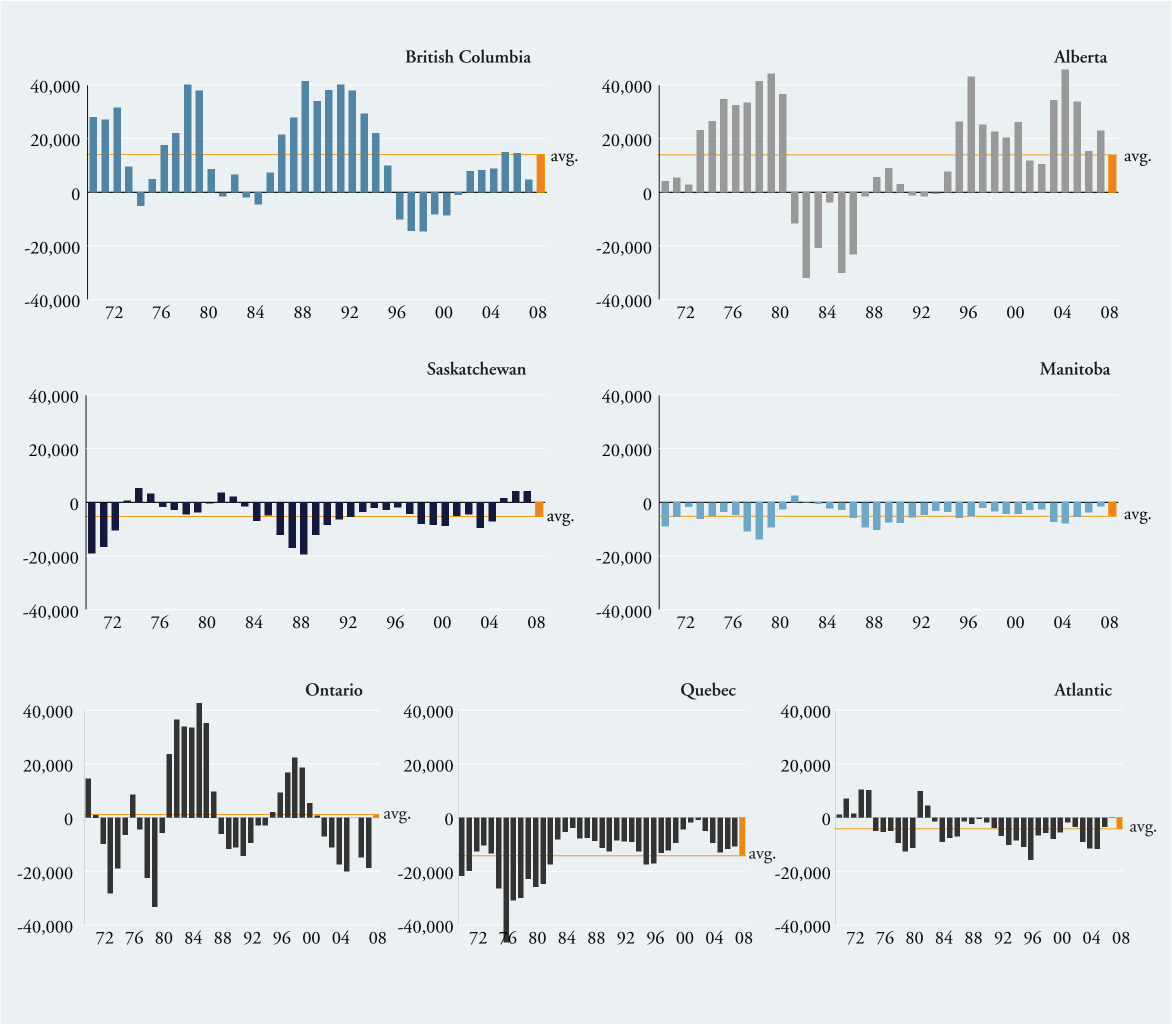
Between 1971 and 2008, 6,412,763 people moved into a western province from either another western province or from elsewhere in the country. Over the same period, 5,741,220 million left a western province for a net gain of 671,543 people. The regional total, however, masks the fact that BC and Alberta were net recipients of interprovincial migrants while Saskatchewan and Manitoba were net losers. In terms of interprovincial migration, there are two very different stories within the West. The combined net gain for BC and Alberta is 1,055,821 compared to a combined net loss for Saskatchewan and Manitoba of 384,278.

What is also striking about these numbers is the sheer volume of movement within the country. Over 12 million Canadians changed their province of residence between 1971 and 2008. There has, in other words, been a tremendous amount of population churn in Canada with millions of people deciding to try their luck in another province (many more than once). For example, it would not be unusual to hear of someone leaving Ontario, moving to Alberta, spending a few years in BC and then moving back to Ontario.

The net loss for Newfoundland and Labrador represents a quarter of its current population (24.3%). The relative loss is also high for Saskatchewan (19.3%) and Manitoba (15.7%). In absolute terms, Quebec lost the most residents 531,382 over the period.

A strong economy has seen Saskatchewan become a net recipient of internal migrants

FIGURE 32: NET INTERPROVINCIAL MIGRATION 1971-2008



Source: Statistics Canada Cansim Table 051-0018 and author's calculations.

The effect of international migration versus internal migration varies across the West

FIGURE 33: TOTAL INTERPROVINCIAL AND INTERNATIONAL NET MIGRATION 2000-2008

	BC	*AB*	*SK*	*MB*	*ON*	*QC*	*Atlantic*	*West*	*ROC*
2000	22,678	30,224	-7,782	-1,090	148,995	19,115	-6,759	44,030	160,731
2001	20,892	37,939	-7,667	-864	140,489	27,847	-4,135	50,300	164,208
2002	23,697	21,215	-4,167	680	93,205	27,251	-843	41,425	119,883
2003	37,460	22,371	-3,119	3,601	103,894	37,448	-1,523	60,313	139,732
2004	42,648	46,919	-7,946	-1,219	99,177	31,848	-6,972	80,402	123,365
2005	45,953	60,552	-5,481	-779	94,532	25,879	-8,553	100,245	110,730
2006	46,534	48,144	4,286	3,729	75,202	25,091	-7,563	102,693	92,578
2007	51,592	33,317	8,103	5,478	80,154	27,081	1,385	98,490	108,371
2008	40,920	41,041	9,737	10,068	68,081	27,933	5,159	101,766	100,585

Source: Cansim Tables 051-0018, 051-0011 and author's calculations.

Zeroing-in on the 2000s, we see that Manitoba's strong performance in attracting migrants from other countries often offsets the leakage of population to other parts of Canada that it has experienced since 2000. Alberta also stands out because net internal migration is more important to its growth than net international migration. Alberta added 221,551 people to its population from other parts of Canada compared to 120,171 from foreign countries between 2000 and 2008. When net internal and net international migration are combined, the West had a slight edge over the rest of Canada in 2008 but still gained less people than the rest of Canada over the course of the 2000s (679,664 vs. 1,120,183).

When moving to another province, most westerners choose to stay in the West

FIGURE 34: DESTINATION OF INTERPROVINCIAL MIGRANTS 1971-2008

FROM BC

Destination	*#*	*% of Total Out-migrants*
to QC	85,310	4.7
to ON	493,212	27.3
to MB	111,122	6.1
to SK	129,429	7.2
to AB	819,905	45.3
to North	52,011	2.9
to Atlantic	117,310	6.5
to West	1,060,456	58.6

FROM AB

Destination	*#*	*% of Total Out-migrants*
to QC	76,269	3.5
to ON	495,690	22.9
to MB	144,715	6.7
to SK	299,460	13.8
to BC	904,976	41.8
to North	55,820	2.6
to Atlantic	186,001	8.6
to West	1,349,151	62.4

FROM SK

Destination	*#*	*% of Total Out-migrants*
to QC	13,686	1.5
to ON	107,771	12.0
to MB	116,536	12.9
to AB	439,642	48.8
to BC	184,939	20.5
to North	13,756	1.5
to Atlantic	24,363	2.7
to West	741,117	82.3

FROM MB

Destination	*#*	*% of Total Out-migrants*
to QC	27,404	3.2
to ON	236,315	27.2
to SK	121,628	14.0
to AB	233,805	26.9
to BC	191,422	22.0
to North	12,465	1.4
to Atlantic	46,258	5.3
to West	546,855	62.9

Source: Cansim Table 051-0019 and author's calculations.

Saskatchewanians are the most likely to stay in the West when moving out of province with 82.3% electing to stay in the region between 1971 and 2008. Almost half of the people who left Saskatchewan went next door to Alberta (hence the "sea of green" Saskatchewan Roughriders fans at Calgary Stampeders games). Outside the West, Ontario is a fairly common population destination. Westerners are least likely to move to Quebec.

In absolute terms, the largest number of people moved from Alberta to BC (904,976). Those moving from BC to Alberta is a close second at 819,905. It is important to note that some of these movers may have moved back and forth more than once—e.g., if a family of 4 left Alberta for BC in the 1970s, came back to Alberta in the 1980s and then moved back to BC in the 1990s, this would count as 8 people moving to BC from Alberta and 4 to Alberta from BC.

Over half a million Atlantic Canadians moved to the West between 1971 and 2008

FIGURE 35: ORIGIN OF INTERPROVINCIAL MIGRANTS 1971-2008

TO BC

Origin	*#*	*% of Total In-migrants*
From PQ	149,461	6.4
From ON	694,941	29.7
From MB	191,422	8.2
From SK	184,939	7.9
From AB	904,976	38.7
From North	65,316	2.8
From Atlantic	150,158	6.4
From West	1,281,337	54.7

TO AB

Origin	*#*	*% of Total In-migrants*
From PQ	149,611	5.6
From ON	675,440	25.1
From MB	233,805	8.7
From SK	439,642	16.4
From BC	819,905	30.5
From North	73,032	2.7
From Atlantic	294,403	11.0
From West	1,493,352	55.6

TO SK

Origin	*#*	*% of Total In-migrants*
From PQ	15,765	2.3
From ON	95,745	13.7
From MB	121,628	17.4
From AB	299,460	42.8
From BC	129,429	18.5
From North	12,673	1.8
From Atlantic	25,342	3.6
From West	550,517	78.6

TO MB

Origin	*#*	*% of Total In-migrants*
From PQ	31,863	4.7
From ON	214,893	31.6
From SK	116,536	17.1
From AB	144,715	21.3
From BC	111,122	16.3
From North	11,457	1.7
From Atlantic	49,623	7.3
From West	372,373	54.7

Source: Cansim Table 051-0019 and author's calculations.

Given that most westerners who change provinces choose another western province, it is not surprising that most of the internal migrants flowing into the western provinces come from within the region. With that said, large numbers of people from Ontario, Quebec, Atlantic Canada and the North have moved to the region. For example, Ontario accounts for almost a third of the internal migrants to Manitoba. Despite its small population base, a large number of Atlantic Canadians have made the trip West in search employment and other opportunities.

International migration is more important to the population growth of CMAs than interprovincial migration

FIGURE 36: DEMOGRAPHIC GROWTH FACTORS BY CENSUS METROPOLITAN AREA 2008/09

(Rate Per Thousand)	*Natural Increase*	*Net International Migration*	*Net Interprovincial Migration*	*Net Intraprovincial Migration*	*Total Net Migration*	*Total Growth*
Canada	4.02	8.28	0.00	0.00	8.28	12.30
All CMAs	4.78	10.65	-0.08	0.19	10.76	15.54
Abbotsford-Mission	**4.96**	**8.91**	**-1.34**	**5.61**	**13.18**	**18.14**
Barrie	2.44	1.36	-1.46	9.15	9.04	11.48
Brantford	1.38	1.99	-1.75	3.96	4.20	5.58
Calgary	**9.02**	**15.07**	**7.20**	**0.42**	**22.69**	**31.71**
Edmonton	**7.23**	**10.89**	**4.80**	**1.68**	**17.37**	**24.60**
Greater Sudbury	-0.58	0.55	-0.35	2.71	2.91	2.33
Guelph	4.36	3.18	-3.30	5.35	5.24	9.59
Halifax	3.33	4.24	0.91	3.76	9.91	13.24
Hamilton	2.89	4.53	-1.64	3.31	6.21	9.09
Kelowna	**0.24**	**4.17**	**9.99**	**6.21**	**20.36**	**20.60**
Kingston	0.42	1.20	2.25	3.67	7.12	7.54
Kitchener	5.42	6.48	-1.75	2.59	7.32	12.74
London	2.70	5.06	-2.05	2.08	5.09	7.79
Moncton	1.45	3.47	1.84	6.21	11.52	12.97
Montreal	5.16	12.17	-2.54	-1.70	7.93	13.09
Oshawa	4.86	2.13	-2.11	10.09	10.11	14.97
Ottawa-Gatineau	5.18	4.81	2.87	2.67	10.45	15.04
Peterborough	-2.00	0.63	-2.21	6.34	4.77	2.77
Quebec City	3.48	3.75	0.81	4.51	7.45	10.94
Regina	**4.23**	**10.58**	**2.14**	**2.58**	**15.30**	**19.54**
Saguenay	2.14	0.29	-0.51	-2.01	-2.23	-0.10
Saint John	0.87	5.50	-0.40	-0.05	5.05	5.93
Saskatoon	**5.45**	**16.09**	**3.66**	**3.28**	**23.04**	**28.49**
Sherbrooke	3.64	7.61	-2.01	2.47	8.06	11.70
St. Catherines-Niagara	-0.59	2.09	-2.46	1.33	0.95	0.37
St. John's	0.45	1.54	6.04	4.64	12.22	12.67
Thunder Bay	-0.53	0.70	-5.80	0.44	-4.67	-5.19
Toronto	6.18	15.02	-1.42	-3.13	10.47	16.65
Trois-Rivieres	1.00	3.00	-0.71	3.41	5.70	6.71
Vancouver	**4.32**	**19.44**	**-0.17**	**-2.44**	**16.84**	**21.16**
Victoria	**-0.75**	**5.98**	**5.13**	**2.48**	**13.58**	**12.83**
Windsor	3.38	2.64	-6.70	-4.97	-9.04	-5.65
Winnipeg	**3.19**	**12.05**	**-2.48**	**0.84**	**11.42**	**14.60**

Source: Statistics Canada Catalogue 91-214-X.

With the exception of Kelowna, Kingston and St. John's, international migrants outnumbered interprovincial migrants for all CMAs in 2008/09. While many CMAs lost population due to interprovincial migration, Calgary, Edmonton, Kelowna, Regina, Saskatoon and Victoria all posted gains in this area. Calgary posted particularly strong gains due to interprovincial migration, adding 7.2 people per 1,000 in 2008/09 compared to a loss of -0.08 for all CMAs. The recent economic turnaround in Newfoundland likely accounts for its strong numbers in this area (St. John's added 6.04 people per 1,000 to its population in 2008/09 due to interprovincial migration).

CHAPTER 4

Visible Minorities in the West

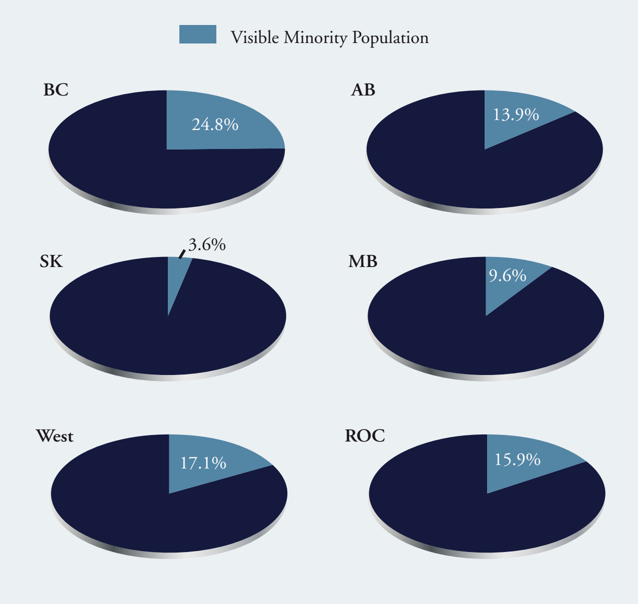
Western Census Metropolitan Areas are home to **1.5 MILLION** who identify themselves as a visible minority.

HIGHLIGHTS

- Western Canada's population includes large numbers of visible minorities.
- In percentage terms, BC has the largest visible minority population in the country.
- Most of the visible minority population lives in large urban centres.
- About 4 in 10 residents of Vancouver are in the visible minority category (second only to Toronto).
- The visible minority population is expected to grow faster than the rest of the population. By 2031, almost a third of western Canadians will be visible minorities.
- Visible minorities are projected to become the majority in Vancouver by 2031.

BC is the most visibly diverse province in Canada

FIGURE 37: VISIBLE MINORITY POPULATION BY PROVINCE 2006 CENSUS



	Total Population	*Total Visible Minority Population*
BC	**4,074,380**	**1,008,855**
AB	**3,256,355**	**454,200**
SK	**953,850**	**33,895**
MB	**1,133,515**	**109,100**
ON	12,028,895	2,745,205
QC	7,435,900	654,350
NB	719,650	13,345
NS	903,090	37,685
PE	134,205	1,825
NL	500,605	5,720
YT	30,195	1,220
NT	41,055	2,265
NU	29,325	420
West	**9,418,100**	**1,606,050**
ROC	21,822,930	3,462,045
Canada	31,241,030	5,068,095

Note: Visible minorities are defined by Statistics Canada as "persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour."
Source: Statistics Canada and author's calculations.

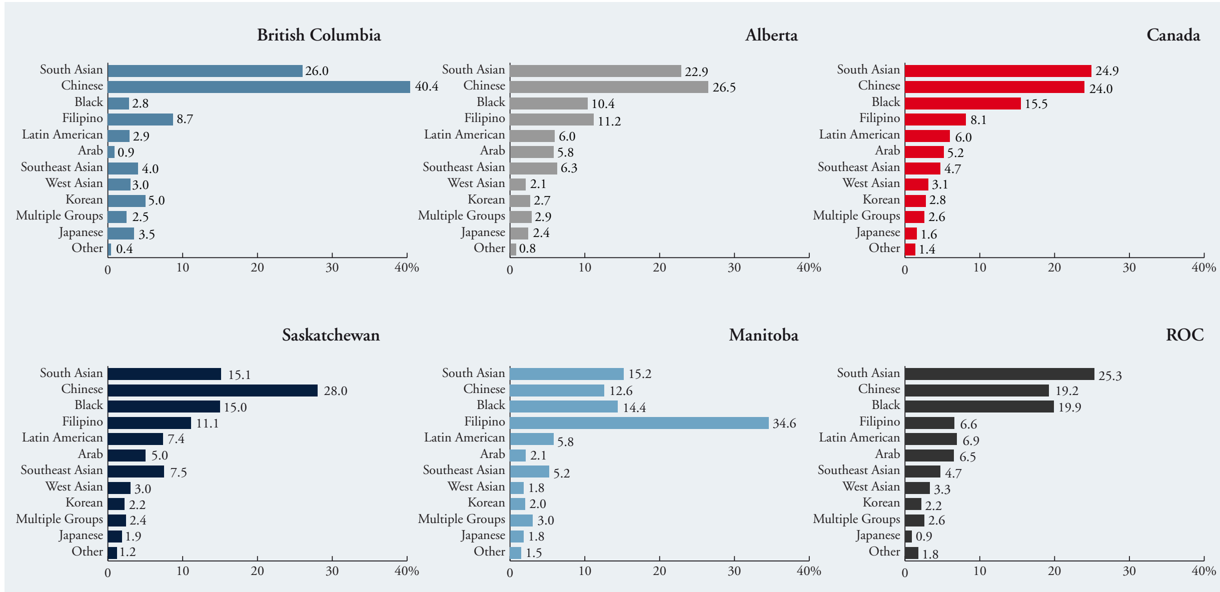
As a region, the West has a slightly higher percentage of visible minorities in its population than the rest of Canada (17.1 % versus 15.9%). There is, however, significant variation within the West, with BC leading the region and the country with almost a quarter of its population in the visible minority category compared to just 3.6% of Saskatchewan's population identifying as a visible minority.

Alberta has the third highest percentage of its population in the visible minority category at 13.9% as of the 2006 Census. In total, there are 1.6 million visible minorities in western Canada compared to 3.5 million in the rest of the country.

The visible minority population in the West has been on the rise: BC's percentage has gone from 17.9 in 1996 to 24.8 as of the 2006 Census; Alberta's has gone from 10.1 to 13.9; Manitoba's has gone from 7.0 to 9.6; and Saskatchewan's has gone from 2.8 to 3.6.

The West is home to 45% of Canada's Chinese population

FIGURE 38: VISIBLE MINORITY POPULATION BY ETHNIC ORIGIN 2006 CENSUS



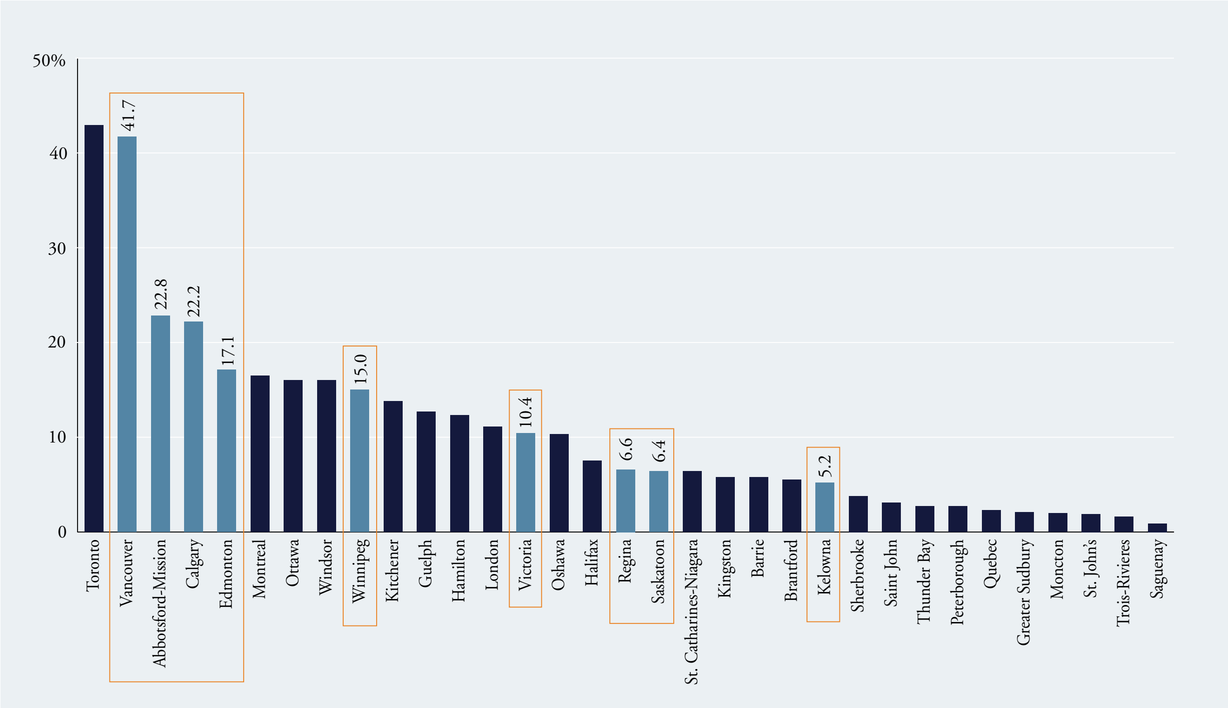
Note: Visible minorities are defined by Statistics Canada as "persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour."
Source: Statistics Canada 2006 Census and author's calculations.

As of the 2006 Census, BC's visible minority population was over 1 million people, with 40.4% of that population having a Chinese background. At 34.6% of its total visible minority population, Manitoba has a large number of residents with a Filipino background. However, in absolute terms, there are 88,075 residents with a Filipino background in BC compared to 37,785 in Manitoba.

Just over 45% of Canada's Chinese population lives in the West. The only category where the West is home to a majority is Japanese (60% of the national total). Underrepresented categories in the West relative to its share of the national population include Black and Arab (12.3% and 14.6% of the national total respectively).

Toronto and Vancouver stand out among CMAs with over 4 in 10 residents in the visible minority category

FIGURE 39: VISIBLE MINORITY POPULATION BY CENSUS METROPOLITAN AREA 2006 CENSUS (% OF CMA POPULATION)



Source: Statistics Canada 2006 Census.

Census Metropolitan Areas are home to 96% of Canada's visible minority population. There are visible minorities in rural areas, but they are spread pretty thin.

The percentage of the population of CMAs that identifies as a visible minority on the Census varies from less than 1% in Saguenay to over 40% in Vancouver and Toronto.

Five of the top 10 cities in terms of visible minorities as a proportion of their total population are in the West (Vancouver, Abbotsford-Mission, Calgary, Edmonton and Winnipeg). Regina, Saskatoon and Kelowna all have relatively small visible minority populations compared to the other western CMAs.

The western CMAs are home to 1.5 million visible minority residents

FIGURE 40: VISIBLE MINORITY POPULATION BY ETHNIC ORIGIN AND WESTERN CMA 2006 CENSUS

	Victoria	*Vancouver*	*Abbotsford-Mission*	*Kelowna*	*Calgary*	*Edmonton*	*Regina*	*Saskatoon*	*Winnipeg*
Total population	325,060	2,097,965	156,640	160,560	1,070,295	1,024,825	192,435	230,850	686,040
Visible minority population	33,870	875,295	35,715	8,320	237,890	175,295	12,605	14,870	102,940
South Asian	7,210	207,160	25,580	2,345	57,700	40,200	1,975	2,230	15,290
Chinese	12,330	381,535	2,245	1,470	66,375	47,195	3,335	4,245	12,810
Black	2,360	20,670	930	660	21,060	20,380	2,170	1,900	14,470
Filipino	2,760	78,890	730	410	25,565	19,630	1,230	1,920	36,935
Latin American	1,845	22,695	1,275	525	13,410	9,210	955	1,050	5,480
Arab	500	7,430	150	60	11,660	11,940	475	940	2,125
Southeast Asian	1,585	33,470	1,665	720	15,750	11,025	1,260	1,010	5,340
West Asian	575	28,160	210	190	6,010	2,925	220	665	1,895
Korean	1,235	44,825	1,615	265	6,835	3,770	330	110	2,080
Japanese	2,280	25,425	830	1,230	4,680	2,270	180	335	1,840
Other	260	2,920	35	135	1,985	1,475	120	115	1,595
Multiple	930	22,115	450	305	6,860	5,275	335	345	3,080

% of Visible Minority Population	*Victoria*	*Vancouver*	*Abbotsford-Mission*	*Kelowna*	*Calgary*	*Edmonton*	*Regina*	*Saskatoon*	*Winnipeg*
South Asian	21.3	23.7	71.6	28.2	24.3	22.9	15.7	15.0	14.9
Chinese	36.4	43.6	6.3	17.7	27.9	26.9	26.5	28.5	12.4
Black	7.0	2.4	2.6	7.9	8.9	11.6	17.2	12.8	14.1
Filipino	8.1	9.0	2.0	4.9	10.7	11.2	9.8	12.9	35.9
Latin American	5.4	2.6	3.6	6.3	5.6	5.3	7.6	7.1	5.3
Arab	1.5	0.8	0.4	0.7	4.9	6.8	3.8	6.3	2.1
Southeast Asian	4.7	3.8	4.7	8.7	6.6	6.3	10.0	6.8	5.2
West Asian	1.7	3.2	0.6	2.3	2.5	1.7	1.7	4.5	1.8
Korean	3.6	5.1	4.5	3.2	2.9	2.2	2.6	0.7	2.0
Japanese	6.7	2.9	2.3	14.8	2.0	1.3	1.4	2.3	1.8
Other	0.8	0.3	0.1	1.6	0.8	0.8	1.0	0.8	1.5
Multiple	2.7	2.5	1.3	3.7	2.9	3.0	2.7	2.3	3.0

Source: Statistics Canada 2006 Census.

At 875,295, Vancouver has the largest population of visible minorities in western Canada.

Given that the vast majority of visible minorities reside in CMAs, the breakdown by ethnic origin for the large cities roughly matches that of the provinces where the cities are located. For example, about 4 in 10 visible minorities in both BC and Vancouver are of Chinese origin. The exceptions are Abbotsford-Mission and Kelowna. People of South Asian origin form 71.6% of Abbotsford's visible minority population compared to a provincial average of 26%. Kelowna has a smaller percentage of Chinese visible minorities than BC as a whole and a higher percentage of people of Japanese origin.

The visible minority population is expected to grow faster than the rest of the population

FIGURE 41: PROJECTED VISIBLE MINORITY POPULATION IN 2031

	Total Population	*Visible Minority Population*	*%*
Toronto	8,868,000	5,572,000	62.8
Vancouver	**3,483,000**	**2,061,000**	**59.2**
BC	**5,996,000**	**2,357,000**	**39.3**
Abbotsford	**214,000**	**83,000**	**38.8**
Calgary	**1,864,000**	**703,000**	**37.7**
Ottawa-Gatineau (ON)	1,232,000	447,000	36.3
Windsor	476,000	156,000	32.8
Montreal	4,900,000	1,521,000	31.0
Rest of Canada	**28,745,000**	**8,921,000**	***31.0***
Canada	**42,078,000**	**12,855,000**	***30.6***
West	**13,333,000**	**3,934,000**	***29.5***
Edmonton	**1,529,000**	**437,000**	**28.6**
Kitchener	603,000	170,000	28.2
Winnipeg	**884,000**	**235,000**	**26.6**
AB	**4,903,000**	**1,255,000**	**25.6**
Guelph	165,000	42,000	25.5
Hamilton	921,000	226,000	24.5
London	554,000	121,000	21.8
Oshawa	455,000	97,000	21.3
MB	**1,391,000**	**250,000**	**18.0**
Victoria	**406,000**	**69,000**	**17.0**
Ottawa-Gatineau (QC)	342,000	49,000	14.3
St.Catharines-Niagara	433,000	62,000	14.3
Saskatoon	**262,000**	**33,000**	**12.6**
Halifax	418,000	52,000	12.4
Regina	**211,000**	**25,000**	**11.8**
Barrie	246,000	28,000	11.4
Kingston	172,000	19,000	11.0
Kelowna	**219,000**	**22,000**	**10.0**
Sherbrooke	203,000	20,000	9.9
Brantford	164,000	16,000	9.8
Peterborough	128,000	10,000	7.8
Saint John	117,000	9,000	7.7
Rest of AB	**1,510,000**	**115,000**	**7.6**
Rest of BC	**1,674,000**	**122,000**	**7.3**
SK	**1,043,000**	**72,000**	**6.9**
Thunder Bay	131,000	9,000	6.9
YT, NT & NU	139,000	9,000	6.5
Moncton	132,000	7,000	5.3
Quebec City	692,000	34,000	4.9
Trois-Rivières	145,000	7,000	4.8
St. John's	169,000	8,000	4.7
Greater Sudbury	170,000	8,000	4.7
Rest of ON	2,908,000	133,000	4.6
Rest of NS	501,000	16,000	3.2
Rest of NB	451,000	14,000	3.1
Rest of MB	**507,000**	**15,000**	**3.0**
PE	136,000	4,000	2.9
Rest of SK	**570,000**	**14,000**	**2.5**
Saguenay	135,000	3,000	2.2
Rest of QC	2,378,000	51,000	2.1
Rest of NL	258,000	5,000	1.9

Source: Statistics Canada Catalogue 91-551-X (Projections of the Diversity of the Canadian Population 2006 to 2031) and author's calculations.

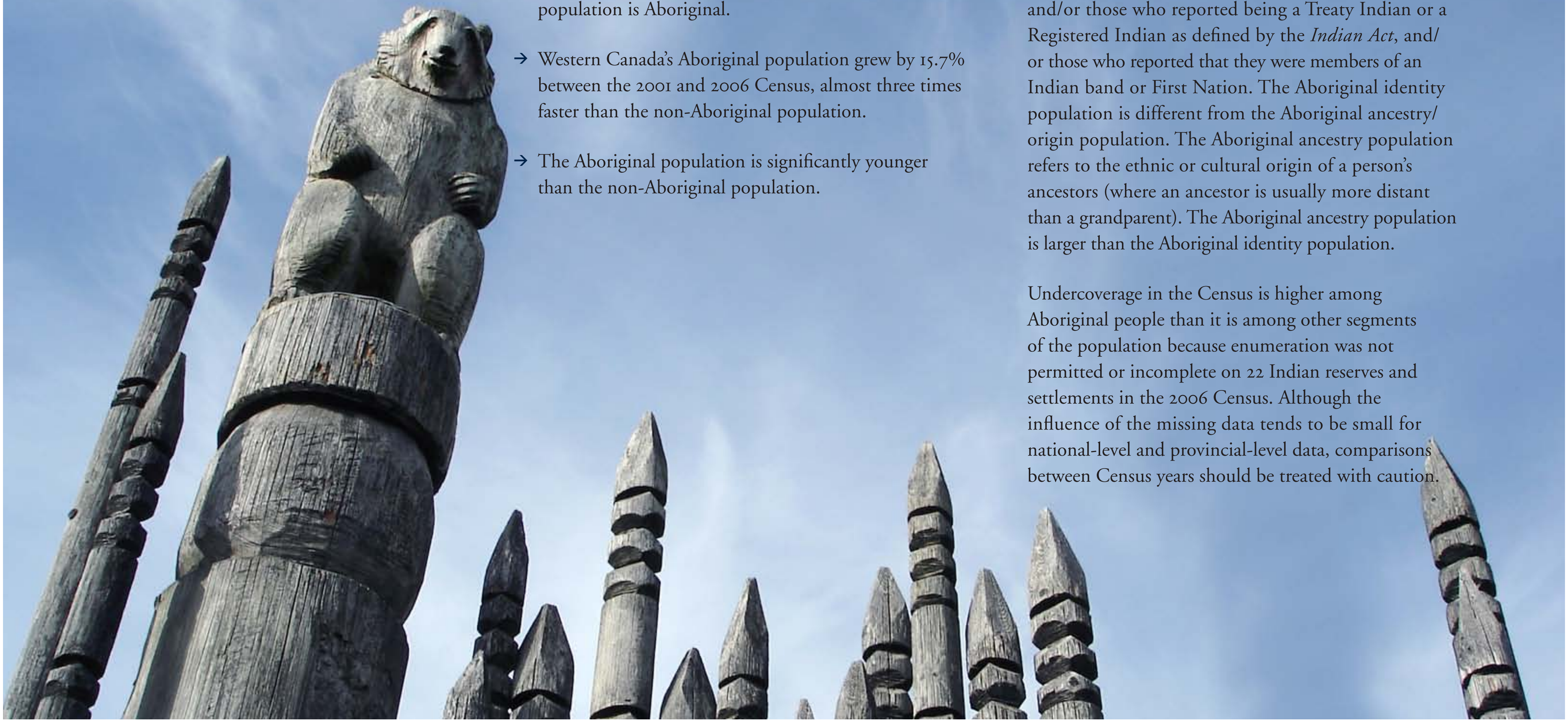
The percentage of western Canadians in the visible minority category is expected to reach 29.5% by 2031 according to Statistics Canada projections. The relative size of the visible minority population will grow in all four western provinces compared to 2006 levels.

Vancouver and Toronto will continue to have the largest visible minority populations in the country; in both cities, visible minorities will be the majority (62.8% in Toronto and 59.2% in Vancouver).

CHAPTER 5

Aboriginal Peoples in the West

Western Canada is home to
6 IN 10
of Canada's Aboriginal people.



HIGHLIGHTS

→ Relatively large proportions of Aboriginal people live in Saskatchewan and Manitoba. Aboriginal people represent 15.5% of Manitoba's population and 14.9% of Saskatchewan's. Outside the West, only 2.2% of the population is Aboriginal.

→ Western Canada's Aboriginal population grew by 15.7% between the 2001 and 2006 Census, almost three times faster than the non-Aboriginal population.

→ The Aboriginal population is significantly younger than the non-Aboriginal population.

The information in this section refers to the *Aboriginal identity population*. This population includes those who reported identifying with at least one Aboriginal group (North American Indian, Métis or Inuit) and/or those who reported being a Treaty Indian or a Registered Indian as defined by the *Indian Act*, and/or those who reported that they were members of an Indian band or First Nation. The Aboriginal identity population is different from the Aboriginal ancestry/origin population. The Aboriginal ancestry population refers to the ethnic or cultural origin of a person's ancestors (where an ancestor is usually more distant than a grandparent). The Aboriginal ancestry population is larger than the Aboriginal identity population.

Undercoverage in the Census is higher among Aboriginal people than it is among other segments of the population because enumeration was not permitted or incomplete on 22 Indian reserves and settlements in the 2006 Census. Although the influence of the missing data tends to be small for national-level and provincial-level data, comparisons between Census years should be treated with caution.

The Aboriginal population in western Canada is roughly the same size as Winnipeg

FIGURE 42: ABORIGINAL IDENTITY POPULATION BY PROVINCE 2006 CENSUS

	Total Population	*Aboriginal Identity Population*	*North American Indian Population*	*Métis Population*	*Inuit Population*	*Registered Indian Population*	*Registered Indians as % of Aboriginal Identity Population*
BC	**4,074,385**	**196,075**	**129,580**	**59,445**	**795**	**110,550**	**56.4**
AB	**3,256,355**	**188,365**	**97,275**	**85,495**	**1,610**	**91,400**	**48.5**
SK	**953,850**	**141,890**	**91,400**	**48,120**	**215**	**90,725**	**63.9**
MB	**1,133,515**	**175,395**	**100,640**	**71,805**	**565**	**101,810**	**58.0**
ON	12,028,895	242,495	158,395	73,605	2,035	123,595	51.0
QC	7,435,905	108,425	65,085	27,980	10,950	55,955	51.6
NB	719,650	17,650	12,385	4,270	185	10,865	61.6
NS	903,090	24,175	15,240	7,680	325	12,425	51.4
PE	134,205	1,730	1,225	385	30	925	53.5
NL	500,610	23,455	7,765	6,470	4,715	6,610	28.2
YT	30,190	7,580	6,280	800	255	5,750	75.9
NT	41,060	20,635	12,640	3,580	4,160	13,010	63.0
NU	29,325	24,915	100	130	24,635	160	0.6
West	**9,418,105**	**701,725**	**418,895**	**264,865**	**3,185**	**394,485**	**56**
ROC	21,822,925	471,060	279,130	124,915	47,295	229,295	49
Canada	31,241,030	1,172,785	698,025	389,780	50,480	623,780	53.2

Source: Statistics Canada 2006 Census and author's calculations.
Note: The total population base figures for this series are based on the 20% sample (long survey) and do not match the figures for the 100% sample. The figures for North American Indian, Métis and Inuit will not add to the total Aboriginal identity population because "multiple Aboriginal identity responses" and "Aboriginal responses not included elsewhere" are not shown. The expression "Registered Indian" refers to those persons who reported they were registered under the Indian Act of Canada. There are minor discrepancies in the Aboriginal data reported on the Statistics Canada website. The differences are not significant.

Western Canada's culture is greatly enriched by its Aboriginal population. At the same time, a disproportionate number of Aboriginal people face challenges such as poverty, discrimination and unemployment.

As of the 2006 Census, just over 700,000 Aboriginal people were living in the West compared to about 470,000 in the rest of the country. Among the provinces, Ontario has the largest number of Aboriginal people at 242,495 (or 21% of Canada's Aboriginal population) followed by BC (196,075), Alberta (188,365), Manitoba (175,395) and Saskatchewan (141,890).

Alberta is home to the largest Métis population (85,495) followed by Ontario (73,605) and Manitoba (71,805).

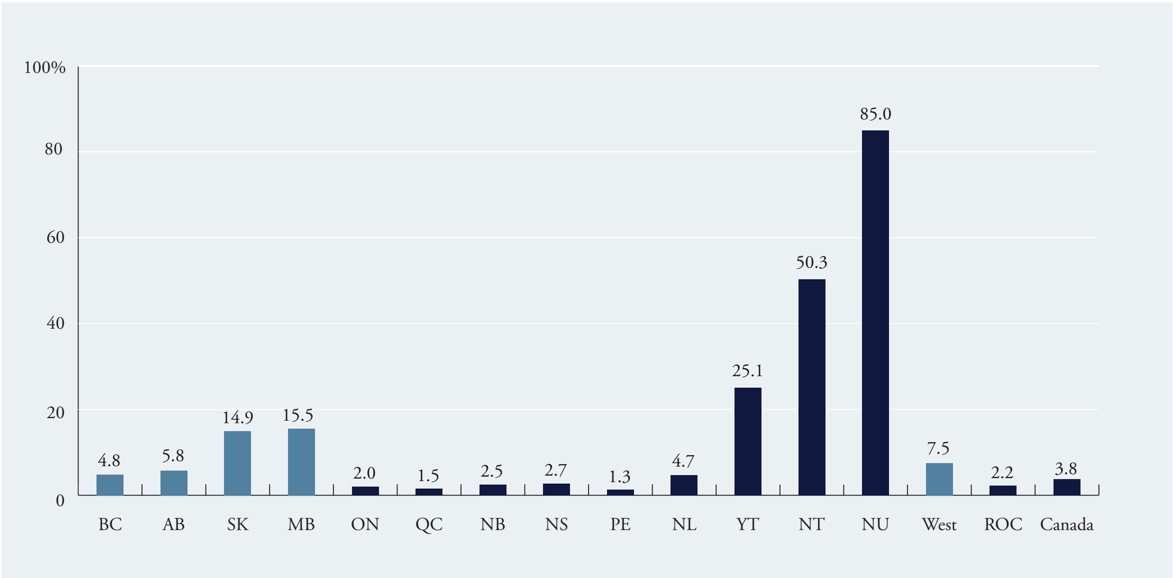
About 56% of the West's Aboriginal people are "registered" under the auspices of the *Indian Act*. When asked about Aboriginal *ancestry* (see note on page 43) 1,678,235 Canadians reported at least one Aboriginal ancestry and 831,940 western Canadians said the same.

Comparing Canada to the US, there were 2,475,956 Americans who identified as "American Indian and Alaska Native alone" and 4,119,301 who identified as "American Indian and Alaska Native alone or in combination with another race" in the 2000 US Census.

At 3.8%, Canada has a larger proportion of Aboriginal people than the US (1.5%) and Australia (2.3%). In New Zealand, about 15% of the population is Maori.

Of Canada's 10 provinces, the largest proportions of Aboriginal people are found in Manitoba and Saskatchewan

FIGURE 43: DISTRIBUTION OF THE ABORIGINAL IDENTITY POPULATION 2006 CENSUS (% OF TOTAL NATIONAL/PROVINCIAL/REGIONAL POPULATION)



Source: Statistics Canada 2006 Census and author's calculations.

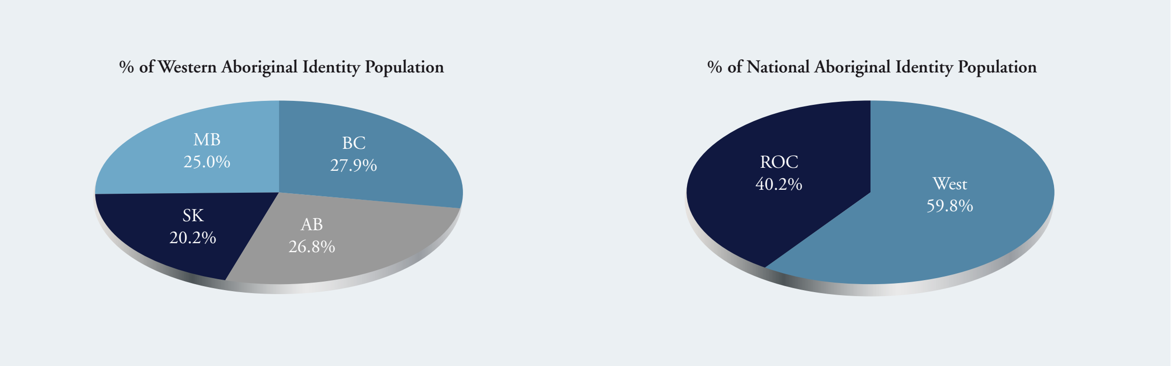
Relative to their total populations, Manitoba and Saskatchewan have the largest Aboriginal populations in the country (not including the territories) at 15.5% and 14.9% respectively. Although BC and Alberta have larger Aboriginal populations in absolute terms, the proportions are smaller than in Manitoba and Saskatchewan.

Aboriginal people represent 7.5% of the total population of western Canada, up from 6.8% in 2001. The proportion of Aboriginal people in the West is over three times higher than in the rest of the country.

About 60% of the West's Aboriginal population are North American Indian, about 38% are Métis and 0.5% are Inuit.

The West is home to the majority of Canada's Aboriginal population

FIGURE 44: DISTRIBUTION OF THE ABORIGINAL IDENTITY POPULATION 2006 CENSUS (% OF TOTAL WESTERN ABORIGINAL POPULATION AND % OF TOTAL NATIONAL ABORIGINAL POPULATION)



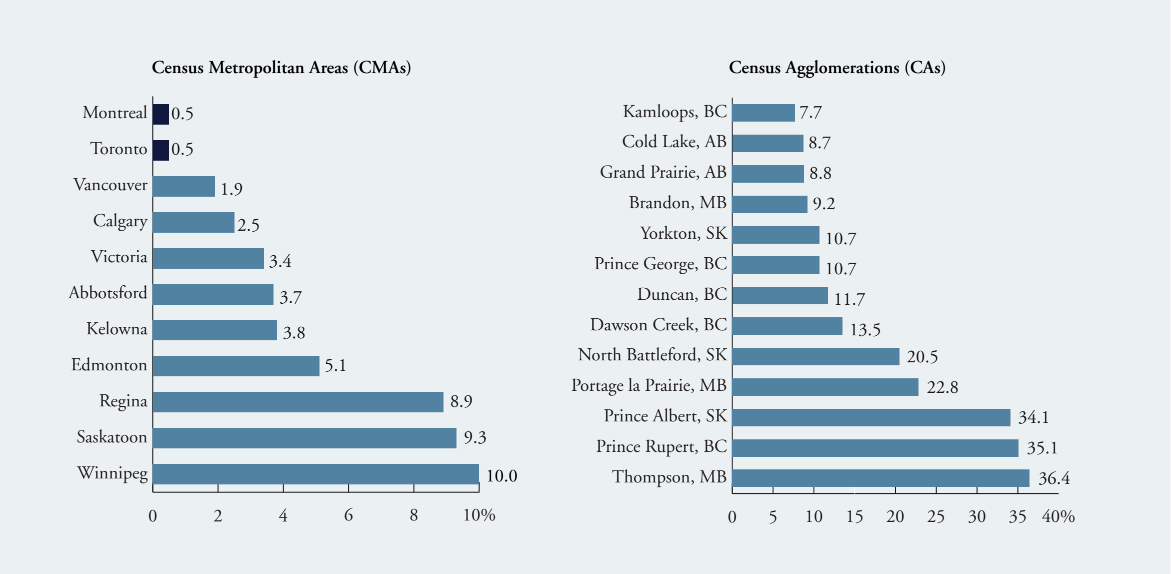
Source: Statistics Canada 2006 Census and author's calculations.

About 6 in 10 Aboriginal people reside in one of the four western provinces. This is roughly double the region's share of the national population. While there is some variation, the West's Aboriginal population is more or less evenly spread across the four western provinces, ranging from 27.9% of the regional Aboriginal population living in BC to 20.2% in Saskatchewan.

Between the 2001 and 2006 Census, western Canada's Aboriginal population grew by 15.7%, almost three times more than the non-Aboriginal population. In the rest of Canada, the Aboriginal population grew by 27.4% over this period. Métis are the faster growing of the three Aboriginal groups, but North American Indian remains the largest group.

The Census Metropolitan Areas of Winnipeg, Saskatoon and Regina are home to relatively high percentages of Aboriginal people

FIGURE 45: ABORIGINAL IDENTITY POPULATION OF CENSUS METROPOLITAN AREAS AND SELECT CENSUS AGGLOMERATIONS 2006 CENSUS (% OF CMA OR CA POPULATION)



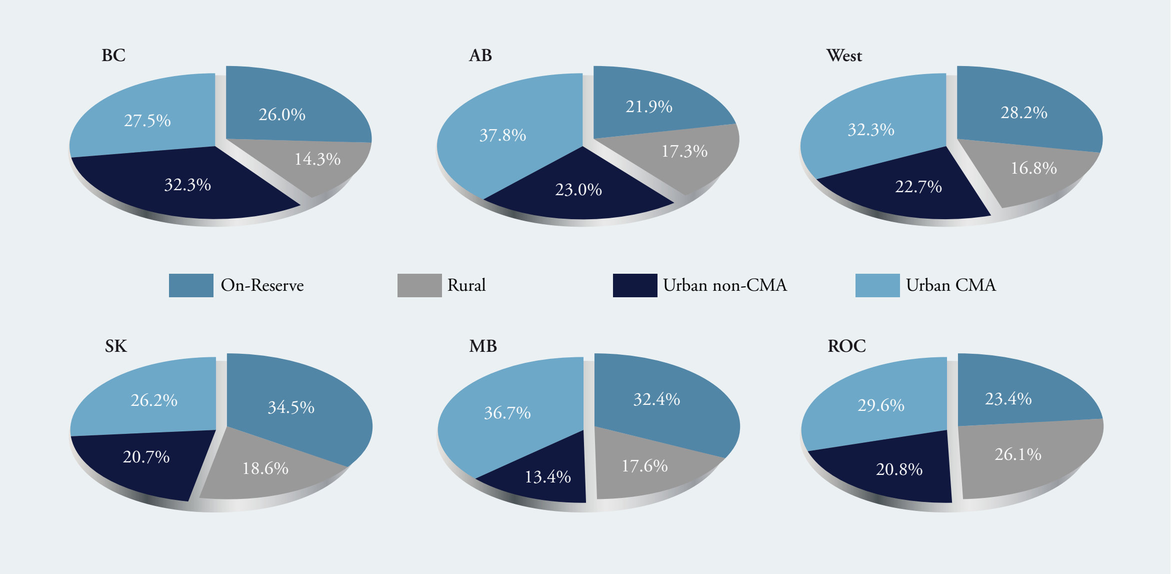
Source: Statistics Canada 2006 Census and author's calculations. The total Aboriginal identity population includes the Aboriginal groups (North American Indian, Métis and Inuit), multiple Aboriginal responses and Aboriginal responses not included elsewhere.

Large numbers of Aboriginal people live in large and small urban centres. In the West, Aboriginal people form sizeable minorities in several Census Metropolitan Areas, especially Winnipeg (10%), Saskatoon (9.3%) and Regina (8.9%). This is in stark contrast to Canada's three largest urban centres where the percentage of Aboriginal people ranges from less than 2% in Vancouver to less than 1% in Toronto and Montreal. Indeed, despite being over 7 times larger than Winnipeg, Toronto's Aboriginal population in 2006 was 26,575 compared to 68,385 for Winnipeg.

Looking at a sample of smaller urban centres in the West with sizeable Aboriginal populations, there is a great deal of variation. At one end of the continuum are centres like Thompson, Prince Rupert and Prince George with over a third of their population in the Aboriginal category compared to places like Kamloops, Cold Lake and Grand Prairie, with less than 10%.

Most Aboriginal people do not live on reserves

FIGURE 46: ABORIGINAL IDENTITY POPULATION BY LOCATION 2006 CENSUS (% OF TOTAL PROVINCIAL ABORIGINAL POPULATION)



Source: Statistics Canada 2006 Census and author's calculations.

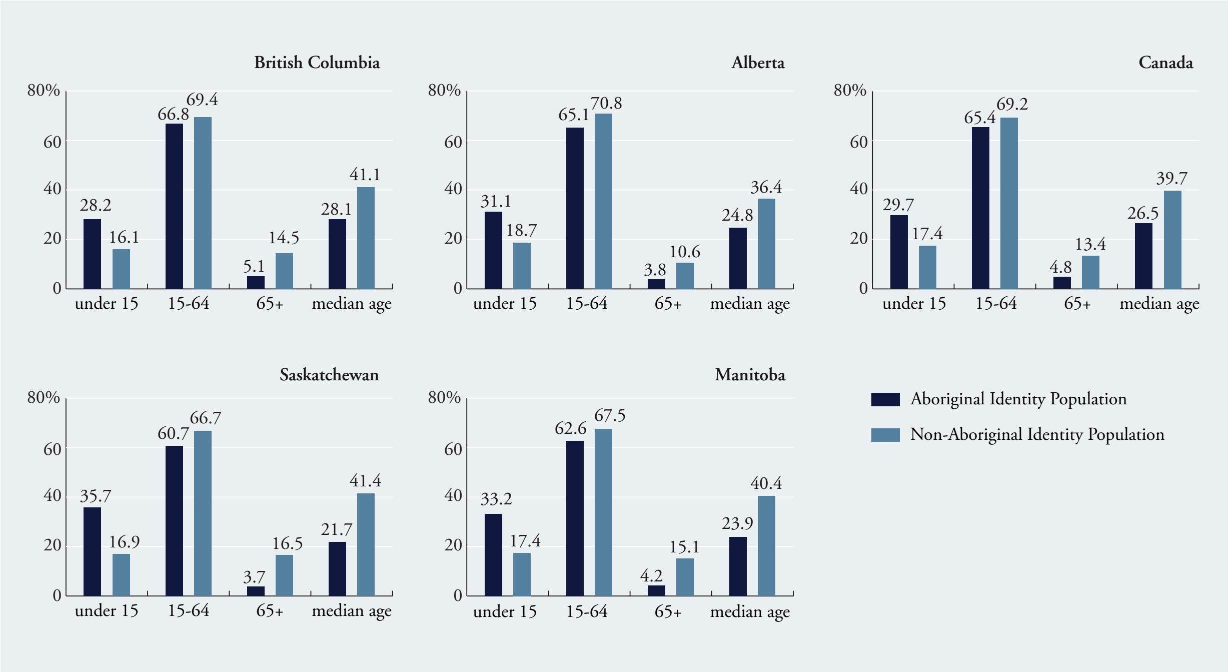
Over half (55%) of the West's Aboriginal population lives in an urban area, 28.2% on a reserve and 16.8% in a non-reserve rural area. Although the percentage of Aboriginal people living in urban areas has increased since the 2001 Census, the non-Aboriginal population remains more urbanized: 82.5% of the West's non-Aboriginal population lives in an urban area.

Aboriginal people in BC and Alberta are somewhat more likely to live in an urban area than Aboriginal people in Saskatchewan and Manitoba and the reverse is true of living on a reserve.

Census metropolitan areas in the West are home to about 3 in 10 of the region's Aboriginal people.

The Aboriginal population is younger than the non-Aboriginal population

FIGURE 47: ABORIGINAL IDENTITY POPULATION BY AGE 2006 CENSUS (% OF PROVINCIAL TOTAL)



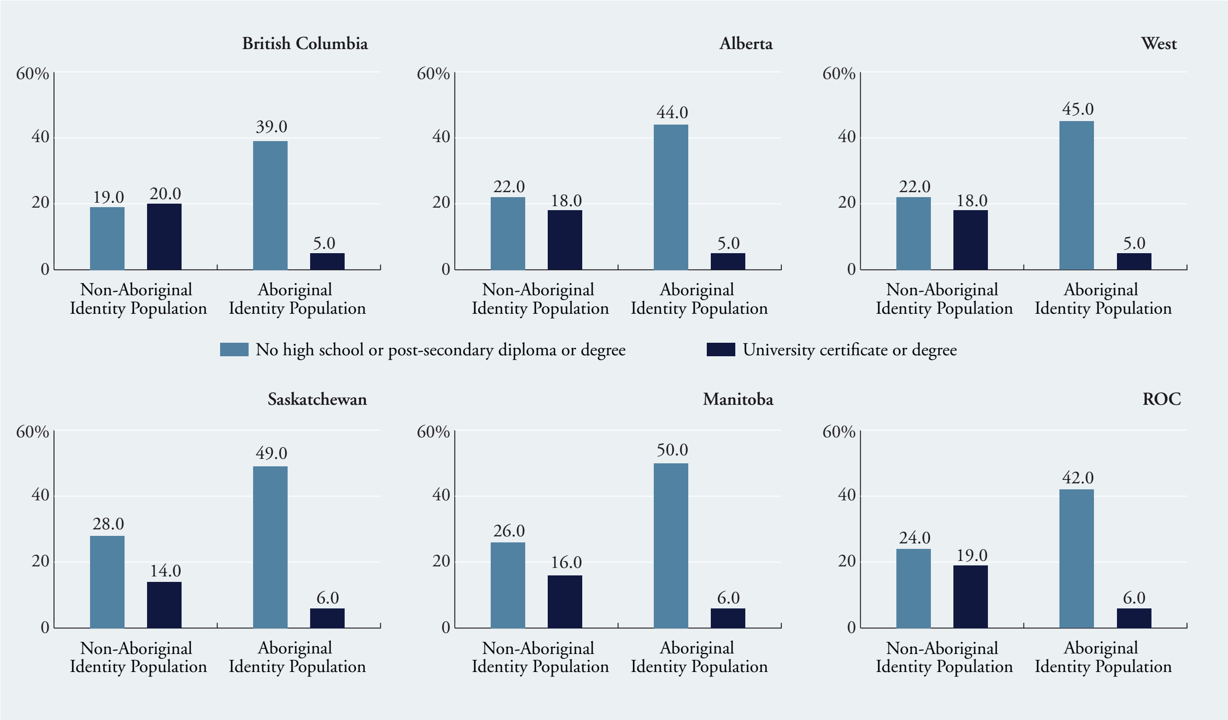
Source: Statistics Canada 2006 Census.

Between 28.2% and 35.7% of Aboriginal people in the western provinces were under 15 years of age as of the 2006 Census. These proportions are much higher than is the case for the non-Aboriginal population. As such, the West's Aboriginal population is relatively young. At the same time, the percentage of seniors in the Aboriginal population is much lower than it is in the non-Aboriginal population.

In keeping with this, the median age of the Aboriginal population is much lower than the median age of the non-Aboriginal population. The median age of Aboriginal people in the western provinces ranges from 21.7 in Saskatchewan to 28.1 in BC whereas the median age for non-Aboriginal people ranges from 36.4 in Alberta to 41.4 in Saskatchewan.

Education levels of the Aboriginal population are lower than those of the non-Aboriginal population

FIGURE 48: ABORIGINAL IDENTITY POPULATION EDUCATIONAL ATTAINMENT 2006 CENSUS (TOTAL NON-ABORIGINAL POPULATION 15 YEARS AND OVER AND ABORIGINAL IDENTITY POPULATION 15 YEARS AND OVER)



Source: Statistics Canada 2006 Census.

For a variety of reasons including poverty, discrimination and the lingering effects of past injustices, the Aboriginal population is less educated than the non-Aboriginal population. In the West, 18% of the non-Aboriginal population aged 15 and over have a university certificate or degree compared to just 5% of the Aboriginal population. Similarly, 45% of the Aboriginal population has no certificate, diploma or degree of any kind compared to 22% of the non-Aboriginal population.

Education has many benefits including increased success in the labour market. The unemployment rate for Aboriginal people in Canada without a certificate, diploma or degree is 22.5% compared to just 6.4 % for those with a university certificate or degree.

Fewer Aboriginal people participate in the labour force than non-Aboriginal people, and those who do, have a tougher time finding work

FIGURE 49: ABORIGINAL IDENTITY POPULATION LABOUR FORCE ACTIVITY 2006 CENSUS (%)

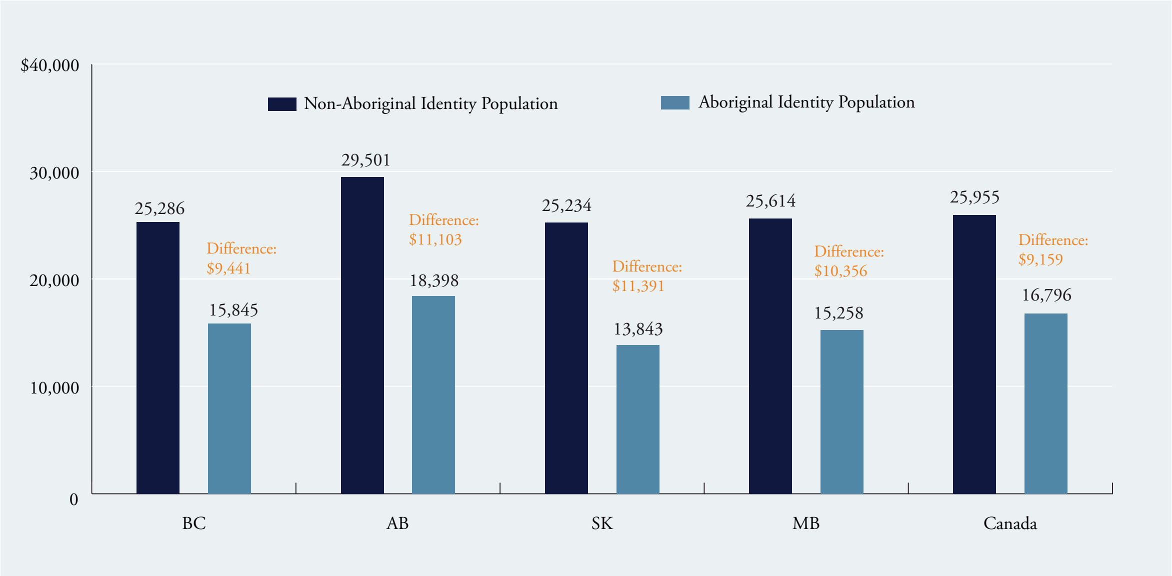
	Participation Rate	*Employment Rate*	*Unemployment Rate*
BC			
Total Population	65.6	61.6	6.0
Aboriginal Identity Population	65.0	55.3	14.9
On Reserve	57.1	42.8	25.0
Non-Aboriginal Identity Population	65.6	61.9	5.6
AB			
Total Population	74.0	70.9	4.3
Aboriginal Identity Population	68.5	61.0	11.0
On Reserve	52.2	38.8	25.7
Non-Aboriginal Identity Population	74.3	71.4	3.9
SK			
Total Population	68.4	64.6	5.6
Aboriginal Identity Population	56.4	46.1	18.2
On Reserve	43.5	30.9	28.9
Non-Aboriginal Identity Population	70.1	67.1	4.2
MB			
Total Population	66.8	62.4	6.6
Aboriginal Identity Population	63.1	53.8	14.8
On Reserve	44.0	31.5	28.5
Non-Aboriginal Identity Population	66.9	62.7	6.3

Source: Statistics Canada 2006 Census.

Just as a variety of factors have hindered the educational attainment of the Aboriginal population, the labour force attachment of Aboriginal people has also been rendered less than that of the non-Aboriginal population. As of the 2006 Census, over a quarter of the on-reserve Aboriginal labour force was unemployed in each of the four western provinces. The rate was better for Aboriginal people in general, but still worse than for the non-Aboriginal population. Given the strong link between education and employment, these figures are not a surprise.

The incomes of Aboriginal people are lower than those of non-Aboriginal people

FIGURE 50: MEDIAN INCOME OF ABORIGINAL AND NON-ABORIGINAL IDENTITY POPULATIONS 2005



Source: Statistics Canada 2006 Census.

The median income of the Aboriginal population in each of the four western provinces is roughly $10,000 less than the median income of the non-Aboriginal population. The median income of the Aboriginal population in Alberta is higher than in the other western provinces but this reflects the higher median income of the Alberta population in general.

These data reinforce the tough situation faced by many of Canada's Aboriginal people that is also reflected in education levels and labour force attachment. Many have noted that the growing population of Aboriginal people in the West represents a tremendous opportunity in terms of expanding the labour force. This, as well as the primary goal of improving the circumstances of the Aboriginal population, will not be achieved without continued effort and new approaches to addressing the underlying causes of the gaps between the Aboriginal and non-Aboriginal populations in Canada.

CHAPTER 6

The Urban West

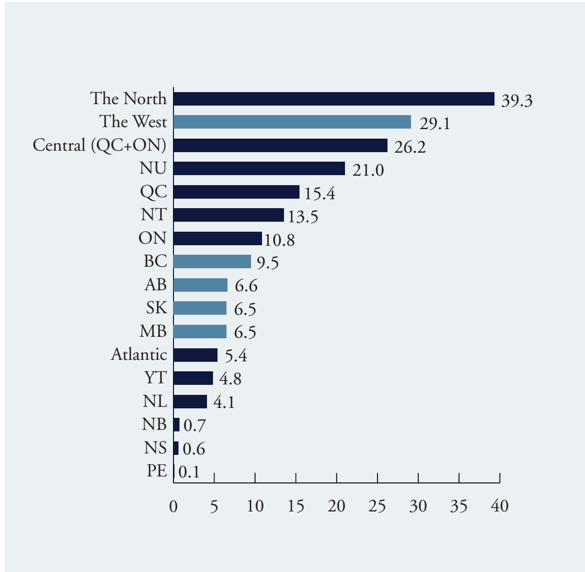
The region is sparsely populated **AT 3.6 PEOPLE** per square kilometre.

HIGHLIGHTS

- With nearly 30% of Canada's total area, western Canada is a huge geographic region. The West is twice the size of France, Germany and Spain combined.
- Despite its land mass and relatively small population, most western Canadians live in a handful of large urban areas—over 6 in 10 westerners live in one of the region's nine Census Metropolitan Areas (CMA).
- Urban growth is the main driver of population growth in the region—80.3% of the region's growth took place in its nine CMAs.
- Calgary has the second largest number of large corporate headquarters in the country.
- Vancouver is consistently ranked as one of the best cities in the world in which to live.

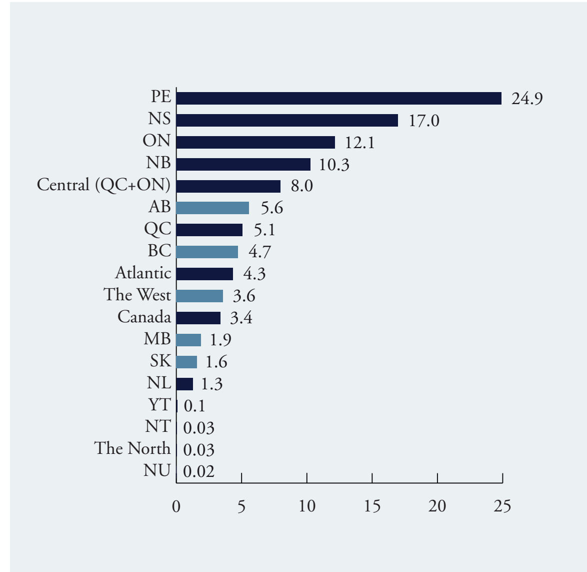
The West accounts for just under 30% of the Canadian landmass

FIGURE 51: PERCENTAGE OF THE TOTAL AREA OF CANADA



Source: Natural Resources Canada (The Atlas of Canada).

FIGURE 52: POPULATION DENSITY 2009 (PERSONS PER SQUARE KILOMETRE)



Source: Atlas of Canada http://atlas.nrcan.gc.ca/site/english/index.html, Statistics Canada Cansim Table 051-0001 and author's calculations.

The West covers 2.9 million square kilometres, or 29.1% of Canada. As such, the West is roughly 5 times the size of France. In fact, western Canada is nearly twice the size of France, Germany and Spain combined and is almost large enough to hold 7 Californias or 12 United Kingdoms.

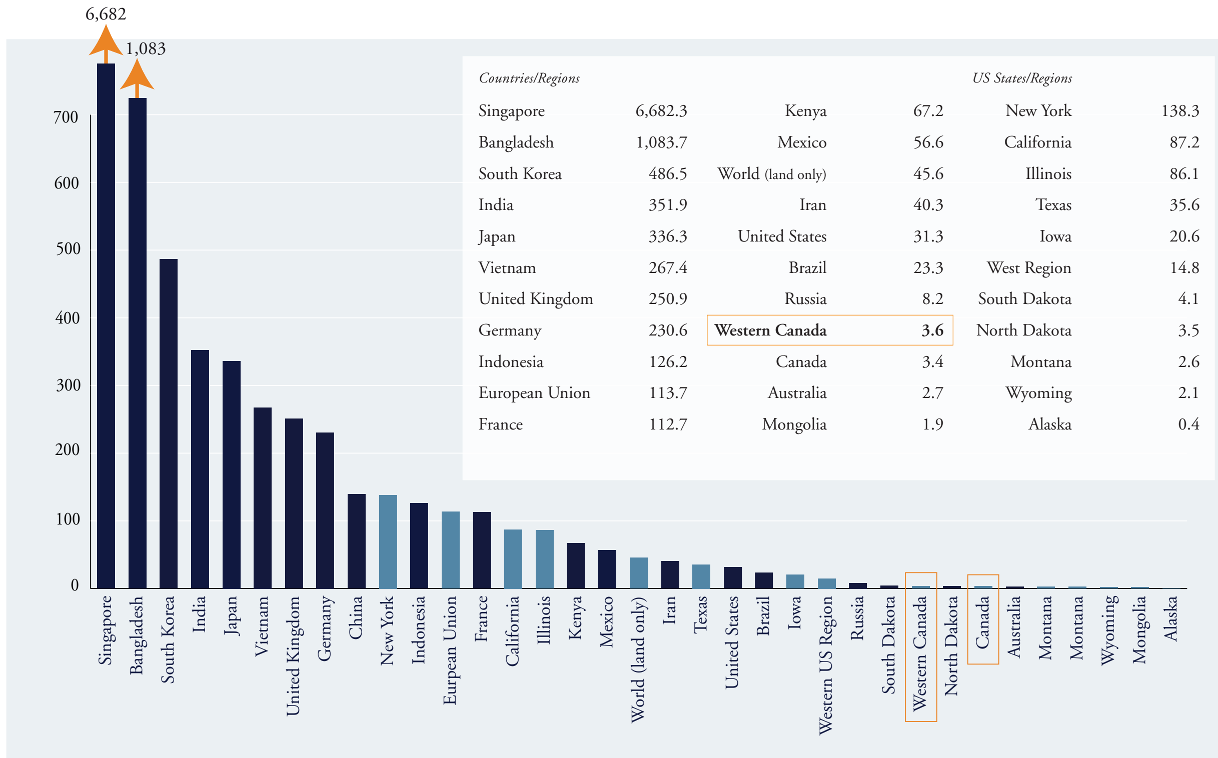
BC is the largest province in the region and the third largest in Canada after Quebec and Ontario. Alberta, Saskatchewan and Manitoba are all roughly the same size. The sparsely populated northern territories account for almost two-fifths of Canada's area.

Alberta has the most people per square kilometre among the western provinces at 5.6 while Manitoba and Saskatchewan have less than 2 people per square kilometre. There are about 8 people per square kilometre in central Canada compared to less than 4 in the West.

While there is a lot of room in western Canada, most westerners live in a relatively small number of urban centres and most live in the southern portions of the four provinces.

Western Canada is sparsely populated compared to other countries and regions

FIGURE 53: POPULATION DENSITY OF SELECT COUNTRIES AND REGIONS (PERSON/KM²)



Countries/Regions				*US States/Regions*	
Singapore	6,682.3	Kenya	67.2	New York	138.3
Bangladesh	1,083.7	Mexico	56.6	California	87.2
South Korea	486.5	World (land only)	45.6	Illinois	86.1
India	351.9	Iran	40.3	Texas	35.6
Japan	336.3	United States	31.3	Iowa	20.6
Vietnam	267.4	Brazil	23.3	West Region	14.8
United Kingdom	250.9	Russia	8.2	South Dakota	4.1
Germany	230.6	**Western Canada**	**3.6**	North Dakota	3.5
Indonesia	126.2	Canada	3.4	Montana	2.6
European Union	113.7	Australia	2.7	Wyoming	2.1
France	112.7	Mongolia	1.9	Alaska	0.4

Note: The West region in the US is defined by the US Census Bureau as Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Washington, Oregon, California, Alaska and Hawaii.
Source: CIA World Factbook, US Census Bureau and author's calculations.

If western Canada was a country, it would rank near the bottom of the list in terms of population density. Indeed, pick almost any country around the world and it is more densely populated than either Canada or western Canada. On average, there are about 46 people per square kilometre on the planet, but only about 3.6 per square kilometre in western Canada. Only four states in the US are less densely populated than western Canada (North Dakota, Montana, Wyoming and Alaska). Texas has about 36 people per square kilometre and California has 87.

Western Canada is sparsely populated, but highly urbanized

FIGURE 54: URBANIZATION IN SELECT REGIONS AND COUNTRIES 2007 (THOUSANDS)

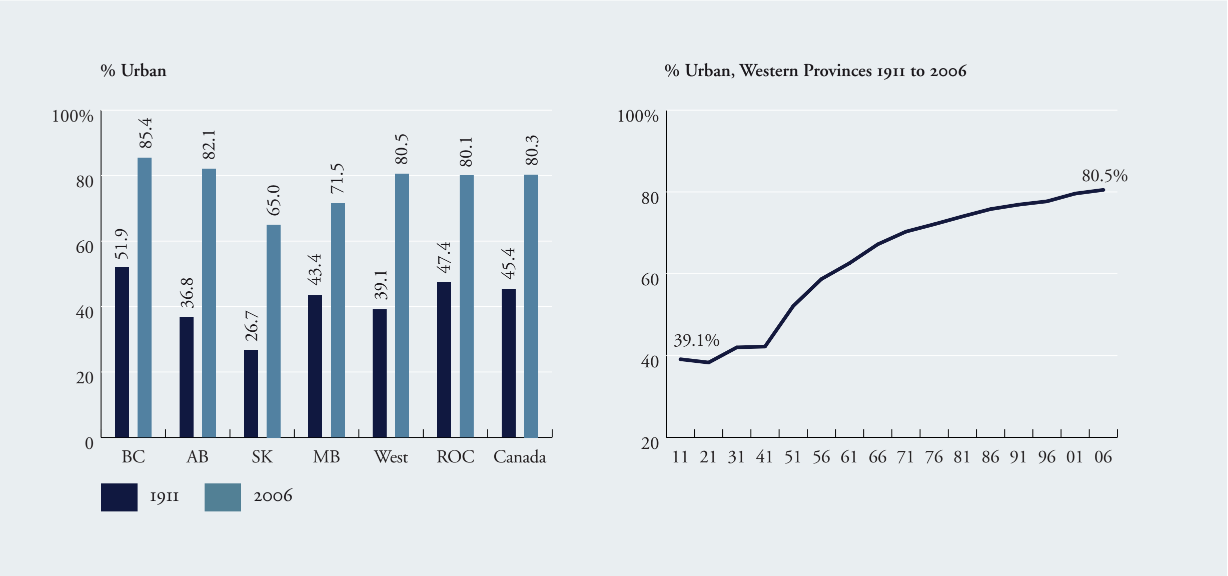
	Population in Urban Areas	*Population in Rural Areas*	*Total*	*Percentage Urban*
World	3,293,944	3,377,283	6,671,226	49.4
More Developed Regions	909,975	313,029	1,223,004	74.4
Less Developed Regions	2,383,969	3,064,254	5,448,223	43.8
Less Developed Regions (without China)	1,815,031	2,296,875	4,111,906	44.1
Africa	373,372	591,601	964,973	38.7
Asia	1,645,225	2,384,440	4,029,665	40.8
China	561,251	767,379	1,328,630	42.2
Oceania	24,160	10,108	34,267	70.5
Europe	527,686	203,598	731,284	72.2
Germany	60,727	21,873	82,599	73.5
France	47,541	14,106	61,647	77.1
Latin America and the Caribbean	448,006	124,200	572,206	78.3
Canada	**26,394**	**6,482**	**32,876**	**80.3**
North America	275,494	63,337	338,831	81.3
United States	248,981	56,845	305,826	81.4
Australia	18,373	2,370	20,743	88.6
United Kingdom	54,620	6,149	60,769	89.9

Note: The definitions of urban vary from place to place so these figures should be seen as illustrative rather than as perfectly comparative. In Canada, an urban area is defined as areas with at least 1,000 inhabitants and a population density of at least 400 persons per square kilometre.
Source: United Nations Department of Economic and Social Affairs/Population Division *World Urbanization Prospects: The 2007 Revision*.

As the density figures show, there is a lot of space in western Canada per person. Despite this, most western Canadians are concentrated in urban areas. The overall urbanization rate in western Canada (80.5%) is basically the same as in the rest of the country (80.1%) and is on par with urbanization in the US, where 81.4% of the population resides in an urban area. Western Canada's urbanization level is much higher than the global average of 49.4% and slightly higher than the average for the developed world (74.4%). Global urbanization levels are expected to rise to around 70% by 2050 according to UN estimates.

The level of urbanization varies across the West

FIGURE 55: URBAN POPULATION 1911 AND 2006 (% OF TOTAL POPULATION)



Note: The definition of urban has changed over the years so comparability over time is not exact.
Source: Statistics Canada Census data (various sources).

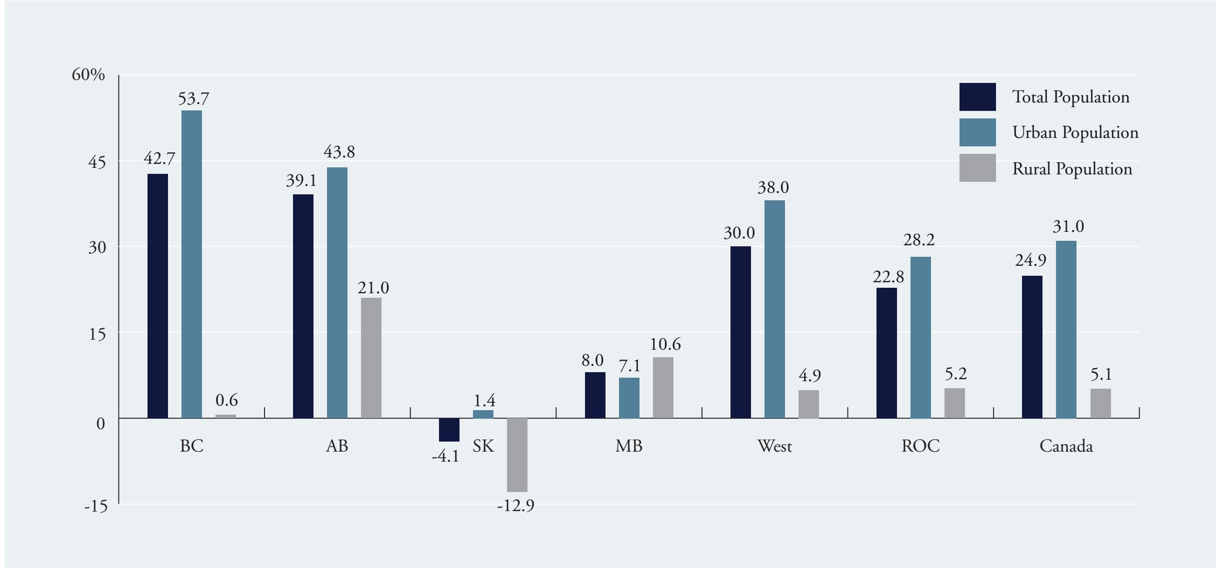
Like the country in general, the West has gone from a largely rural society to a largely urban one. A century ago, the majority of western Canadians called the countryside home whereas today most of us are more familiar with shopping malls and interchanges than life on the farm.

Within the West, Saskatchewan remains the most rural of the provinces with just 65% of its population living in urban areas followed by Manitoba at 71.5%. Both Alberta and BC have urbanization levels of over 80%. In fact, BC is the most urbanized province in the country, just barely edging out Ontario (85.1%). The Atlantic provinces are the least urbanized.

Despite the continuing march toward urbanization, the importance of the rural West remains high. Rural areas are still home to a large number of western Canadians (1.9 million as of the 2006 Census) as well as much of the region's rich endowment of natural capital. Nonetheless, the image of the West as a rural hinterland is terribly outdated.

Saskatchewan has experienced rural depopulation

FIGURE 56: POPULATION GROWTH IN URBAN AND RURAL AREAS 1986-2006 (% CHANGE)



Source: Statistics Canada Census and author's calculations.

With the exception of Saskatchewan, both the urban West and the rural West have grown since 1986. For the West as a whole, urban growth has been much stronger than rural growth, but this is not true in Manitoba where rural growth has actually been greater (in percentage terms) than urban growth. Saskatchewan stands out in the region as the only province that has seen its rural population decline. It will be interesting to see if the recent surge in population growth in Saskatchewan will see its rural growth rate move into positive territory in the 2011 Census. (Saskatchewan's rural population has declined every Census since 1931.)

As Figure 57 on the following page shows, even though rural areas have been growing in BC, Alberta and Manitoba, urban growth contributes much more to the overall expansion of the population. For example, 54,072 people were added to Manitoba's urban areas between 1986 and 2006 compared to 31,314 to its rural areas.

It is important to note that many urban areas are not large cities but relatively small communities with strong connections to the economy and culture of rural areas. Despite this, the trend toward a more urban society often makes it difficult to balance the needs or urban and rural residents. It is also important to note that these numbers are generalizations and that some specific rural and urban areas may be shrinking while others are growing.

Urban growth is the main driver of population growth in the West

FIGURE 57: URBAN AND RURAL POPULATION GROWTH 1986-2006 (% OF TOTAL POPULATION GROWTH)

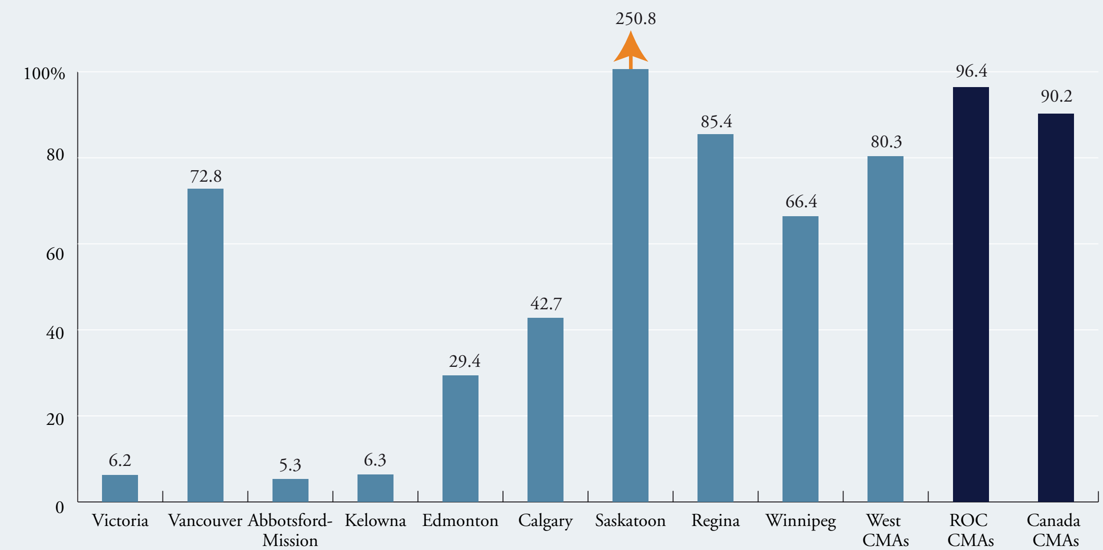
	Total Population Growth	*Urban Growth*	*Rural Growth*
BC	1,230,117	1,226,295	3,822
AB	924,520	822,091	102,429
SK	-41,453	8,718	-50,171
MB	85,386	54,072	31,314
West	2,198,570	2,111,176	87,394
ROC	4,104,997	3,887,487	217,510
Canada	6,303,567	5,998,663	304,904

Source: Statistics Canada Census and author's calculations.

Large cities account for the majority of population growth in the West

FIGURE 58: CENSUS METROPOLITAN AREA GROWTH AS % OF TOTAL GROWTH

	Victoria	*Vancouver*	*Abbotsford-Mission*	*Kelowna*	*Edmonton*	*Calgary*	*Saskatoon*	*Regina*	*Winnipeg*	*West CMAs*	*ROC CMAs*	*Canada CMAs*
CMA pop. change 1996-2009	36,128	422,695	30,606	36,438	267,868	389,766	28,052	9,548	58,270	1,279,371	2,446,604	3,725,975
Provincial pop. change 1996-2009	580,890	580,890	580,890	580,890	912,529	912,529	11,184	11,184	87,768	1,592,371	2,537,270	4,129,641



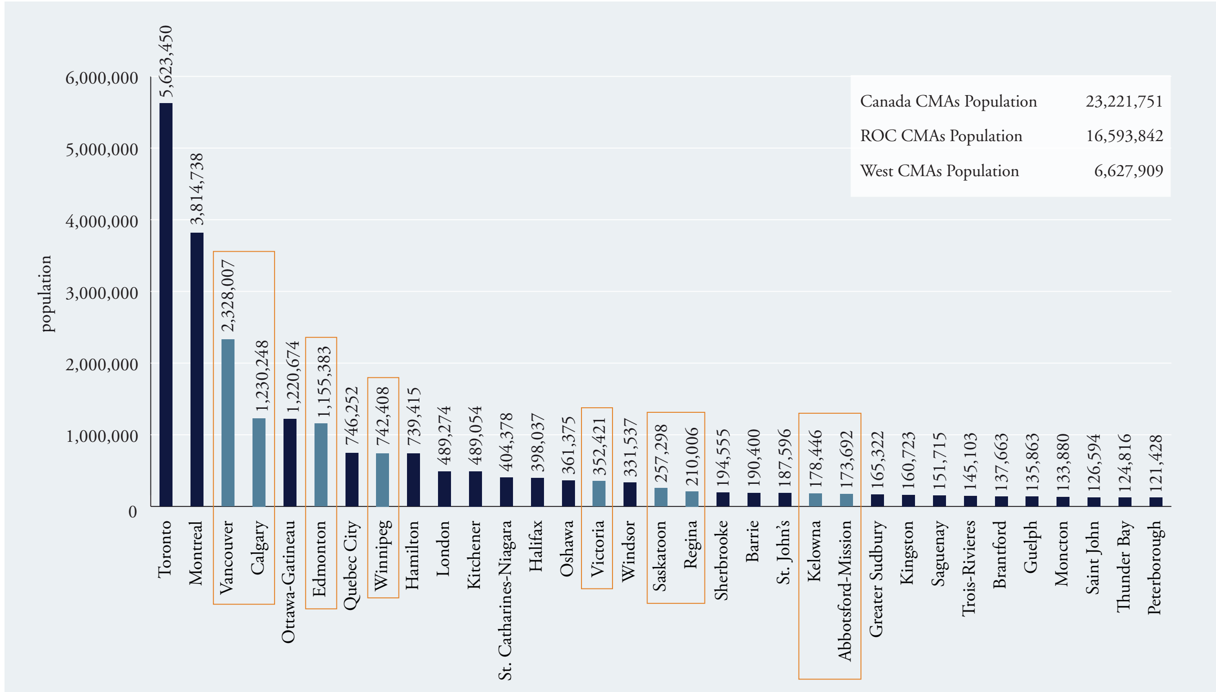
Note: Statistics Canada describes a CMA as an "area consisting of one or more neighbouring municipalities situated around a major urban core. A census metropolitan area must have a total population of at least 100,000 of which 50,000 or more live in the urban core."
Source: Statistics Canada Cansim Tables 51-0046 and 51-0001 and author's calculations.

Between 1996 and 2009, the West's nine Census Metropolitan Areas increased by 1,279,371 residents. This equates to 80.3% of all population growth in the region over that period. The concentration of population growth in large urban areas was even greater in the rest of Canada (96.4%).

The populations of all nine of the West's CMAs increased between 1996 and 2009. In the case of Saskatoon, the increase in size of the CMA (28,052) was greater than the population increase for the province (11,184) because other parts of Saskatchewan lost people. Calgary accounted for more of Alberta's population growth than Edmonton and Vancouver was the locus of population growth in BC.

Most western Canadians live in a small number of large cities

FIGURE 59: POPULATION OF CENSUS METROPOLITAN AREAS 2009



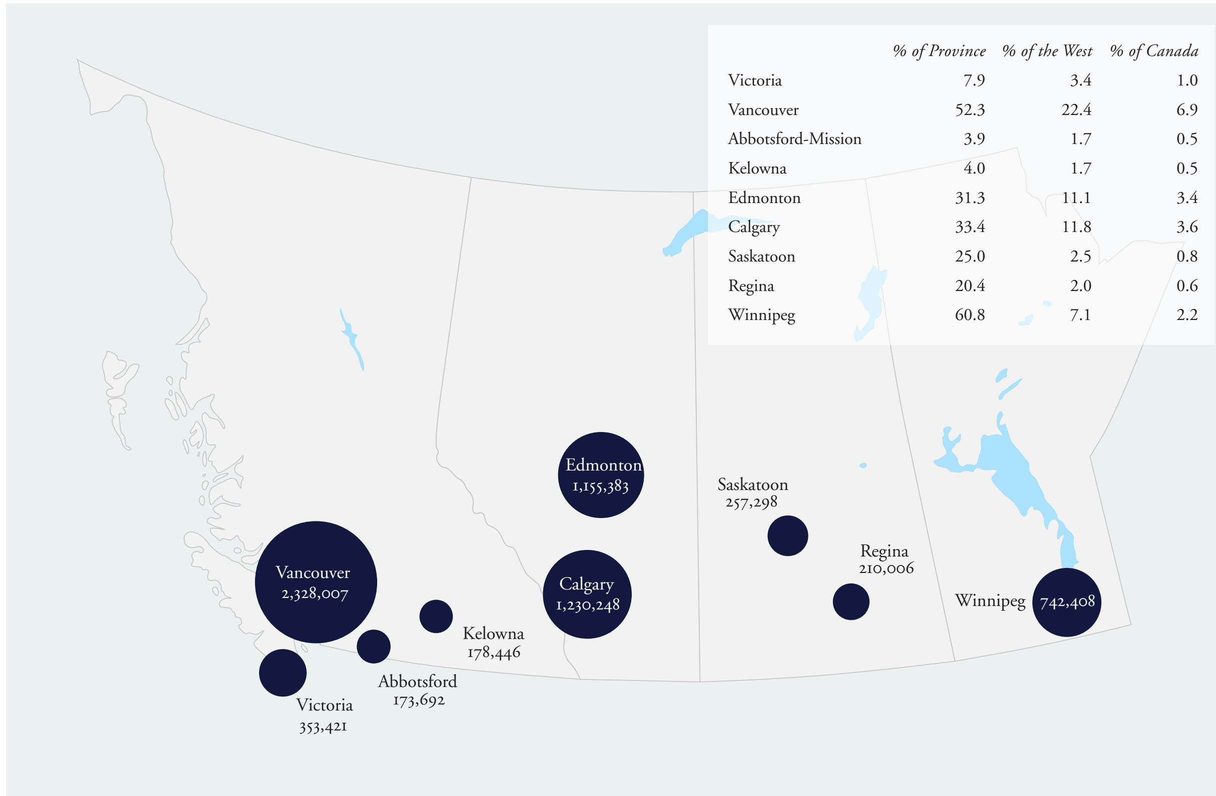
Source: Statistics Canada Cansim Table 51-0046 and author's calculations.

The West is home to 9 of Canada's 33 Census Metropolitan Areas. The West's CMAs vary greatly in size. The largest is Vancouver at 2.3 million people and the smallest is Abbotsford-Mission at 173,692 people. The West is home to 3 of the 6 urban areas in the "over 1 million" club. BC has 4 CMAs, Alberta and Saskatchewan each have 2 and Manitoba has just 1.

The number of municipalities that form the West's CMAs also varies. For example, the CMA of Calgary is made up of 8 municipalities/districts and 1 Indian reserve with over 90% of the CMA population living in the anchor city of Calgary. By contrast, the CMA of Vancouver is made up of 22 municipalities/districts and 16 Indian reserves and the anchor city of Vancouver is home to only 27% of the urban area's population.

Over 6 in 10 western Canadians live in a Census Metropolitan Area

FIGURE 60: RELATIVE SIZE OF WESTERN CENSUS METROPOLITAN AREA POPULATIONS 2009



	% of Province	*% of the West*	*% of Canada*
Victoria	7.9	3.4	1.0
Vancouver	52.3	22.4	6.9
Abbotsford-Mission	3.9	1.7	0.5
Kelowna	4.0	1.7	0.5
Edmonton	31.3	11.1	3.4
Calgary	33.4	11.8	3.6
Saskatoon	25.0	2.5	0.8
Regina	20.4	2.0	0.6
Winnipeg	60.8	7.1	2.2

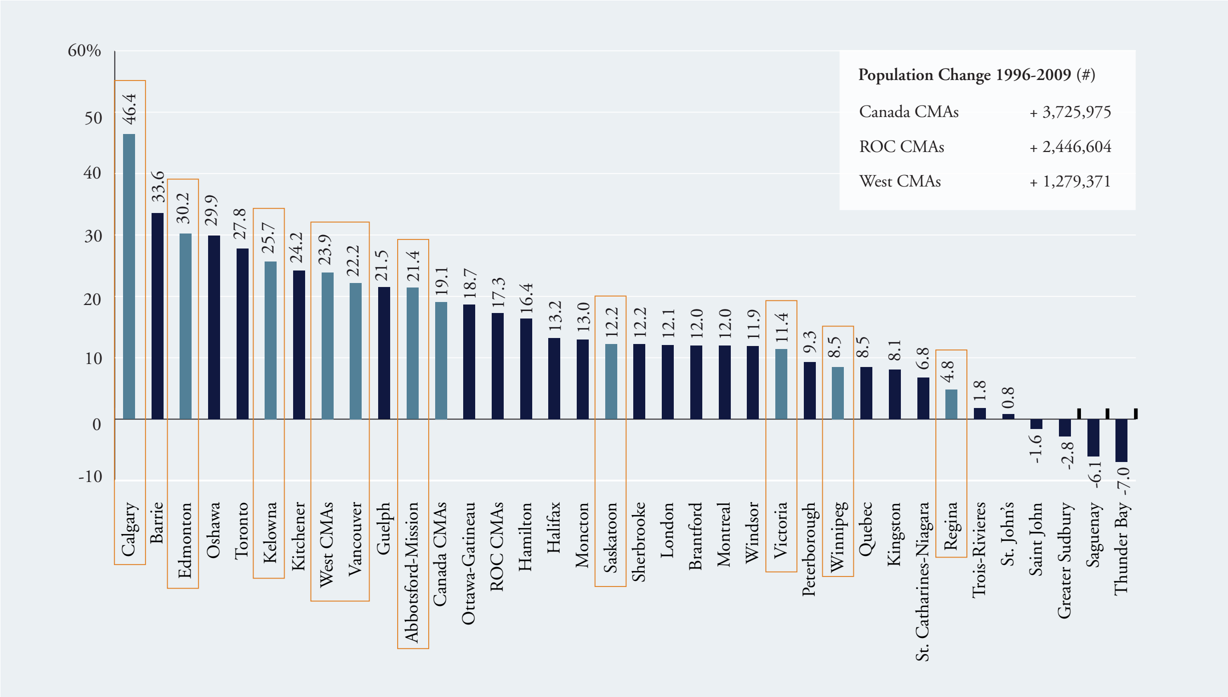
Source: Statistics Canada Cansim Tables 51-0046 and 51-0001 and author's calculations.

Winnipeg is home to 60.8% of Manitoba's population; this is the largest share of provincial population of the West's CMAs. Vancouver is home to over half of BC's population. The population in Saskatchewan and Alberta is a bit more spread out. Saskatchewan has the largest proportion of its population living somewhere other than a CMA (54.6%).

Just under two-thirds of the West's population (63.8%) calls a CMA home. Vancouver accounts for 22.4% of the West's population which is just under the combined share of Calgary and Edmonton (22.9%). Together, the western CMAs are home to 19.6% of the national population.

Calgary leads all CMAs in terms of population growth

FIGURE 61: POPULATION GROWTH (%) IN CENSUS METROPOLITAN AREAS 1996-2009



Source: Statistics Canada Cansim Table 51-0046 and author's calculations.

In percentage terms, Calgary grew the most of all CMAs between 1996 and 2009, posting an increase of 46.4%. The average in the West was 23.9% growth and 17.3% in the rest of Canada. Abbotsford-Mission, Vancouver, Kelowna, Edmonton and Calgary all grew by over 20%. Regina posted the most modest increase in the region at 4.8%. Unlike Thunder Bay, Sageunay, Greater Sudbury and Saint John, no western CMA shrank over the reference period.

In absolute terms, Toronto added the most people at 1,222,404 followed by Vancouver at 422,695.

The West's metro areas are much smaller than large metros in the US

FIGURE 62: FIFTY LARGEST US METRO AREAS COMPARED TO CANADIAN CMAS

Metropolitan Statistical Area/CMA	*2009 Population*	*Metropolitan Statistical Area/CMA*	*2009 Population*
New York-Northern New Jersey-Long Island, NY-NJ-PA	19,069,796	Cleveland-Elyria-Mentor, OH	2,091,286
Los Angeles-Long Beach-Santa Ana, CA	12,874,797	Orlando-Kissimmee, FL	2,082,421
Chicago-Naperville-Joliet, IL-IN-WI	9,580,567	San Antonio, TX	2,072,128
Dallas-Fort Worth-Arlington, TX	6,447,615	Kansas City, MO-KS	2,067,585
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	5,968,252	Las Vegas-Paradise, NV	1,902,834
Houston-Sugar Land-Baytown, TX	5,867,489	San Jose-Sunnyvale-Santa Clara, CA	1,839,700
Toronto, ON	**5,623,450**	Columbus, OH	1,801,848
Miami-Fort Lauderdale-Pompano Beach, FL	5,547,051	Charlotte-Gastonia-Concord, NC-SC	1,745,524
Washington-Arlington-Alexandria, DC-VA-MD-WV	5,476,241	Indianapolis-Carmel, IN	1,743,658
Atlanta-Sandy Springs-Marietta, GA	5,475,213	Austin-Round Rock, TX	1,705,075
Boston-Cambridge-Quincy, MA-NH	4,588,680	Virginia Beach-Norfolk-Newport News, VA-NC	1,674,498
Detroit-Warren-Livonia, MI	4,403,437	Providence-New Bedford-Fall River, RI-MA	1,600,642
Phoenix-Mesa-Scottsdale, AZ	4,364,094	Nashville-Davidson--Murfreesboro--Franklin, TN	1,582,264
San Francisco-Oakland-Fremont, CA	4,317,853	Milwaukee-Waukesha-West Allis, WI	1,559,667
Riverside-San Bernardino-Ontario, CA	4,143,113	Jacksonville, FL	1,328,144
Montreal, QC	**3,814,738**	Memphis, TN-MS-AR	1,304,926
Seattle-Tacoma-Bellevue, WA	3,407,848	Louisville/Jefferson County, KY-IN	1,258,577
Minneapolis-St. Paul-Bloomington, MN-WI	3,269,814	Richmond, VA	1,238,187
San Diego-Carlsbad-San Marcos, CA	3,053,793	**Calgary, AB**	**1,230,248**
St. Louis, MO-IL	2,828,990	Oklahoma City, OK	1,227,278
Tampa-St. Petersburg-Clearwater, FL	2,747,272	Ottawa-Gatineau	1,220,674
Baltimore-Towson, MD	2,690,886	Hartford-West Hartford-East Hartford, CT	1,195,998
Denver-Aurora-Broomfield, CO	2,552,195	New Orleans-Metairie-Kenner, LA	1,189,981
Pittsburgh, PA	2,354,957	**Edmonton, AB**	**1,155,383**
Vancouver, BC	**2,328,007**	Birmingham-Hoover, AL	1,131,070
Portland-Vancouver-Beaverton, OR-WA	2,241,841	Salt Lake City, UT	1,130,293
Cincinnati-Middletown, OH-KY-IN	2,171,896	Raleigh-Cary, NC	1,125,827
Sacramento--Arden-Arcade--Roseville, CA	2,127,355	Buffalo-Niagara Falls, NY	1,123,804

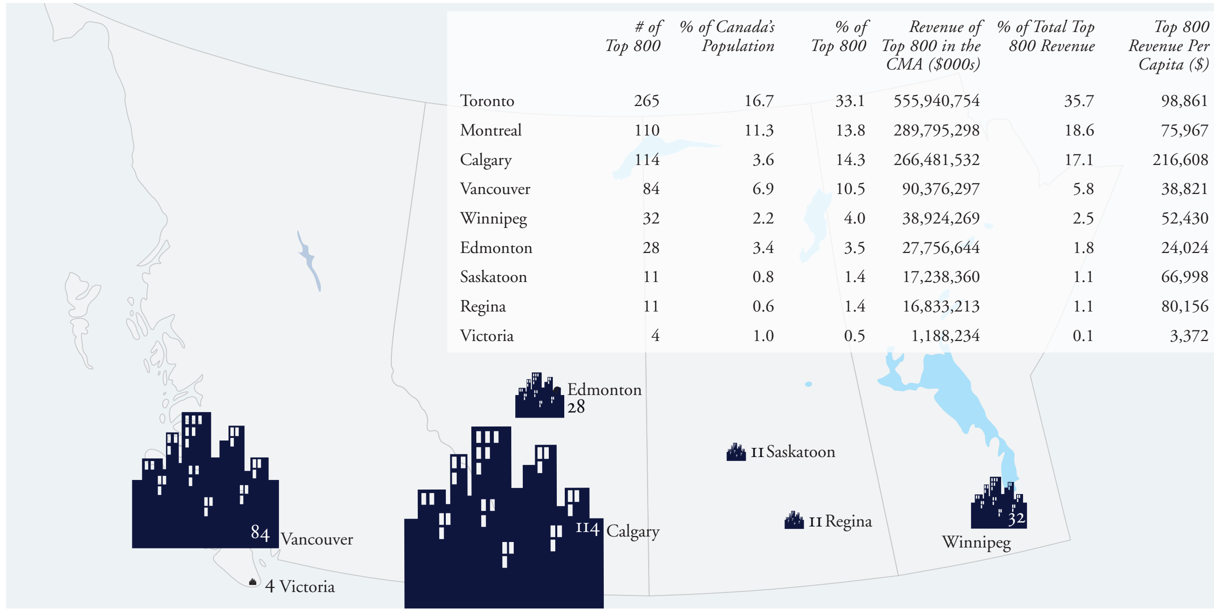
Note: There are differences in the way that Census Metropolitan Areas and Metropolitan Statistical Areas are defined. Nonetheless, the concepts are broadly comparable.
Source: US Census Bureau and Source: Statistics Canada Cansim Table 51-0046.

There are 342 Metropolitan Statistical Areas in the US with over 100,000 residents, 52 of which have populations over a million. If Vancouver were in the US, it would rank as the 25th largest metro area just behind Pittsburgh and just ahead of Portland. Calgary would be 44th and Edmonton would be 47th.

Winnipeg is roughly the same size as El Paso, Texas, Victoria is close to Eugene, Oregon, Saskatoon is on par with Cedar Rapids, Iowa, Regina is similar in size to Tuscaloosa, Alabama, Kelowna and Abbotsford are roughly the same size as Monroe, Louisiana.

The Census Metropolitan Area of Toronto remains Canada's corporate heartland, but Calgary is also a major corporate centre

FIGURE 63: HEADQUARTERS OF THE 800 LARGEST CORPORATIONS IN CANADA 2009 (RANKED BY REVENUE)



	# of Top 800	% of Canada's Population	% of Top 800	Revenue of Top 800 in the CMA ($000s)	% of Total Top 800 Revenue	Top 800 Revenue Per Capita ($)
Toronto	265	16.7	33.1	555,940,754	35.7	98,861
Montreal	110	11.3	13.8	289,795,298	18.6	75,967
Calgary	114	3.6	14.3	266,481,532	17.1	216,608
Vancouver	84	6.9	10.5	90,376,297	5.8	38,821
Winnipeg	32	2.2	4.0	38,924,269	2.5	52,430
Edmonton	28	3.4	3.5	27,756,644	1.8	24,024
Saskatoon	11	0.8	1.4	17,238,360	1.1	66,998
Regina	11	0.6	1.4	16,833,213	1.1	80,156
Victoria	4	1.0	0.5	1,188,234	0.1	3,372

Source: Financial Post Magazine, FP500 Database, Statistics Canada and author's calculations.

Where head offices are located is important for a number of reasons. Head offices are sources of jobs, decision-making, philanthropy, influence and economic activity. Plus, where there's smoke, there's usually fire. In other words, a concentration of head offices is linked to other economic assets and activities (e.g., airport traffic, business events, accounting and legal services). As such, the number of head offices of large companies in a city is a good proxy for its corporate muscle.

It is important to note that the revenue generated by large corporations is not all produced by the head office and little of it may stick to the head office city. Nonetheless, location of the head offices of large corporations tells us a lot about a place and its economic weight.

The Toronto CMA is home to 265 of the head offices of the country's 800 largest corporations (ranked by annual revenue). Calgary is a distant, but very respectable second, at 114 head offices. Both cities punch way above their demographic weight: Toronto accounts for 16.7% of Canada's population, but 33.1% of the head offices of the 800 largest corporations; Calgary accounts for just 3.6% of Canada's population, but 14.3% of the head offices.

The 114 large corporations with head offices in Calgary generated $216,608 per capita compared to $98,861 per person in Toronto. This suggests that the impact of the corporate sector in Calgary is much greater than it is in Toronto as there is more money flowing through Calgary's head offices relative to its population than in Toronto.

Vancouver is seen as offering a very high quality of life

FIGURE 64: CITY QUALITY OF LIFE RANKINGS 2009 (TOP 30 CITIES)

	Rank		*Rank*
Vienna, Austria	1	Berlin, Germany	16
Zurich, Switzerland	2	Melbourne, Australia	18
Geneva, Switzerland	3	Luxembourg, Luxembourg	19
Vancouver, Canada	**4**	Stockholm, Sweden	20
Auckland, New Zealand	4	Perth , Australia	21
Düsseldorf, Germany	6	**Montreal, Canada**	**22**
Munich, Germany	7	Nürnberg, Germany	23
Frankfurt, Germany	8	Oslo, Norway	24
Bern, Switzerland	9	Dublin, Ireland	25
Sydney, Australia	10	Singapore, Singapore	26
Copenhagen, Denmark	11	**Calgary, Canada**	**26**
Wellington, New Zealand	12	Hamburg, Germany	28
Amsterdam, Netherlands	13	Honolulu, USA	29
Brussels, Belgium	14	San Francisco, USA	30
Toronto, Canada	**15**	Helsinki, Finland	30
Ottawa, Canada	**16**	Adelaide, Australia	30

FIGURE 65: THE ECONOMIST INTELLIGENCE UNIT'S GLOBAL LIVEABILITY SURVEY 2008 (TOP 30 CITIES)

	Rank		*Rank*
Vancouver, Canada	**1**	Hamburg, Germany	15
Melbourne, Australia	2	**Montreal, Canada**	**15**
Vienna, Austria	3	Brisbane, Australia	18
Perth, Australia	4	Paris, France	19
Toronto, Canada	**5**	Frankfurt, Germany	20
Helsinki, Finland	6	Wellington, New Zealand	21
Adelaide, Australia	7	Tokyo, Japan	22
Calgary, Canada	**7**	Berlin, Germany	22
Geneva, Switzerland	9	Amsterdam, Netherlands	24
Sydney, Australia	9	Oslo, Norway	25
Zurich, Switzerland	9	Luxembourg, Luxembourg	26
Stockholm, Sweden	12	Brussels, Belgium	27
Osaka, Japan	13	Munich, Germany	28
Copenhagen, Denmark	14	Pittsburgh, US	29
Auckland, New Zealand	15	Honolulu, US	30

Note: The Mercer rankings are based on a point-scoring index, which sees Vienna score 108.6, and Baghdad 14.4. Cities are ranked against New York as the base city with an index score of 100. Mercer's Quality of Living ranking covers 215 cities and is conducted to help governments and major companies place employees on international assignments. Living conditions are analysed according to 39 factors, grouped in 10 categories:

* Political and social environment (political stability, crime, law enforcement, etc)
* Economic environment (currency exchange regulations, banking services, etc)
* Socio-cultural environment (censorship, limitations on personal freedom, etc)
* Health and sanitation (medical supplies and services, infectious diseases, sewage, waste disposal, air pollution, etc)
* Schools and education (standard and availability of international schools, etc)
* Public services and transportation (electricity, water, public transport, traffic congestion, etc)
* Recreation (restaurants, theatres, cinemas, sports and leisure, etc)
* Consumer goods (availability of food/daily consumption items, cars, etc)
* Housing (housing, household appliances, furniture, maintenance services, etc)
* Natural environment (climate, record of natural disasters)

Source: Mercer Consulting and The Economist.

Each year, Mercer Consulting publishes a list of cities ranked by the quality of life they offer. While a very subjective measure, it is worth noting that Vancouver tied with Auckland, New Zealand for 4th spot on the list and that Calgary tied with Singapore for 26th spot. (Not all Canadian cities are considered, so this should be kept in mind.)

You may feel that Saskatoon or Brandon offer a better quality of life than the cities on the Mercer list, but it is still interesting to see two western cities among many of the world's great cities.

Western Canadian cities fare even better on the list prepared by the *Economist* (Figure 65). In the 2008 survey, Vancouver ranked number 1, Toronto 4th and Calgary 5th. In 2010, Vancouver once again topped the list, with Toronto still in 4th and Calgary moving up to 5th spot.

Again, it is important to stress that not all Canadian cities are part of the survey.

Alberta has the fastest growing Census Agglomerations in the country

FIGURE 66: POPULATION OF WESTERN CENSUS AGGLOMERATIONS 2006 AND 2001 CENSUSES (RANKED BY % CHANGE)

	2001	2006	% Change		2001	2006	% Change
Okotoks, AB	11,689	17,145	46.7	Campbell River, BC	35,036	36,461	4.1
Wood Buffalo, AB	42,581	52,643	23.6	Cold Lake, AB	11,520	11,991	4.1
Grande Prairie, AB	58,787	71,868	22.3	Brooks, AB	21,685	22,452	3.5
Red Deer, AB	67,829	82,772	22.0	Thompson, MB	13,261	13,593	2.5
Lloydminster, AB/SK	23,964	27,023	12.8	Dawson Creek, BC	10,754	10,994	2.2
Canmore, AB	10,792	12,039	11.6	Port Alberni, BC	25,299	25,297	0.0
Medicine Hat, AB	61,735	68,822	11.5	Swift Current, SK	16,527	16,533	0.0
Chilliwack, BC	74,003	80,892	9.3	Powell River, BC	16,604	16,537	-0.4
Fort St. John, BC	23,007	25,136	9.3	Moose Jaw, SK	33,519	33,360	-0.5
Parksville, BC	24,285	26,518	9.2	Cranbrook, BC	24,275	24,138	-0.6
Courtenay, BC	45,205	49,214	8.9	Portage la Prairie, MB	20,617	20,494	-0.6
Lethbridge, AB	87,388	95,196	8.9	Yorkton, SK	17,554	17,438	-0.7
Nanaimo, BC	85,664	92,361	7.8	Estevan, SK	11,297	11,135	-1.4
Vernon, BC	51,530	55,418	7.5	Prince Albert, SK	41,460	40,766	-1.7
Duncan, BC	38,813	41,387	6.6	Prince George, BC	85,035	83,225	-2.1
Squamish, BC	14,435	15,256	5.7	North Battleford, SK	18,590	17,765	-4.4
Salmon Arm, BC	15,388	16,205	5.3	Williams Lake, BC	19,768	18,760	-5.1
Camrose, AB	14,870	15,620	5.0	Terrace, BC	19,980	18,581	-7.0
Wetaskiwin, AB	11,154	11,673	4.7	Quesnel, BC	24,426	22,449	-8.1
Kamloops, BC	88,951	92,882	4.4	Prince Rupert, BC	15,302	13,392	-12.5
Brandon, MB	46,273	48,256	4.3	Kitimat, BC	10,285	8,987	-12.6
Penticton, BC	41,564	43,313	4.2				

Source: Statistics Canada

A Census Agglomeration has an urban core of at least 10,000 people. The CAs of Okotoks, Wood Buffalo (which includes Fort McMurray), Grande Prairie and Red Deer led the country in growth between the 2001 and 2006 Census. Lloydminster, Canmore and Medicine Hat were also in the top 10. Some of the hardest hit CAs in terms of population decline were in BC (Williams Lake, Terrace, Quesnel, Prince Rupert and Kitimat).

CHAPTER 7

The Rural West

The West's rural population accounts for

29.9%

of the national rural population.

11.5%

of Saskatchewan residents live on a farm compared to a national average of 2.2%.

HIGHLIGHTS

- → The West's rural population has been growing slower than its urban population.
- → Only Saskatchewan has experienced consistent rural population decline.
- → Rural areas with strong links to large urban centres are growing faster than other rural areas.
- → The West's farm population has been in decline for decades. In 1931, there were 1.3 million people living on farms in the West compared to just 380,000 in 2006.
- → BC has the largest number of farmers living in urban areas in the country.
- → The number of farms has been falling while the average size of farms has been rising.
- → Cattle ranching and grain farming dominate agriculture in the West.
- → The drop in the total number of farms between 2001 and 2006 is entirely due to the declining number of farms with annual revenue below $250,000. The total number of farms with annual revenues above $500,000 went up by almost one-quarter.

THE FARM POPULATION is defined as all persons living on farms in households with a farm operator.

A FARM OPERATOR is a person responsible for the management decisions made in operating a census farm.

RURAL AREAS ARE DEFINED IN DIFFERENT WAYS. THIS SECTION REFERS TO THE FOLLOWING CONCEPTS:

Census Rural Area: This is the definition of rural used by Statistics Canada's Census of Population. Typically, it has referred to the population living outside settlements of 1,000 or more inhabitants. The current definition states that a Census Rural Area has a population outside settlements with 1,000 or more population with a population density of 400 or more inhabitants per square kilometre. Census Rural Areas are sometimes found within the boundaries of Census Metropolitan Areas (CMAs) and Census Agglomerations (CAs).

Rural and Small Town (RST) refers to areas outside CMAs and CAs. Both CMAs and CAs include neighbouring towns and municipalities where 50% of more of the workforce commutes to the urban core (Statistics Canada, 2007). The term Larger Urban Centre (LUC) refers to both CMAs and CAs.

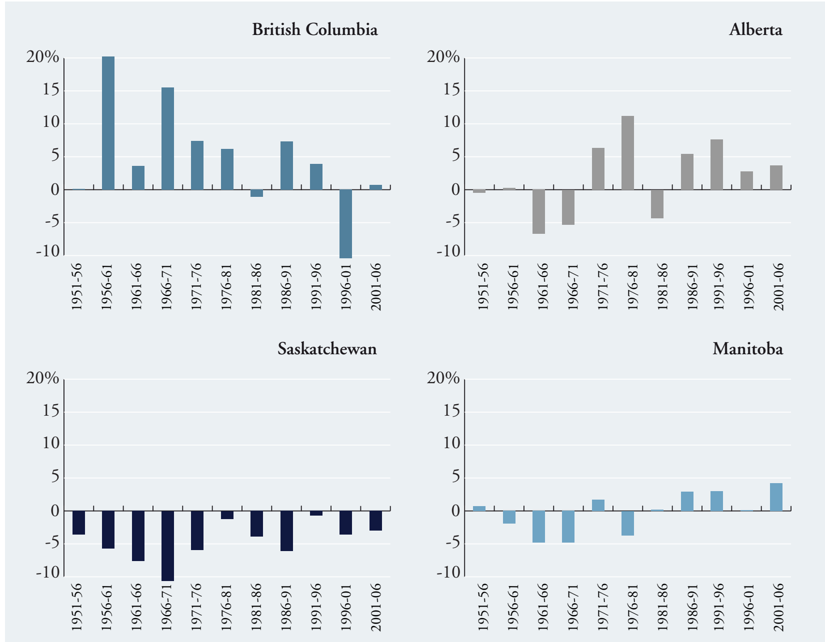
Metropolitan Influenced Zone (MIZ): The RST population may be disaggregated according to the degree of influence of larger urban centres. Towns and municipalities (i.e., census subdivisions) are classified according to the share of workers who commute to a larger urban centre. The categories are Strong MIZ (where 30% or more of the workforce commutes to an urban core), Moderate MIZ (where 5% to 29% commute to any urban core), Weak MIZ (where greater than 0% but less than 5% commute to any urban core) and No MIZ (where there are no residents commuting to an urban core).

Predominantly Rural Regions: The OECD defines a "predominantly rural region" as having more than 50% of the population living in rural communities where a "rural community" has a population density less than 150 persons per square kilometre. In Canada, the census division has been used to represent "regions." **Intermediate Regions** have 15% to 49% of their population living in a rural community. **Predominantly Urban Regions** have less than 15% of their population living in a rural community. **Predominantly Rural Regions** are classified as **Rural Metro-Adjacent, Rural Non-Metro-Adjacent** and **Rural Northern**. Rural metro-adjacent regions are predominantly rural census divisions which are adjacent to metropolitan centres while rural non-metro-adjacent regions are those predominantly rural census divisions which are not adjacent to metropolitan centres. Rural northern regions are predominantly rural census divisions that are found either entirely or mostly above the following lines of parallel in each province: Manitoba, 53rd; Saskatchewan, Alberta and British Columbia, 54th.

SOURCE: Statistics Canada, *Rural and Small Town Canada Analysis Bulletin*, Vol. 7, No. 7 (November 2008) and *Structure and Change in Canada's Rural Demography: An Update to 2006 with Provincial Detail* (December 2008).

Rural population change is uneven across the West

FIGURE 67: POPULATION CHANGE IN RURAL AREAS (% CHANGE) WITH RURAL POPULATION IN 2006 AND PROVINCIAL RURAL POPULATION AS % OF TOTAL NATIONAL RURAL POPULATION



	Rural Population in 2006	*Rural Population as % of National Rural Total*
BC	**602,187**	**9.7**
AB	**590,499**	**9.5**
SK	**339,244**	**5.5**
MB	**327,479**	**5.3**
ON	1,809,147	29.1
QC	1,495,785	24.1
NB	357,062	5.7
NS	406,530	6.5
PE	74,678	1.2
NL	213,370	3.4
West	**1,859,409**	**29.9**
ROC	4,356,572	70.1
Canada	6,215,981	100.0

Source: Statistics Canada, Rural and Small Town Canada Analysis Bulletin, Vol. 7, No. 7 (November 2008), *Structure and Change in Canada's Rural Demography: An Update to 2006 with Provincial Detail* and author's calculations. Population change, as calculated in this table includes the change due to population growth or decline plus the change due to reclassification or areas from rural to urban (or urban to rural). In general, reclassification makes only a small impact on the calculated change at the level of provinces. Data are tabulated in boundaries applicable at the time of the given census.

As noted in the previous section on the urban West, the region's rural population has been growing more slowly than its urban population. Hence, the rural share of the regional population is in decline relative to the urban share. This general trend, however, masks the ups and downs of population growth in the rural West.

Since 1986, the rural populations of Manitoba and Alberta have posted positive growth at each Census interval. BC's rural areas have grown between every Census except 1981-1986 (-1.1%) and 1996-2001) (-10.4%). Rural population decline is most prominent in Saskatchewan where rural areas have decreased consistently from Census to Census. Saskatchewan was the last province in the West to see its rural population become the minority in 1971, but has seen that population fall by over 96,000 since that time.

Although thought of by some as more rural than other parts of Canada because of its farming and frontier heritage, the West accounts for only 29.9% of Canada's rural population and there are almost as many rural people in Ontario (1,809,147) as in all four western provinces combined (1,859,409).

Rural areas with strong links to large urban centres grew faster than those with weaker links

FIGURE 68: POPULATION BY METROPOLITAN INFLUENCED ZONE (2006 BOUNDARIES)

	BC % of Total Population in 2006	*% Change 2001 to 2006*	*AB % of Total Population in 2006*	*% Change 2001 to 2006*	*SK % of Total Population in 2006*	*% Change 2001 to 2006*	*MB % of Total Population in 2006*	*% Change 2001 to 2006*	*West % of Total Population in 2006*	*% Change 2001 to 2006*	*ROC % of Total Population in 2006*	*% Change 2001 to 2006*	*Canada % of Total Population in 2006*	*% Change 2001 to 2006*
Larger Urban Centres	87	6.0	79	12.6	60	1.5	68	2.7	79	7.4	82	6.0	81	6.4
CMAs	67	6.7	64	11.9	44	2.4	60	2.7	63	7.7	70	6.6	68	6.9
CAs	20	3.5	15	15.7	15	-1.1	7	2.7	16	6.5	12	2.6	13	4.0
Rural and Small Town Areas	13	0.8	21	3.8	40	-4.7	32	2.4	21	1.0	18	1.0	19	1.0
Strong Metropolitan Influenced Zone	2	4.8	2	12.9	2	0.3	3	5.2	2	7.2	5	4.3	4	4.7
Moderate Metropolitan Influenced Zone	4	4.6	7	3.4	11	-4.8	9	3.5	6	2.2	7	0.5	7	0.9
Weak Metropolitan Influenced Zone	6	-2.8	11	1.6	19	-4.8	17	2.2	10	-0.7	5	-2.1	6	-1.4
No Metropolitan Influenced Zone	1	0.1	1	14.1	8	-5.7	3	-2.7	2	-1.4	1	2.9	1	0.4
TOTAL	100	5.3	100	10.6	100	-1.1	100	2.6	100	6.0	100	5.1	100	5.4

Note: Canada total does not include the territories.
Source: Statistics Canada, *Structure and Change in Canada's Rural Demography: An Update to 2006 with Provincial Detail* and author's calculations.

When we slice up urban and rural areas in a slightly different way, we find that rural and small town areas with strong links to large urban centre (measured by the percentage of people who commute to an urban core) are growing faster than other rural areas. For the West as a whole, rural and small town areas grew by 1% between 2001 and 2006 compared to 7.2% growth in rural and small town areas in strong metropolitan influenced zones. It is important to note here, however, that strong metropolitan influenced zones account for only 2.3% of the regional population.

On the Prairies, relatively large percentages of the population live in weak and non-metropolitan influenced zones where less than 5% of residents commute to an urban core: the numbers are 20% for Manitoba, 27% for Saskatchewan and 12% for Alberta.

According to the OECD definition of rural, about 4 in 10 westerners live in a predominantly rural area

FIGURE 69: POPULATION CHANGE BY TYPE OF REGION 2001 TO 2006 (PERCENT CHANGE)

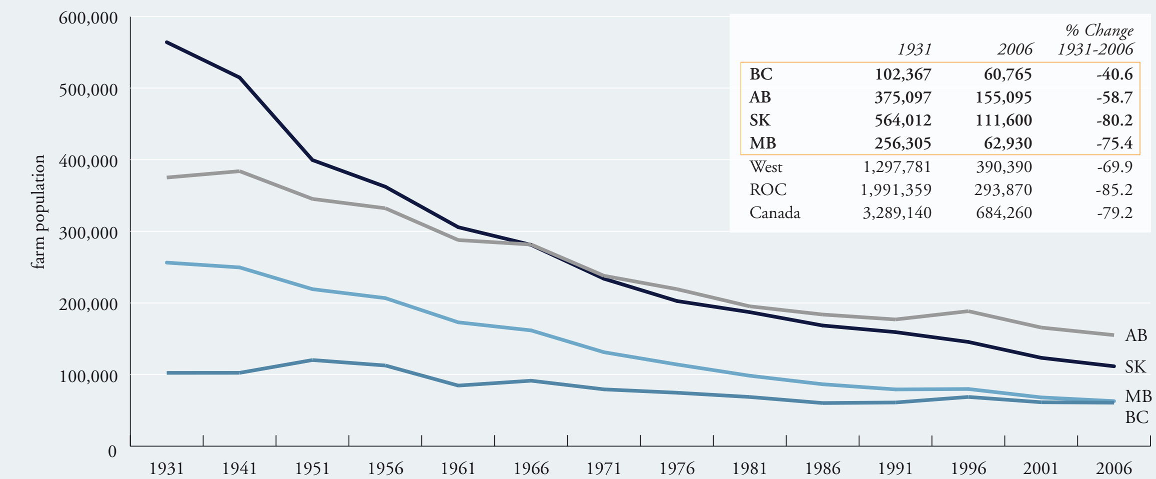
	BC % of Total Population in 2006	% Change 2001 to 2006	AB % of Total Population in 2006	% Change 2001 to 2006	SK % of Total Population in 2006	% Change 2001 to 2006	MB % of Total Population in 2006	% Change 2001 to 2006	West % of Total Population in 2006	% Change 2001 to 2006	ROC % of Total Population in 2006	% Change 2001 to 2006	Canada % of Total Population in 2006	% Change 2001 to 2006
Predominantly Urban Regions	60	6.4	68	12.0	…	…	55	2.4	56	8.2	48	5.5	50	6.4
Intermediate Regions	…	…	…	…	48	1.7	…	…	5	1.7	27	7.1	20	6.7
All Predominantly Rural Regions	40	3.6	32	7.7	52	-3.6	45	2.8	39	3.5	26	2.3	30	2.8
Rural Metro-Adjacent Regions	14	5.5	21	7.7	23	-3.0	20	5.7	18	5.2	14	4.4	15	4.7
Rural Non-Metro-Adjacent Regions	23	3.6	9	5.5	25	-5.3	18	-0.1	18	2.1	10	-0.4	12	0.7
Rural Northern Regions	3	-6.6	2	23.5	4	5.9	6	2.5	3	1.7	2	1.8	2	1.8
TOTAL	100	5.3	100	10.6	100	-1.1	100	2.6	100	6.0	100	5.1	100	5.4

Source: Statistics Canada, *Structure and Change in Canada's Rural Demography: An Update to 2006 with Provincial Detail* and author's calculations.

When the Organization for Economic Co-operation and Development's broader definition of rural is used, we see some dramatic differences compared to when the standard Canadian definition is used. For example, BC emerges as a much more rural province when the broader definition is used with 40% of its population living in "predominantly rural" areas. The proportion of the population classified as rural also jumps in Saskatchewan (from 35% to 52%), Manitoba (from 29% to 45%) and Alberta (from 18% to 32%). As a result, the average for the West is 39% compared to 26% for the rest of Canada and, according to this measure at least, the West is significantly more "rural" than Ontario (19%) and Quebec (23%).

The farm population is much smaller today than in the past

FIGURE 70: FARM POPULATION 1931-2006



	1931	2006	% Change 1931-2006
BC	**102,367**	**60,765**	**-40.6**
AB	**375,097**	**155,095**	**-58.7**
SK	**564,012**	**111,600**	**-80.2**
MB	**256,305**	**62,930**	**-75.4**
West	1,297,781	390,390	-69.9
ROC	1,991,359	293,870	-85.2
Canada	3,289,140	684,260	-79.2

Source: Statistics Canada, *Structure and Change in Canada's Rural Demography: An Update to 2006* with Provincial Detail, Statistics Canada website and author's calculations. Farm operator data is from the Census of Agriculture 2006. http://www40.statcan.gc.ca/l01/cst01/agrc42k-eng.htm

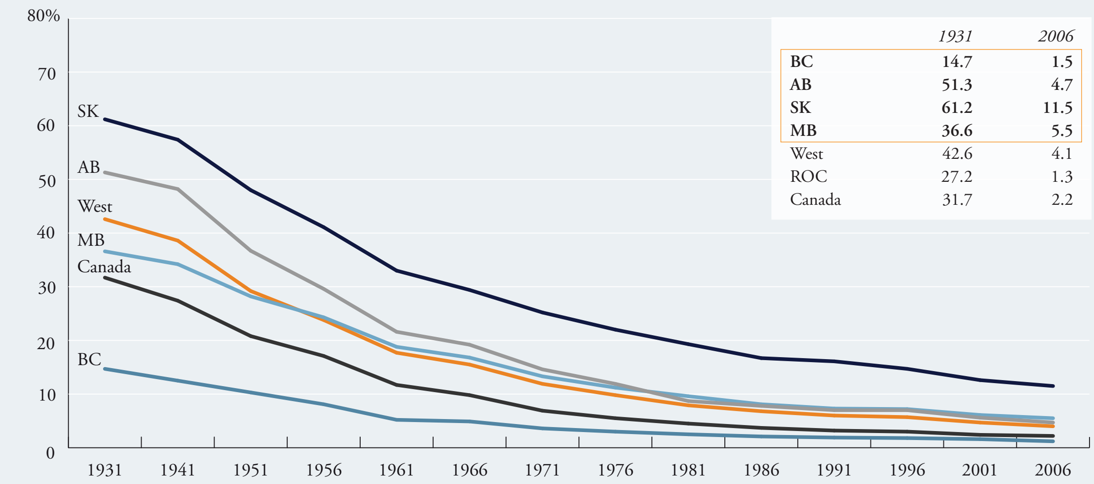
While Canada's population went from 10.4 million in 1931 to 31.5 million in 2006, the farm population dropped by 79% from 3.3 million to 684,000. In 1931, there were 1.3 million people living on farms in the West compared to just 390,390 in 2006.

The relative importance of agriculture to the West is highlighted by the shift in the region's share of the national farm population. In 1931, the West was home to 39.5% of Canada's farm population. Fast forward to 2006 and it was home to 57.1%. In other words, despite being home to only about a third of Canada's population, the West is where we find over half of the nation's farm population.

Saskatchewan had over 564,000 people living on farms in 1931 (the most of any western province), but this dropped to 111,600 by 2006 behind Alberta's 155,095 farm residents.

The relative size of the farm population has shrunk dramatically since 1931

FIGURE 71: FARM POPULATION AS PERCENTAGE OF TOTAL PROVINCIAL/REGIONAL POPULATION 1931-2006



	1931	2006
BC	14.7	1.5
AB	51.3	4.7
SK	61.2	11.5
MB	36.6	5.5
West	42.6	4.1
ROC	27.2	1.3
Canada	31.7	2.2

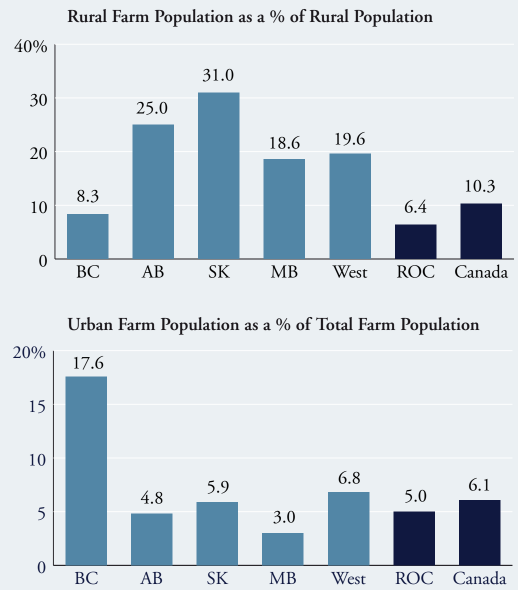
Source: Statistics Canada, *Structure and Change in Canada's Rural Demography: An Update to 2006* with Provincial Detail, Statistics Canada website and author's calculations.

Just as the absolute number of people living on farms has followed a decidedly downward path, so has the share of the total population living on farms. For the West as a whole, the farm population's share of the total population fell from 42.6% in 1931 to just 4.0% in 2006. Saskatchewan may not have the most farmers in the West anymore, but it does have the largest percentage of its population living on farms in both the region and the country as a whole. About 1 in 10 residents of Saskatchewan live on a farm compared to a national average of 2.2%.

BC, traditionally less farm-oriented than the Prairies, has the smallest percentage of its population living on farms at 1.5%. Manitoba and Alberta split the difference in the West with 5.5% and 4.7% of their respective populations living on farms.

BC has the largest urban farm population in the country

FIGURE 72: URBAN AND RURAL FARM POPULATION 2006



	Census Urban Farm Population	*Census Rural Farm Population*	*Total Farm Population*	*Total Rural Population*
BC	**10,725**	**50,040**	**60,765**	**601,530**
AB	**7,510**	**147,585**	**155,095**	**590,430**
SK	**6,580**	**105,020**	**111,600**	**339,295**
MB	**1,905**	**61,025**	**62,930**	**327,490**
West	26,720	363,670	390,390	1,858,745
ROC	14,825	279,045	293,870	4,355,280
Canada	41,545	642,715	684,260	6,214,025

Note: Canada and ROC does not include territories in this table.
Source: Statistics Canada, Canada's Farm Population: Agriculture–Population Linkage Data for the 2006 Census and author's calculations.

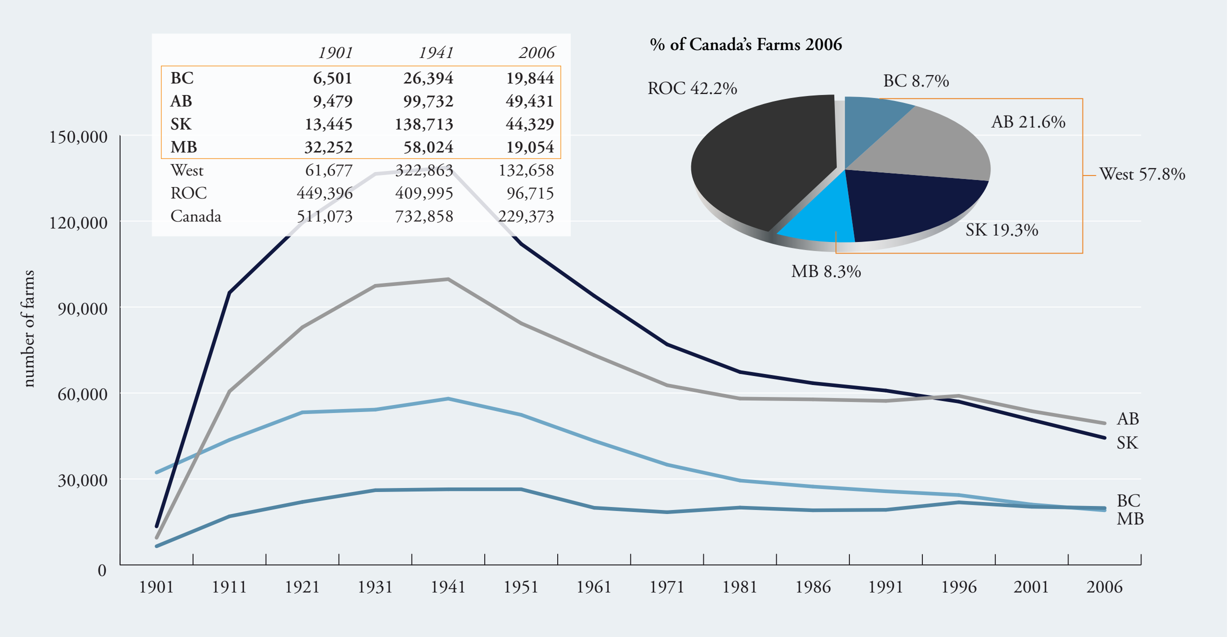
At almost 11,000, BC has the largest farm population living in urban areas. Newfoundland and Labrador has a greater percentage of its farm population living in urban areas (26.8% compared to BC's 17.6%), but this amounts to only 315 urban farmers. Within the West, Manitoba has the smallest percentage of its farm population living in urban areas at 3.0% followed by Alberta at 4.8% and Saskatchewan at 5.9%.

Farmers are a minority in the rural areas of all four western provinces. Less than a fifth of the West's rural population live on farms. BC has the smallest percentage at 8.3% and Saskatchewan has the highest at 31.0%. Farmers are not only a minority in the general population, but in the countryside as well. (Farmers here is used to refer to people living on farms as opposed to farm operators in the strict sense.)

Just as the number of farmers has fallen, so too has the number of farms

FIGURE 73: NUMBER OF FARMS 1901-2006

	1901	1941	2006
BC	**6,501**	**26,394**	**19,844**
AB	**9,479**	**99,732**	**49,431**
SK	**13,445**	**138,713**	**44,329**
MB	**32,252**	**58,024**	**19,054**
West	61,677	322,863	132,658
ROC	449,396	409,995	96,715
Canada	511,073	732,858	229,373



Source: Statistics Canada Census of Agriculture 2006 and author's calculations.

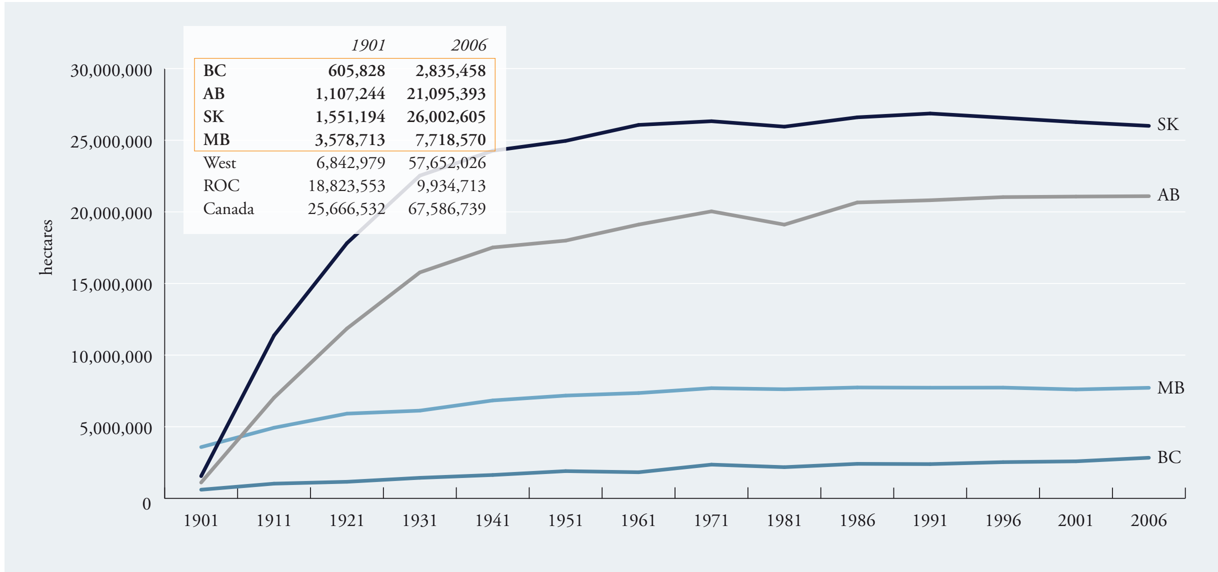
The number of farms in the West jumped dramatically between 1901 and 1911, going from 61,677 to 216,161 in just 10 years. The number of farms in the region continued to rise until it peaked in 1941 at 322,863.

Ontario actually has the largest number of farms in Canada (57,211) and Quebec is fourth in the list with 30,675. Relative to its population and area, Prince Edward Island's 1,700 farms is quite significant. In other words, while the West has the most farms and, as the next figure shows, the majority of the farmland, agriculture is important right across the country.

Between 2001 and 2006, Saskatchewan had the highest rate of decrease in the number of farms (12.4%) in the West. The number of farms fell by 9.6% in Manitoba, 7.9% in Alberta and 2.2% in BC. The lower rate of decline in BC is due in part to its relatively diverse agriculture sector.

While the number of farmers and farms has fallen, the total amount of farmland in the West has remained relatively constant in recent years

FIGURE 74: TOTAL FARM AREA 1901-2006 (HECTARES)



Note: A hectare = 2.471 acres = 0.01 km^2
Source: Statistics Canada Census of Agriculture 2006 and author's calculations.

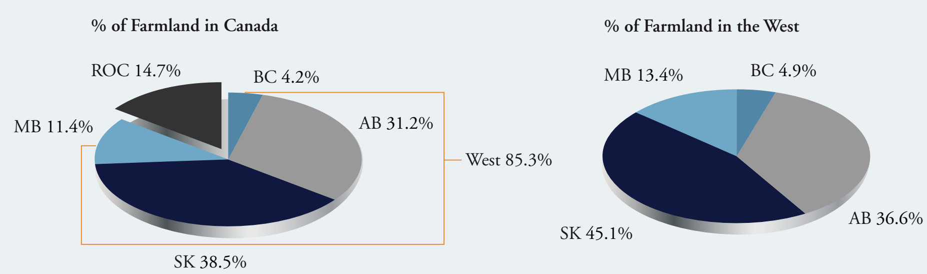
In the early decades of the 20th century, the amount of land used for farming in the West increased dramatically. This was largely due to the influx of new farmers to Saskatchewan and Alberta.

The amount of farmland in the West increased more than eight fold between 1901 and 2006 whereas there is about half as much farmland in the rest of Canada today as there was in 1901.

Over the past 40 years, the total area of farmland in the West has remained fairly constant. However, between 2001 and 2006, the total area of farmland in BC increased by 9.6%.

The majority of Canada's farmland is found in the West

FIGURE 75: SHARE OF TOTAL NATIONAL AND REGIONAL FARM AREA 2006



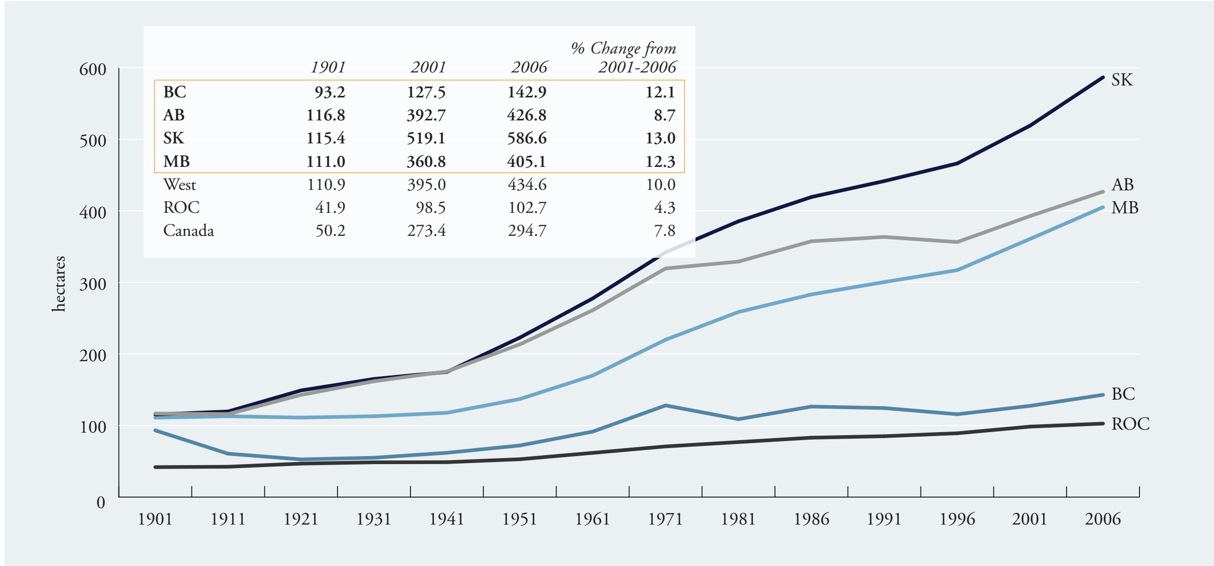
	Hectares
BC	**2,835,458**
AB	**21,095,393**
SK	**26,002,605**
MB	**7,718,570**
West	57,652,026
ROC	9,934,713
Canada	67,586,739

Note: A hectare = 2.471 acres = 0.01 km^2
Source: Statistics Canada Census of Agriculture 2006 and author's calculations.

The West accounts for 85.3% of Canada's farmland. Saskatchewan has the largest share at 38.5% of the national total followed by Alberta at 31.2%. Within the West, Saskatchewan accounts for 45.1% of the region's farmland whereas BC has just 4.9%.

The changing economics of farming has led to larger farms

FIGURE 76: AVERAGE FARM SIZE 1901-2006 (HECTARES)



	1901	2001	2006	% Change from 2001-2006
BC	**93.2**	**127.5**	**142.9**	**12.1**
AB	**116.8**	**392.7**	**426.8**	**8.7**
SK	**115.4**	**519.1**	**586.6**	**13.0**
MB	**111.0**	**360.8**	**405.1**	**12.3**
West	110.9	395.0	434.6	10.0
ROC	41.9	98.5	102.7	4.3
Canada	50.2	273.4	294.7	7.8

Note: A hectare = 2.471 acres = 0.01 km^2

Source: Statistics Canada Census of Agriculture 2006 and author's calculations.

As the number of farms declined while the amount of farmland stayed relatively the same, the average size of farms in the West increased. While the average farm size in BC is higher now than in the past, the increase has been much greater on the Prairies. The sharpest increases in farm size took place between the 1941 and 1971 Census. During this time, the number of farms on the Prairies fell and the average size of farms rose.

In the face of slim margins, volatile prices, rising costs, increased competition and new agricultural technology, many small operations have been consumed by larger and larger farms. Larger farms can take advantage of economies of scale and allow farm operators to remain financial viable.

The average size of farms varies greatly around the world

FIGURE 77: NUMBER OF FARMS AND AREA FOR SELECT COUNTRIES (ACRES)

	Farms #	*Total Area of Farms* *Acres*	*Average Size* *Acres*
Canada (2006)	**229,373**	**167,010,491**	**728**
Western Canada (2006)	**132,658**	**142,458,156**	**1,075**
Argentina (2002)	295,485	425,273,427	1,439
Australia (2001)	140,516	1,126,091,533	8,014
Brazil (1996)	4,859,865	873,773,389	180
China (1997)	193,445,894	321,326,863	2
France (2000)	663,810	73,877,143	111
United Kingdom (2000)	233,250	40,839,774	175
United States (2002)	2,128,982	938,268,725	441

Source: Statistics Canada, http://www45.statcan.gc.ca/2009/cgco_2009_011-eng.htm and author's calculations.

Western Canada has a lot of big farms, but they are dwarfed by farms in Australia where the average size is 8,014 acres compared to 1,075 in the West. China is on the other end of the continuum with over 193 million farms with an average size of just 2 acres.

Ranches and grain farms dominate the mix of farm types in the West

FIGURE 78: FARMS BY TYPE 2006 (% OF PROVINCIAL TOTAL)

	BC	*AB*	*SK*	*MB*
Dairy cattle and milk production	3.4	1.2	0.5	2.4
Beef cattle ranching and farming, including feedlots	21.0	41.5	27.6	34.6
Hog and pig farming	0.6	1.2	0.5	4.0
Chicken egg production	3.2	0.3	0.1	0.7
Broiler and other meat-type chicken production	1.6	0.4	0.1	0.5
Turkey production	0.3	0.1	-	0.1
Poultry hatcheries	-	-	-	-
Combination poultry and egg production	0.3	-	-	-
Other poultry production	0.3	0.1	-	0.1
Sheep farming	1.9	0.8	0.4	0.7
Goat farming	0.7	0.3	0.1	0.4
Apiculture	1.0	0.5	0.6	1.3
Horse and other equine production	15.1	9.3	2.5	4.4
Fur-bearing animal and rabbit production	0.1	-	-	0.1
Livestock combination farming	4.9	3.0	2.0	2.3
All other miscellaneous animal production	1.6	2.1	1.1	0.6
Soybean farming	-	-	-	1.0
Oilseed (except soybean) farming	0.4	6.4	12.5	7.9
Dry pea and bean farming	-	0.2	1.9	0.7
Wheat farming	0.2	5.7	15.7	6.8
Corn farming	0.1	-	-	0.2
Other grain farming	0.7	13.1	27.2	19.0
Potato farming	0.4	0.3	0.2	0.8
Other vegetables (except potato) and melon farming	3.4	0.3	0.1	0.5
Fruit and tree-nut farming	16.1	0.5	0.3	0.7
Mushroom production	0.3	-	-	-
Other food crops grown under cover	0.9	0.2	0.1	-
Nursery and tree production	6.8	1.1	0.2	0.8
Floriculture production	2.3	0.5	0.4	0.7
Tobacco farming	-	-	-	-
Hay farming	10.2	8.7	4.4	6.7
Fruit and vegetable combination farming	0.8	0.1	-	-
All other miscellaneous crop farming	1.6	2.0	1.4	2.0

Note: Each census farm is classified according to the commodity or group of commodities that accounts for 50% or more of the total potential receipts. The farm type is based on the North American Industrial Classification System (NAICS) farm-typing categories. Source: Statistics Canada Census of Agriculture 2006.

Just under three quarters of Canada's oilseed and grain farms are found in the West. Saskatchewan alone accounts for 41.2% of the nation's oilseed and grain farms.

Cattle ranches and dairy farms account for a large number of farms in all four western provinces. Cattle ranches and dairy farms represent 42.7% of the farms in Alberta followed closely by Manitoba at 37.0%. At 21,099, Alberta has the largest number of cattle ranches and dairy farms in the country.

Fruit farms form a significant proportion of BC's farms at 16.1% but are a minor element of farming on the Prairies.

Measured by revenue, the number of smaller farms is shrinking while the number of larger farms is growing

FIGURE 79: FARMS BY GROSS RECEIPTS 2006 (% OF PROVINCIAL TOTAL)

FIGURE 80: FARMS BY GROSS RECEIPTS 2001 AND 2006 (# AND % CHANGE)

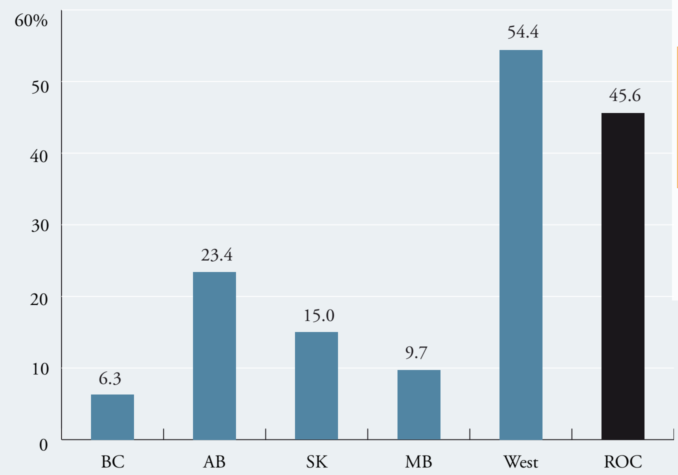
	BC 2001	2006	% Change	AB 2001	2006	% Change	SK 2001	2006	% Change	MB 2001	2006	% Change
Total	**20,290**	**19,844**	**-2.2**	**53,652**	**49,431**	**-7.9**	**50,598**	**44,329**	**-12.4**	**21,071**	**19,054**	**-9.6**
Under $10K	10,087	9,466	-6.2	10,089	9,791	-3.0	6,194	5,443	-12.1	3,745	3,426	-8.5
$10K to $25K	3,426	3,194	-6.8	9,565	8,720	-8.8	8,052	6,751	-16.2	3,096	2,779	-10.2
$25K to $50K	1,936	2,037	5.2	8,335	7,170	-14.0	8,272	6,737	-18.6	2,955	2,516	-14.9
$50K to $100K	1,464	1,592	8.7	8,526	7,448	-12.6	10,303	8,376	-18.7	3,527	2,813	-20.2
$100K to $250K	1,509	1,536	1.8	10,131	8,805	-13.1	12,437	10,674	-14.2	4,584	3,875	-15.5
$250K to $500K	879	889	1.1	4,230	4,333	2.4	4,016	4,466	11.2	1,963	2,058	4.8
$500K to $1,000K	594	618	4.0	1,628	1,871	14.9	1,030	1,406	36.5	748	958	28.1
$1,000K to $2,000K	269	328	21.9	625	688	10.1	183	328	79.2	240	341	42.1
Over $2,000K	126	184	46.0	523	605	15.7	111	148	33.3	213	288	35.2

Source: (Figure 79) Statistics Canada Census of Agriculture 2001 and 2006. Source: (Figure 80) Statistics Canada Census of Agriculture 2001 and 2006.

Measured by annual revenue, there are a lot of very small farms in the West. Over half of the farms in the West had gross receipts of less than $50,000 in 2005. This figure ranges from 42.7% in Saskatchewan to 74.1% in BC. On the other end of the spectrum, very large farms—those with revenue of $1 million or more—account for only 2.2% of all operations. It is important to note that between 2001 and 2006, the decrease in the total number of farms was entirely due to farms with annual revenue below $25,000. The total number of farms with annual revenue above $500,000 increased by 23.4%.

One of the many challenges facing western farmers is the slim margin between revenue and expenditure

FIGURE 81: FARM REVENUE AS A % OF NATIONAL TOTAL 2005



Farm Receipts, Revenue and Expenses 2005 ($)

	Gross Receipts	*Expenses*	*Net Revenue*	*Net Revenue Per Farm*
BC	**2,651,963,167**	**2,382,732,345**	**269,230,822**	**13,567**
AB	**9,889,044,545**	**8,791,632,114**	**1,097,412,431**	**22,201**
SK	**6,338,334,378**	**5,580,116,405**	**758,217,973**	**17,104**
MB	**4,073,912,291**	**3,489,253,123**	**584,659,168**	**30,684**
West	22,953,254,381	20,243,733,987	2,709,520,394	20,425
ROC	19,238,726,790	16,192,629,972	3,046,096,818	31,496
Canada	42,191,981,171	36,436,369,959	5,755,611,212	25,093

Note: Expenses include wages and salaries paid to family members. For Canada as a whole, this line item accounted for 4.3% of expenses in 2005.
Source: Statistics Canada Census of Agriculture 2006 and author's calculations.

In 2005, western farms generated gross revenue totaling $23 billion or 54.4% of Canada's total farm revenue. Tight margins are something with which most farmers are faced. In the West, the difference between revenue and expenditure was just $2.7 billion or $20,425 per farm.

CHAPTER 8

Human Capital in the West

As of the 2006 Census, over **A MILLION** western Canadians between the ages of 25 and 64 had a university degree.

Unemployment in the West spiked during the 2009 recession but was not as high as it was during the recession of the **EARLY 1990s.**

HIGHLIGHTS

- The western provinces have very high rates of college and university education compared to other OECD countries.
- High school drop-out rates have been improving but remain a concern, particularly in small towns and rural areas.
- Generally speaking, the more education you have, the greater the likelihood that you are working.
- Alberta continues to have the highest proportion of its population in the labour force (either working or looking for work).
- Self-employment in more common in the West than in the rest of the country.
- Manufacturing jobs account for a smaller proportion of jobs in the West than in the rest of Canada.
- Unemployment is higher in the goods-producing sector than in the services-producing sector. Unemployment is particularly high in the BC forestry sector.
- Average incomes have increased in all four western provinces. Alberta has the highest average incomes of any province in the country.

Almost a quarter of western Canadians age 25 to 64 have a university degree

FIGURE 82: HIGHEST LEVEL OF EDUCATIONAL ATTAINMENT FOR THE POPULATION AGED 25 TO 64 (2006 CENSUS) (%)

	No Certificate, Diploma or Degree	*High School Certificate or Equivalent(1)*	*Apprenticeship or Trades Certificate or Diploma*	*College, CEGEP or Other Non-university Certificate or Diploma(2)*	*University Certificate or Diploma Below the Bachelor Level(3)*	*University Certificate, Diploma or Degree at Bachelor's Level or Above*
BC	**12.4**	**25.9**	**12.0**	**19.6**	**6.1**	**24.1**
AB	**15.4**	**24.1**	**12.4**	**21.5**	**4.6**	**22.0**
SK	**19.4**	**26.7**	**13.7**	**18.5**	**4.8**	**17.1**
MB	**20.4**	**25.4**	**11.3**	**18.7**	**4.8**	**19.4**
ON	13.6	25.0	8.8	22.0	4.7	26.0
QC	17.1	21.1	18.1	17.5	5.4	20.8
NB	21.0	25.8	12.4	21.3	3.5	16.1
NS	18.6	20.9	13.9	22.0	4.4	20.2
PE	18.7	23.7	11.8	24.3	4.0	17.5
NL	25.7	19.6	14.8	22.2	3.8	14.0
YT	15.3	21.2	13.1	24.3	3.8	22.2
NT	23.0	18.5	11.5	23.7	3.2	20.0
NU	46.0	10.3	9.3	19.3	2.3	12.8
West	**15.0**	**25.3**	**12.2**	**20.0**	**5.3**	**22.2**
ROC	15.6	23.3	12.5	20.4	4.9	23.2
Canada	15.4	23.9	12.4	20.3	5.0	22.9

Notes: (1) High school certificate or equivalent includes persons who have graduated from a secondary school or equivalent. Excludes persons with a postsecondary certificate, diploma or degree. Examples of postsecondary institutions include community colleges, institutes of technology, CEGEPs, private trade schools, private business colleges, schools of nursing and universities.

(2) College, CEGEP or other non-university certificate or diploma replaces the category Other non-university certificate or diploma in previous censuses. This category includes accreditation by non-degree-granting institutions such as community colleges, CEGEPs, private business colleges and technical institutes.

(3) The overall quality of the Highest certificate, diploma or degree variable from the 2006 Census is acceptable. However, users of the University certificate or diploma below the bachelor level category should know that an unexpected growth in this category was noted compared to the 2001 Census. In fact, in the 2001 Census, 2.5% of respondents aged 15 years or over declared such a diploma, compared to 4.4% in 2006, representing 89% growth. This phenomenon was not found in other sources like the Labour Force Survey.

We recommend users interpret the 2006 Census results for this category with caution.

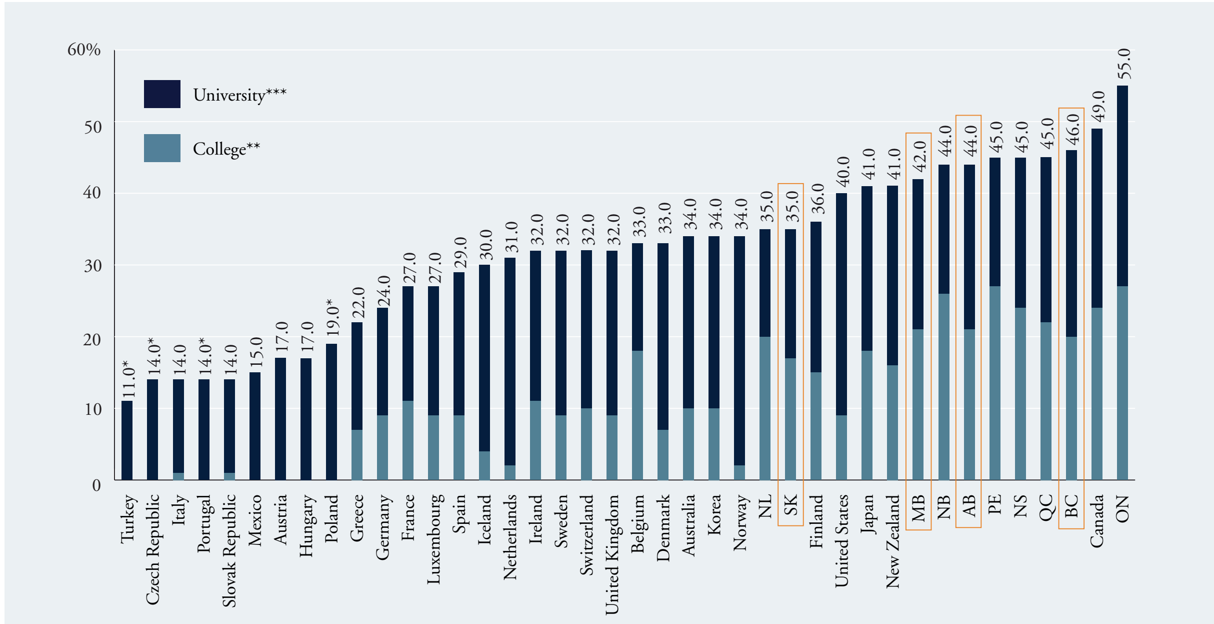
Source: Statistics Canada Census 2006 and author's calculations.

A significant number (15%) of western Canadians aged 25 to 64 have not completed high school; this is on par with the rest of the country (15.6%). Within the West, Manitoba has the highest proportion of its population in the "no certificate, diploma or degree category" (20.4%) and BC has the lowest (12.4%).

At the other end of the education continuum, BC again leads the West with almost a quarter (24.1%) of its population aged 25 to 64 holding a university degree at the bachelor's level or above. The regional average (22.2%) is roughly the same as it is in the rest of the Canada (23.2%). In absolute terms, there are 1,147,480 western Canadians 25 to 64 years of age with a university degree as of the 2006 Census.

The education level of western Canadians is high by OECD standards

FIGURE 83: PROPORTION OF THE POPULATION 25 TO 64 YEARS OF AGE WITH A COLLEGE DEGREE, BACHELOR'S DEGREE OR HIGHER 2007 (OECD COUNTRIES AND CANADIAN PROVINCES)



Note: *Included in University. **ISCED 5B. ***ISCED 5A and ISCED 6. The Canadian statistics in this figure do not match with those in Figure 82 because a slightly different categorization of education levels is used by the OECD. The statistics in this figure refer to the International Standard Classification of Education Tertiary Type 5A and 6 categories (university) and Tertiary Type 5B (college). These categories correspond to having a bachelor's degree or higher. http://www.statcan.gc.ca/pub/81-604-x/2009001/tbl/a1.1-eng.htm
Source: Statistics Canada, *Education Indicators in Canada*, 2009, Catalogue No. 81-604-X.

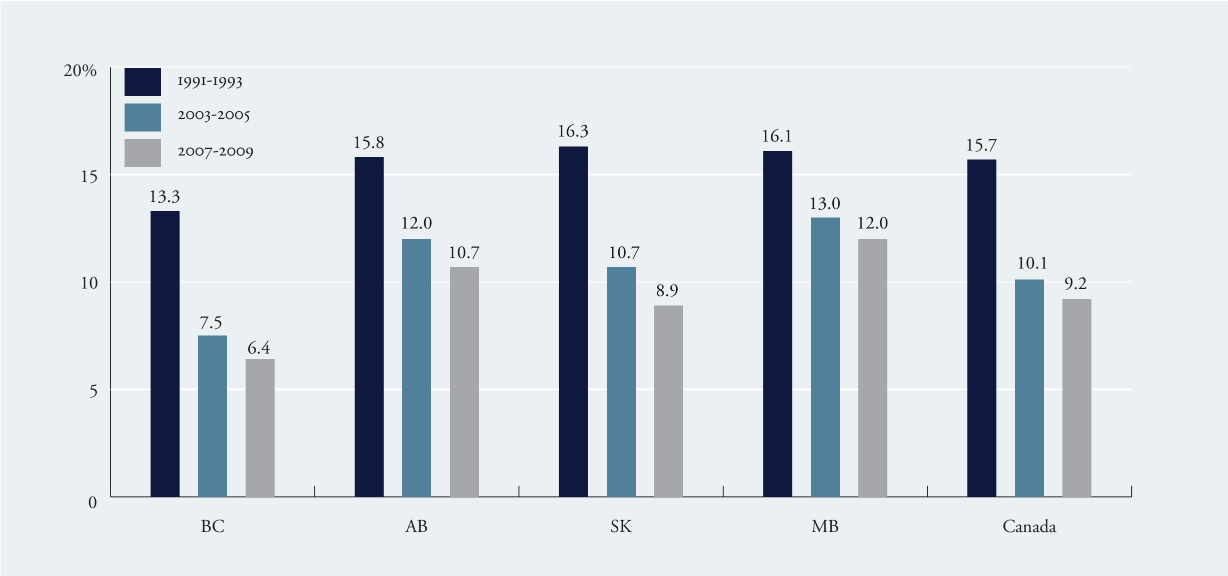
When it comes to university degrees, Canada stacks up well against other OECD countries. With 25% of their populations aged 25 to 64 holding a bachelor's degree or higher, Canada and New Zealand are tied for sixth spot on the list of OECD nations. All four western provinces have a larger proportion of degree holders than countries such as France, Germany and Italy.

Canada and the western provinces also do very well on a comparative basis when it comes to college education. In fact, when college and university education are combined, BC, Alberta and Manitoba have higher percentages than any OECD country with Saskatchewan trailing only New Zealand, Japan, the United States and Finland.

While college and university education are only one indication of the skill level of the workforce, the fact that western Canada scores high on these indexes suggests that it has a very capable workforce that is the envy of many jurisdictions.

High school drop-out rates are down across the West

FIGURE 84: DROP-OUT RATE (%), THREE-YEAR AVERAGES 1991-93, 2003-05 AND 2007-09



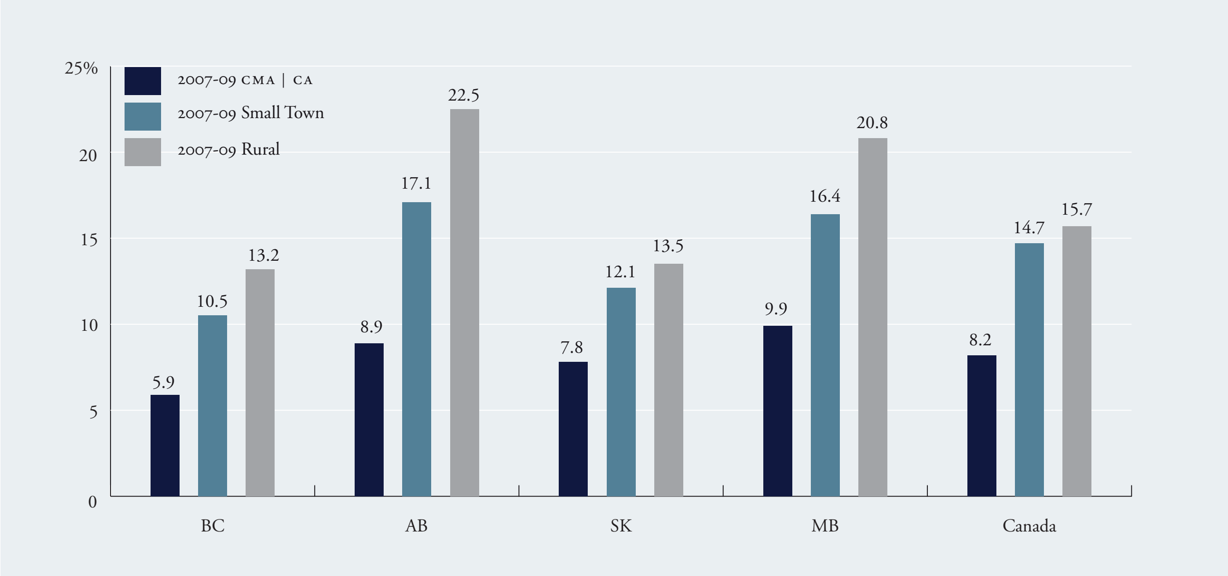
Source: Statistics Canada, *Education Matters: Insights on Education, Learning and Training in Canada*, vol. 7 no. 1, April 29, 2010, Catalogue 81-0004-X and Canadian Council on Learning, Composite Learning Index (http://www.cli-ica.ca/en/about/about-cli/indicators/know-dropout-rate.aspx). Drop-outs are defined as 20-24-year-olds without a high school diploma and not in school. Since the Labour Force Survey is a sample survey subject to some inherent error, particularly among smaller geographies, provincial drop-out rates are averaged over three-year periods. This is done to improve the confidence in the trend.

Although still higher than they should be, high school drop-out rates have been improving in the West and in the rest of the country. During the 1991-1993 period, the drop-out rate in the West average between 13.3% and 16.3%. By the 2003-2005 period, the drop-out rate in the region had fallen to between 7.5% and 13%. By 2007-2009, the drop-out rate was down to between 6.4% and 12%.

Within the West, BC has the lowest drop-out rate and Manitoba has the highest.

The high school drop-out rate is much higher in small towns and rural areas

FIGURE 85: DROP-OUT RATE IN CENSUS METROPOLITAN AREAS/CENSUS AGGLOMERATIONS, SMALL TOWNS AND RURAL AREAS 2007-2009 AVERAGE



Source: Statistics Canada, *Education Matters: Insights on Education, Learning and Training in Canada*, vol. 7 no. 1, April 29, 2010, Catalogue 81-0004-X and Canadian Council on Learning, Composite Learning Index (http://www.cli-ica.ca/en/about/about-cli/indicators/know-dropout-rate.aspx). Drop-outs are defined as 20-24-year-olds without a high school diploma and not in school. Since the Labour Force Survey is a sample survey subject to some inherent error, particularly among smaller geographies, provincial drop-out rates are averaged over three-year periods. This is done to improve the confidence in the trend. For areas smaller than provincial, four-year averages were used.

High school drop-out rates in the rural West are double what they are in its large and medium-size cities. The drop-out rate in rural Alberta is the highest in the country at 22.5%, with Manitoba not far behind at 20.8%.

The higher drop-out rates in small towns and rural areas are explained in part by the proximity of jobs in the natural resource sector and a lack of access to post-secondary education reducing the perceived need to stay in school as opposed to joining the labour force.

Finishing high school is linked to finding employment

FIGURE 86: EDUCATION LEVEL BY PARTICIPATION AND UNEMPLOYMENT RATE FOR THE POPULATION 15 YEARS AND OVER (2006 CENSUS)

	BC Participation Rate (%)	Unemployment Rate (%)	*AB* Participation Rate (%)	Unemployment Rate (%)	*SK* Participation Rate (%)	Unemployment Rate (%)	*MB* Participation Rate (%)	Unemployment Rate (%)	*Canada* Participation Rate (%)	Unemployment Rate (%)
Total	65.6	6.0	74.0	4.3	68.4	5.6	67.3	5.5	66.8	6.6
Without high school certificate or equivalent	44.8	10.3	57.8	6.3	50.3	8.5	49.9	9.1	45.1	10.5
Without further schooling	42.5	11.1	55.4	6.7	47.9	8.8	47.8	9.8	42.9	11.1
With further schooling	57.7	6.9	71.1	4.5	67.2	6.8	64.8	5.4	61.3	7.6
With apprenticeship or trades certificate or diploma	55.7	6.8	70.1	4.3	65.5	7.0	61.9	5.5	60.2	7.7
With college, CEGEP or other non-university certificate or diploma	64.1	7.2	73.7	5.1	71.7	6.2	71.3	5.1	65.3	7.5
With high school certificate or equivalent	71.9	5.2	80.2	3.7	78.0	4.6	76.1	4.3	74.9	5.7
Without further schooling	67.3	6.4	76.8	4.6	75.7	5.9	72.1	5.3	68.8	7.3
With further schooling	74.6	4.6	82.2	3.3	79.6	3.8	78.7	3.7	78.1	4.9
With apprenticeship or trades certificate or diploma	72.9	4.6	82.1	3.3	80.3	4.5	75.2	4.3	76.5	5.8
With college, CEGEP or other non-university certificate or diploma	74.4	4.5	81.8	3.2	79.5	3.9	78.7	3.6	78.6	4.9
With university certificate, diploma or degree	75.2	4.6	82.4	3.3	79.3	3.3	80.0	3.4	78.4	4.6

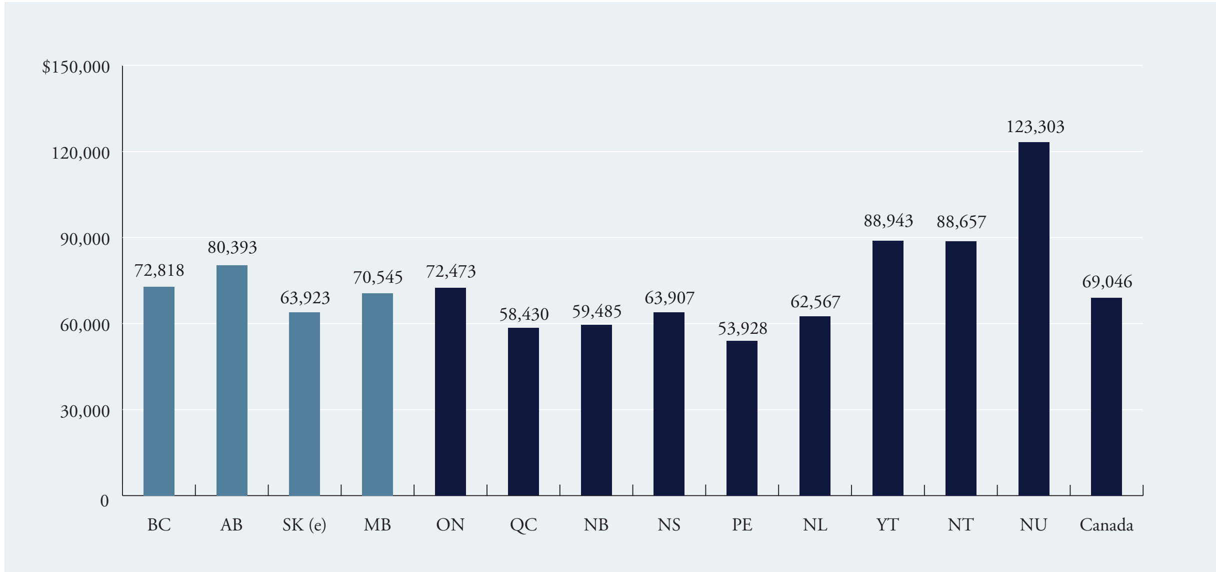
Source: Statistics Canada Census 2006.

Completing high school and pursuing post-secondary education are strong indicators of improved labour market performance. Generally speaking, the more education you have, the more likely it is that you are participating in the labour force (looking for work or working) and the less likely that you are unemployed.

In Alberta, for example, 82.4% of those with a university degree are in the labour force compared to just 57.8% without a high school degree. Across the West, the unemployment rate is highest among those without a high school diploma or any other further schooling.

Average teacher salaries vary across the West

FIGURE 87: AVERAGE REMUNERATION PER EDUCATOR IN PUBLIC ELEMENTARY AND SECONDARY SCHOOLS, CANADA, PROVINCES AND TERRITORIES, 2007/2008*

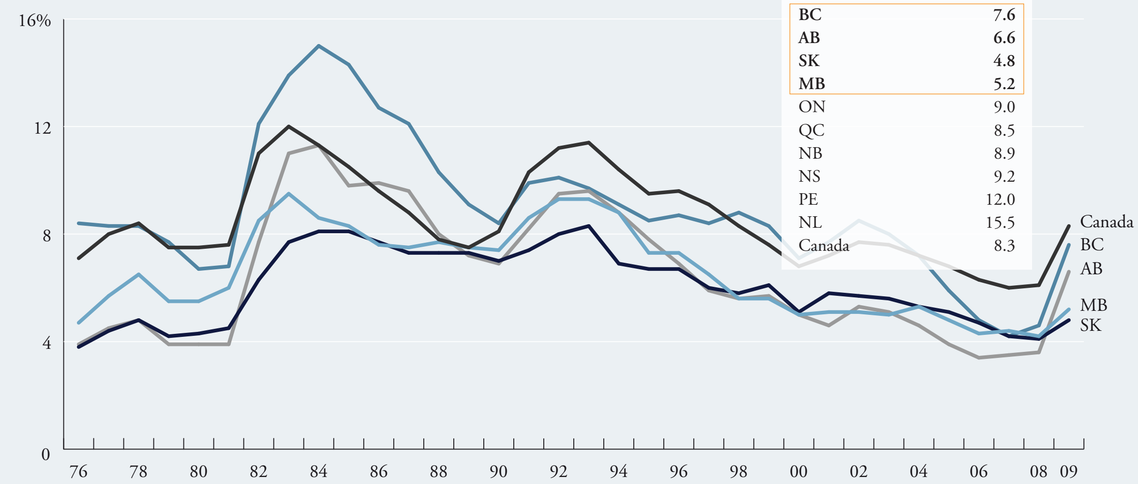


Note: (e)=estimate *Due to differences in methodology, comparisons between jurisdictions should be made with care.
Source: Statistics Canada, *Summary Public School Indicators for Canada, the Provinces and Territories, 2001/2002 to 2007/2008*, Catalogue 81-595-M.
http://www.statcan.gc.ca/pub/81-595-m/2010083/t/tbla15-eng.htm

The average remuneration of teachers across the West and across the country illustrates the variation that exists within the Canadian system. The average salary of a teacher in Alberta is over $16,000 more than in neighbouring Saskatchewan (keeping in mind that these figures are estimated only).

The unemployment rate spiked in 2009 during the recession

FIGURE 88: UNEMPLOYMENT RATE 1976 TO 2009



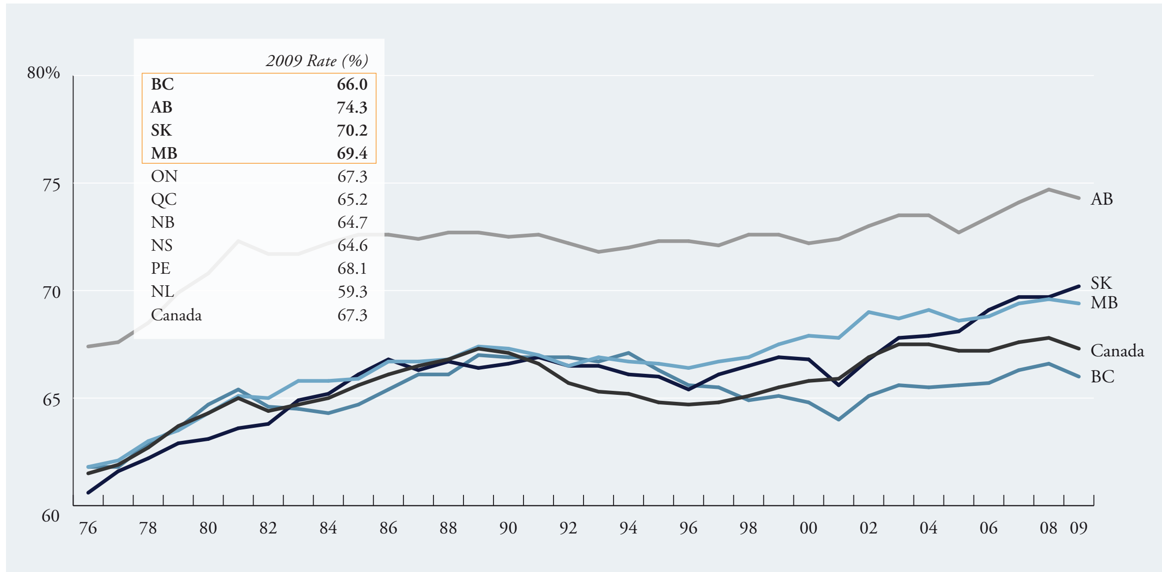
2009 Rate (%)	
BC	7.6
AB	6.6
SK	4.8
MB	5.2
ON	9.0
QC	8.5
NB	8.9
NS	9.2
PE	12.0
NL	15.5
Canada	8.3

Note: The unemployment rate is the number of unemployed people expressed as a percentage of the labour force (employed plus unemployed).
Source: Statistics Canada Cansim Table 282-0002.

Unemployment rates in the western provinces were below those in the rest of the country during the recession that gripped Canada in 2009. The rates in the West were also lower than they were during the lean years of the early 1990s when unemployment was significantly higher than today. BC had the highest unemployment rate in the region in 2009 and Saskatchewan had the lowest. With its long track record of strong population growth and low unemployment, the jump in the unemployment rate in Alberta to 6.6% in 2009 was a particular shock.

Alberta has the highest labour force participation rate in the country

FIGURE 89: PARTICIPATION RATE 1976-2009



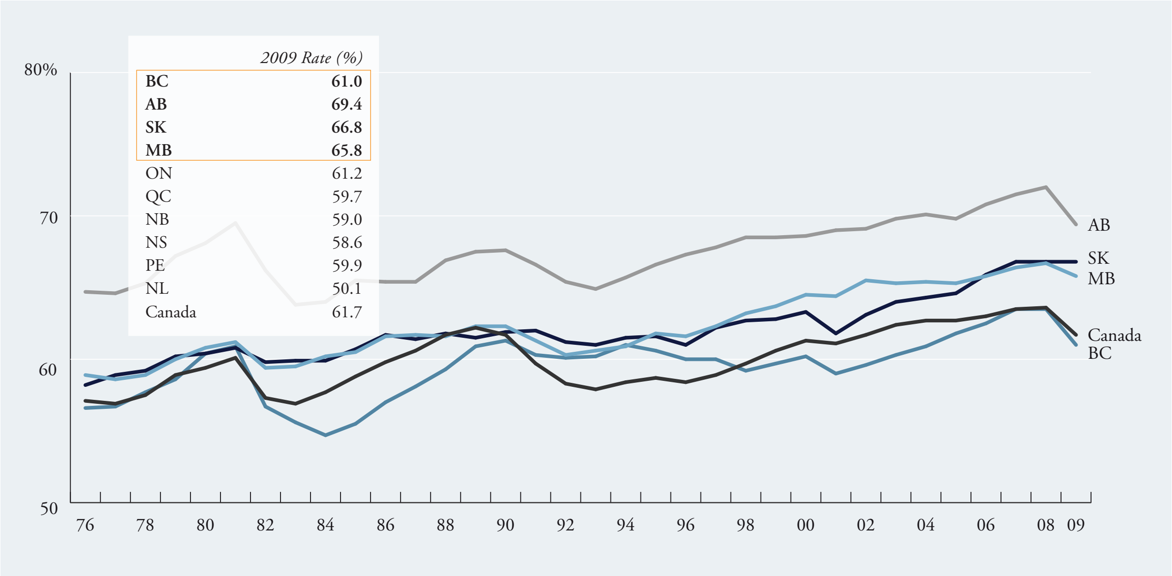
Note: The participation rate is the labour force (employed plus unemployed) expressed as a percentage of the population 15 years of age and over.
Source: Statistics Canada Cansim Table 282-0002.

The participation rates in the four western provinces have been relatively stable for some time. With that said, the participation rate in all four provinces is a little higher at the end of first decade of the 2000s than at the start.

Alberta continues to lead both the region and country in terms of its participation rate. At 74.3%, Alberta's 2009 participation rate was 4 percentage points higher than Saskatchewan's (the next highest rate in the country) and a full 15 percentage points higher than in Newfoundland and Labrador (the lowest rate in the country).

The employment rate in the prairie provinces is relatively high

FIGURE 90: EMPLOYMENT RATE 1976 TO 2009



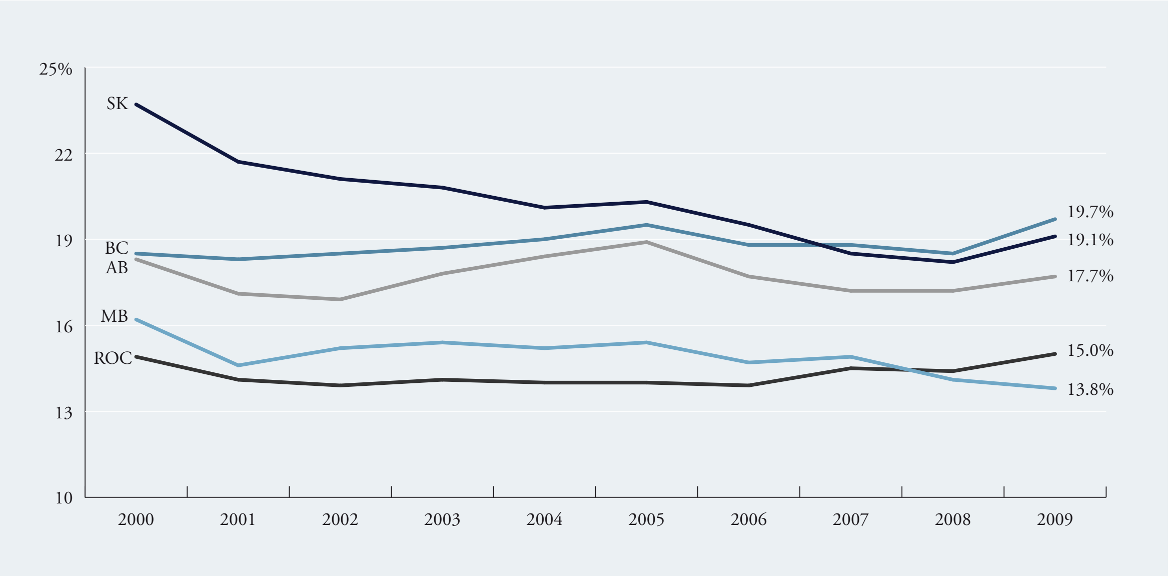
Note: The employment rate is the number of persons employed expressed as a percentage of the total population 15 years of age and over.
Source: Statistics Canada Cansim Table 282-0002.

The proportion of people age 15 and over who are working is the highest in Alberta (69.4%) and the lowest in Newfoundland and Labrador (50.1%). The employment rates in Manitoba, Saskatchewan and Alberta are all well above the national average. The employment rate fell across the West in 2009 except for in Saskatchewan.

Factors affecting the employment rate include but are not limited to the age of the population, the general state of the economy and the number of people attending school and for how long.

Self-employment accounts for about fifth of employment in the West

FIGURE 91: SELF-EMPLOYMENT AS A PROPORTION OF TOTAL EMPLOYMENT 2000-2009 (%)



Source: Statistics Canada Cansim Table 282-0012 and author's calculations.

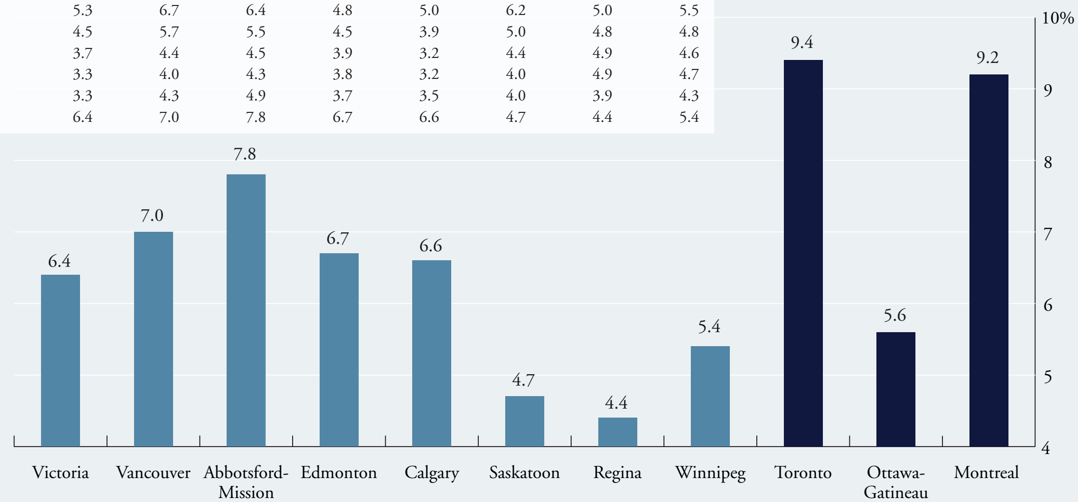
With the exception of Manitoba, the proportion of self-employed people in the western provinces is higher than in the rest of the country. BC leads the region and Canada on this measure with 19.7% of its workers in the self-employed category with Saskatchewan only a few tenths of a percentage point behind at 19.1%.

The proportion of workers who are self-employed has not changed a great deal in BC and Alberta since 2000 whereas there has been more notable drops in both Manitoba and Saskatchewan. In both cases, the drop in self-employment is the result of a decline in the number of self-employed farmers. The number of self-employed farmers dropped by 24.9% in Manitoba and 30.9% in Saskatchewan between 2000 and 2009.

Unemployment in the West's large cities roughly matches the provincial rates

FIGURE 92: UNEMPLOYMENT RATE IN WESTERN CENSUS METROPOLITAN AREAS 2009 (%)

	Victoria	*Vancouver*	*Abbotsford-Mission*	*Edmonton*	*Calgary*	*Saskatoon*	*Regina*	*Winnipeg*
1987	11.0	11.6	9.0	11.0	9.0	9.6	6.7	7.9
1988	10.1	9.3	9.9	9.0	7.7	9.4	6.9	8.1
1989	8.7	7.4	9.7	8.2	6.9	9.1	7.7	7.8
1990	7.8	7.2	7.1	7.6	6.9	8.9	6.8	8.0
1991	8.2	8.3	10.6	9.3	8.5	10.6	6.5	9.7
1992	7.9	9.0	10.6	10.7	9.9	10.6	7.8	10.8
1993	8.6	9.3	9.1	11.2	10.3	10.1	8.7	11.0
1994	7.2	8.8	9.2	10.7	9.4	9.0	7.2	10.4
1995	8.5	7.9	8.8	8.9	8.1	8.1	7.3	7.9
1996	8.6	7.9	11.4	8.3	7.0	8.3	6.4	8.2
1997	7.6	8.2	8.0	6.8	6.0	7.3	6.3	7.2
1998	8.7	8.0	10.1	6.1	5.2	7.0	5.2	5.7
1999	6.6	7.7	7.6	5.9	5.5	6.7	5.4	5.8
2000	6.7	5.8	7.5	5.6	4.5	5.6	4.9	5.3
2001	6.3	6.6	6.7	5.0	4.5	6.3	5.5	5.2
2002	7.0	7.7	7.5	5.2	5.7	6.1	5.5	5.3
2003	6.2	7.3	7.5	5.0	5.4	6.0	5.7	5.2
2004	5.3	6.7	6.4	4.8	5.0	6.2	5.0	5.5
2005	4.5	5.7	5.5	4.5	3.9	5.0	4.8	4.8
2006	3.7	4.4	4.5	3.9	3.2	4.4	4.9	4.6
2007	3.3	4.0	4.3	3.8	3.2	4.0	4.9	4.7
2008	3.3	4.3	4.9	3.7	3.5	4.0	3.9	4.3
2009	6.4	7.0	7.8	6.7	6.6	4.7	4.4	5.4



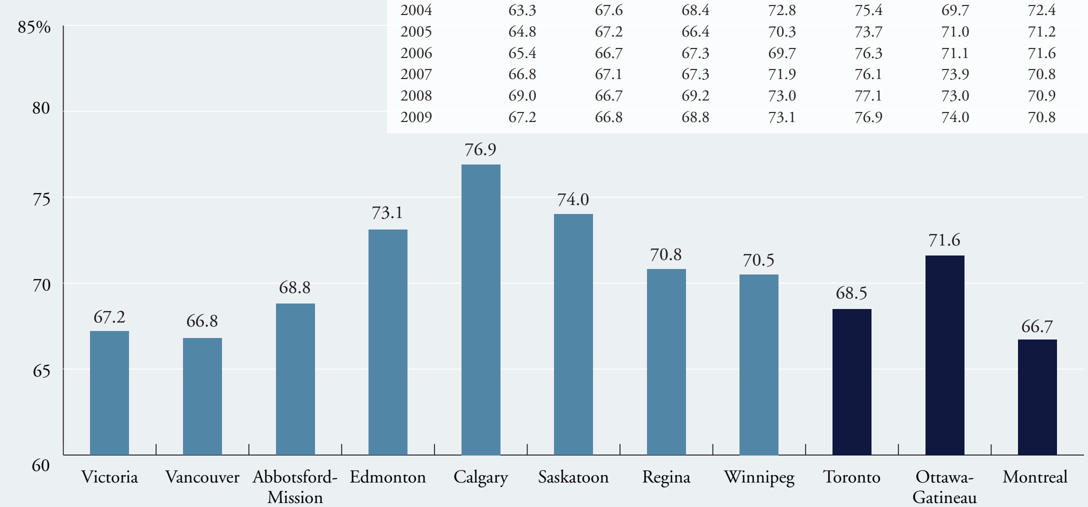
Source: Statistics Canada Cansim Table 282-0053. Data for Kelowna CMA not available.

In 2009, the unemployment rate in the West's large urban areas was within a tenth of a percentage point of the provincial rate. The only exception is Victoria where the difference is 1.2 percentage points (6.4% in Victoria versus the provincial rate of 7.6%). The western cities with the lowest unemployment in 2009 were Regina and Saskatoon. Those with the highest were Abbotsford and Vancouver.

Calgary has the region's highest participation rate

FIGURE 93: PARTICIPATION RATE IN WESTERN CENSUS METROPOLITAN AREAS 2009 (%)

	Victoria	*Vancouver*	*Abbotsford-Mission*	*Edmonton*	*Calgary*	*Saskatoon*	*Regina*	*Winnipeg*
1987	62.1	68.6	63.0	73.3	75.3	68.7	70.8	67.8
1988	60.6	68.1	68.9	73.2	75.4	69.0	69.9	68.1
1989	63.5	68.5	69.0	72.8	75.3	69.2	71.2	68.9
1990	63.6	68.9	66.2	72.0	74.0	68.0	71.9	68.3
1991	62.9	69.0	64.9	72.2	73.4	69.0	71.1	68.0
1992	61.3	69.4	67.3	72.4	72.7	67.3	70.2	67.3
1993	62.3	68.5	65.2	70.9	72.3	66.5	71.2	67.6
1994	63.4	68.8	64.1	71.3	71.6	67.3	70.0	66.9
1995	62.6	67.7	68.0	71.6	72.8	67.1	68.8	67.8
1996	62.0	66.9	66.5	70.5	73.9	67.4	68.4	67.4
1997	63.7	66.6	67.8	72.0	73.6	68.1	68.3	67.3
1998	63.0	65.6	66.6	71.1	74.2	67.9	71.3	68.1
1999	64.5	66.0	63.5	70.6	74.6	67.6	70.9	68.4
2000	64.0	65.9	63.6	70.0	75.2	68.1	69.9	69.1
2001	61.1	65.6	65.0	70.5	75.8	67.4	70.9	69.8
2002	63.1	67.2	67.9	71.3	75.9	69.0	72.5	70.9
2003	63.3	67.7	66.9	72.0	75.4	69.8	71.9	70.0
2004	63.3	67.6	68.4	72.8	75.4	69.7	72.4	70.7
2005	64.8	67.2	66.4	70.3	73.7	71.0	71.2	69.2
2006	65.4	66.7	67.3	69.7	76.3	71.1	71.6	70.1
2007	66.8	67.1	67.3	71.9	76.1	73.9	70.8	71.1
2008	69.0	66.7	69.2	73.0	77.1	73.0	70.9	70.9
2009	67.2	66.8	68.8	73.1	76.9	74.0	70.8	70.5



Source: Statistics Canada Cansim Table 282-0053. Data for Kelowna CMA not available.

As with unemployment rates, the participation rates in the West's large cities track the provincial figures. With the exception of Edmonton, the participation rate is a little higher in the cities than in the provinces overall.

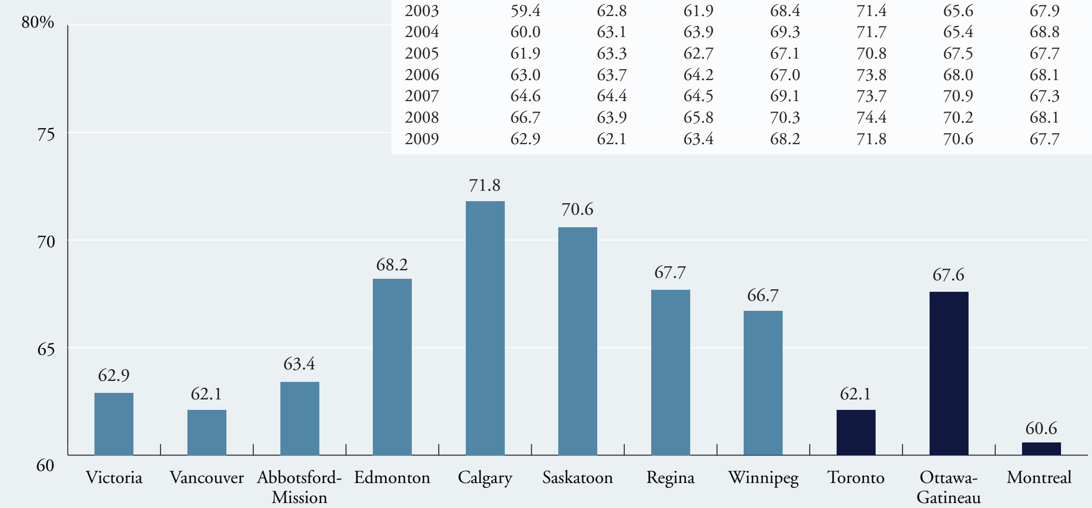
In Saskatoon, for example, the participation rate in 2009 was 74% compared to a provincial average of 70.2%.

Calgary has the highest participation rate in the region at 76.9% in 2009 while Victoria had the lowest at 67.2%.

Calgary and Saskatoon lead the West in terms of their employment rates

FIGURE 94: EMPLOYMENT RATE IN WESTERN CENSUS METROPOLITAN AREAS 2009 (%)

	Victoria	*Vancouver*	*Abbotsford-Mission*	*Edmonton*	*Calgary*	*Saskatoon*	*Regina*	*Winnipeg*
1987	55.3	60.7	57.4	65.2	68.6	62.1	66.0	62.4
1988	54.4	61.8	62.0	66.6	69.6	62.6	65.0	62.5
1989	58.0	63.5	62.3	66.8	70.1	63.0	65.7	63.6
1990	58.7	64.0	61.5	66.5	68.9	61.9	67.0	62.8
1991	57.7	63.2	58.0	65.5	67.1	61.7	66.5	61.4
1992	56.5	63.2	60.1	64.6	65.5	60.2	64.8	60.0
1993	57.0	62.1	59.3	63.0	64.9	59.7	65.0	60.2
1994	58.8	62.8	58.2	63.7	64.9	61.3	65.0	60.0
1995	57.3	62.4	62.0	65.2	66.8	61.8	63.8	62.5
1996	56.6	61.6	58.8	64.6	68.8	61.9	64.0	61.9
1997	58.9	61.1	62.4	67.1	69.2	63.3	64.0	62.4
1998	57.5	60.4	59.9	66.7	70.4	63.1	67.6	64.3
1999	60.3	61.0	58.7	66.4	70.5	63.1	67.1	64.5
2000	59.8	62.1	58.8	66.1	71.7	64.3	66.5	65.4
2001	57.2	61.3	60.6	67.0	72.4	63.2	67.0	66.2
2002	58.6	62.0	62.9	67.5	71.6	64.7	68.6	67.2
2003	59.4	62.8	61.9	68.4	71.4	65.6	67.9	66.4
2004	60.0	63.1	63.9	69.3	71.7	65.4	68.8	66.8
2005	61.9	63.3	62.7	67.1	70.8	67.5	67.7	65.9
2006	63.0	63.7	64.2	67.0	73.8	68.0	68.1	66.9
2007	64.6	64.4	64.5	69.1	73.7	70.9	67.3	67.7
2008	66.7	63.9	65.8	70.3	74.4	70.2	68.1	67.8
2009	62.9	62.1	63.4	68.2	71.8	70.6	67.7	66.7



Source: Statistics Canada Cansim Table 282-0053. Data for Kelowna CMA not available.

The employment rate in each large western city is slightly higher than the provincial rate in every case except Edmonton where the employment rate is just below the provincial level. Saskatoon, Victoria and Abbotsford have all seen significant jumps in their employment rates since 2000.

Manufacturing remains a relatively smaller source of jobs in the West but the gap between East and West is shrinking

FIGURE 95: EMPLOYMENT BY INDUSTRY 1987 AND 2009 (% OF TOTAL EMPLOYMENT)

	BC 1987	BC 2009	AB 1987	AB 2009	SK 1987	SK 2009	MB 1987	MB 2009	West 1987	West 2009	ROC 1987	ROC 2009
Goods-producing sector	**24.2**	**19.8**	**28.0**	**26.7**	**33.7**	**26.8**	**27.9**	**23.1**	**27.3**	**23.4**	**30.3**	**21.6**
Agriculture	2.3	1.5	7.2	2.8	19.7	8.3	8.1	4.4	7.1	3.0	2.4	1.4
Forestry, fishing, mining, oil and gas	3.6	1.8	6.1	7.0	2.6	4.7	1.7	1.1	4.0	3.9	1.6	0.9
Forestry and logging with support activities	1.7	0.6	0.3	0.1	0.2	0.2	0.2	0.1	0.8	0.3	0.4	0.2
Fishing, hunting and trapping	0.4	0.1	x	x	x	x	x	x	x	x	x	x
Mining and oil and gas extraction	1.4	1.1	5.8	6.9	2.4	4.5	1.3	0.9	3.0	3.5	0.9	0.5
Utilities	0.7	0.6	1.1	1.0	0.9	0.9	1.1	1.3	0.9	0.8	0.9	0.9
Construction	5.8	8.6	5.8	9.6	5.7	7.4	6.0	6.2	5.8	8.6	5.9	6.1
Manufacturing	11.8	7.2	7.8	6.2	4.7	5.5	11.1	10.1	9.4	7.0	19.4	12.3
Services-producing sector	**75.8**	**80.2**	**72.0**	**73.3**	**66.3**	**73.2**	**72.1**	**77.0**	**72.7**	**76.6**	**69.7**	**78.4**
Retail and Wholesale Trade	17.0	16.3	16.2	15.2	15.8	15.6	16.0	14.7	16.4	15.6	15.9	15.7
Transportation and warehousing	6.2	5.1	5.6	5.2	4.5	4.8	6.7	6.4	5.8	5.3	4.9	4.7
Finance, insurance, real estate and leasing	6.6	6.3	5.4	5.5	4.7	5.6	6.1	6.0	5.9	5.9	6.3	6.8
Real estate and leasing	2.4	2.4	1.8	2.1	1.4	1.5	1.9	1.5	2.0	2.1	1.8	1.8
Professional, scientific and technical services	4.9	7.5	4.7	7.6	2.4	4.2	2.4	4.1	4.1	6.8	3.9	7.3
Business, building and other support services	2.5	4.2	2.4	3.3	1.6	2.3	1.9	3.2	2.3	3.6	2.2	4.0
Educational services	6.1	7.2	7.0	6.6	6.8	7.6	6.3	8.0	6.5	7.1	6.2	7.1
Health care and social assistance	9.1	11.5	9.0	9.9	10.2	12.7	11.5	13.9	9.5	11.3	9.3	11.7
Information, culture and recreation	4.9	5.3	4.2	4.0	3.3	3.9	3.9	3.9	4.3	4.5	4.1	4.6
Accommodation and food services	7.2	7.6	5.6	6.3	5.7	5.9	5.5	6.0	6.3	6.8	5.6	6.0
Other services	5.5	4.5	5.1	5.0	5.0	4.6	4.9	4.7	5.2	4.7	5.1	4.6
Public administration	5.9	4.7	6.8	4.5	6.4	6.0	6.8	6.0	6.4	4.9	6.1	5.8

Note: x = data not available from Statistics Canada. Source: Statistics Canada Cansim 282-0008 and author's calculations.

One of the key things that differentiates the West's economy from the economy in the rest of Canada is the importance of the manufacturing sector. Manufacturing employs 7.0% of western Canadian workers compared to 12.3% in the rest of Canada. The gap has shrunk since 1987 when 9.4% of western workers had manufacturing jobs compared to 19.4% outside the West.

Although the proportion of workers in the West with manufacturing jobs has decreased, there are more people working in manufacturing in the region today than in the late 1980s, and this holds true for each individual western provinces as well. As of 2009, there were 376,900 manufacturing jobs in the West, up from 331,100 in 1987.

Within the West, Manitoba has the highest percentage of its labour force working in the manufacturing sector (10.1% in 2009) and Saskatchewan has the lowest at 5.5%.

The declining importance of agriculture as an employer in the West is evident in the smaller proportion of westerners working in this sector. The percentage of people working in agriculture is down in all four western provinces and only BC has seen the absolute number of agricultural jobs grow between 1987 and 2009.

Another notable difference is the relatively large proportion of employed in the mining, and oil and gas extraction sector in Saskatchewan (4.5%) and Alberta (6.9%).

Unemployment in BC's forestry sector was almost 20% in 2009

FIGURE 96: UNEMPLOYMENT RATE BY INDUSTRY 2009(%)

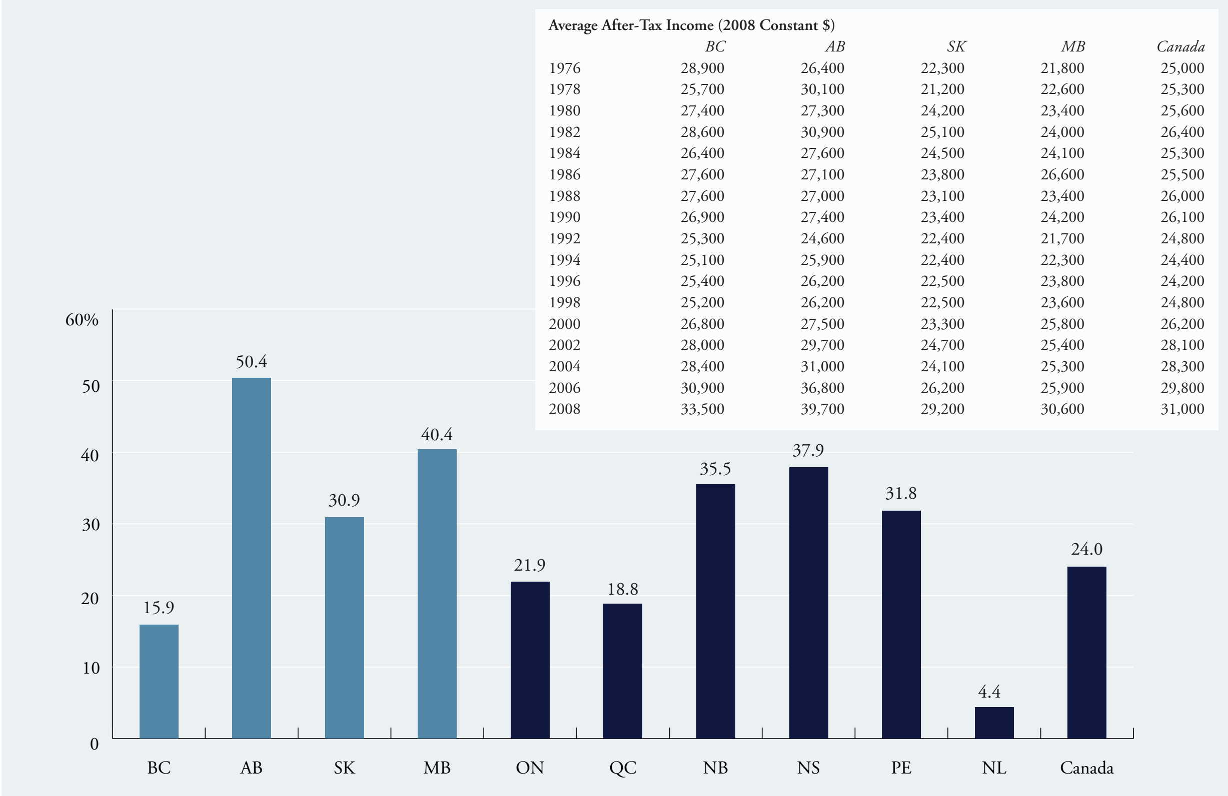
	BC	*AB*	*SK*	*MB*	*Canada*
All industries	**7.6**	**6.6**	**4.8**	**5.2**	**8.3**
Goods-producing sector	**10.9**	**7.5**	**5.0**	**5.1**	**9.7**
Agriculture	8.0	x	1.6	2.6	5.5
Forestry, fishing, mining, oil and gas	16.9	7.7	8.3	12.2	12.5
Forestry and logging with support activities	19.7	x	x	x	21.0
Fishing, hunting and trapping	x	x	x	x	21.9
Mining and oil and gas extraction	14.1	7.5	7.8	10.0	9.8
Utilities	x	x	x	x	2.5
Construction	11.0	9.1	7.2	7.2	10.9
Manufacturing	10.3	8.2	5.0	4.7	9.7
Services-producing sector	**4.5**	**4.5**	**3.4**	**3.5**	**5.0**
Wholesale trade	4.8	5.0	2.5	2.7	4.9
Retail trade	5.2	6.0	4.4	4.1	6.1
Transportation and warehousing	6.2	5.9	3.9	2.5	5.8
Finance, insurance, real estate and leasing	3.4	2.2	x	1.9	3.0
Professional, scientific and technical services	4.0	4.9	2.7	3.1	4.2
Business, building and other support services	6.4	7.8	5.5	6.7	10.5
Educational services	3.6	3.4	4.1	4.0	3.9
Health care and social assistance	1.8	1.6	1.2	2.3	2.0
Information, culture and recreation	5.1	5.1	3.8	4.0	6.3
Accommodation and food services	7.3	6.4	8.1	6.7	8.6
Other services	5.4	4.9	3.6	4.3	5.3
Public administration	2.5	1.8	1.6	2.2	2.4

Source: Statistics Canada Cansim Table 282-0008.
Note: x = data not available from Statistics Canada.

Overall, unemployment is higher in the goods-producing sector than it is in the services-producing sector. The hardest hit sector in the region has been BC's forestry industry which posted an unemployment rate of 19.7%. Unemployment in BC's manufacturing and construction sectors was also in the double digits in 2009. In all four western provinces, the unemployment rate in the construction sector was higher than the average rate. Two sectors with generally very low unemployment in 2009 are health care and public administration.

The average after-tax income of unattached individuals is highest in Alberta

FIGURE 97: AVERAGE AFTER-TAX ANNUAL INCOME OF UNATTACHED INDIVIDUALS % CHANGE 1976-2008 (2008 CONSTANT DOLLARS)



Average After-Tax Income (2008 Constant $)

	BC	*AB*	*SK*	*MB*	*Canada*
1976	28,900	26,400	22,300	21,800	25,000
1978	25,700	30,100	21,200	22,600	25,300
1980	27,400	27,300	24,200	23,400	25,600
1982	28,600	30,900	25,100	24,000	26,400
1984	26,400	27,600	24,500	24,100	25,300
1986	27,600	27,100	23,800	26,600	25,500
1988	27,600	27,000	23,100	23,400	26,000
1990	26,900	27,400	23,400	24,200	26,100
1992	25,300	24,600	22,400	21,700	24,800
1994	25,100	25,900	22,400	22,300	24,400
1996	25,400	26,200	22,500	23,800	24,200
1998	25,200	26,200	22,500	23,600	24,800
2000	26,800	27,500	23,300	25,800	26,200
2002	28,000	29,700	24,700	25,400	28,100
2004	28,400	31,000	24,100	25,300	28,300
2006	30,900	36,800	26,200	25,900	29,800
2008	33,500	39,700	29,200	30,600	31,000

Source: Statistics Canada Cansim Table 202-0702.

The average after-tax income of unattached individuals in BC and Alberta is higher than the national average; the opposite is the case in Saskatchewan and Manitoba. Unattached individuals in Alberta enjoy the highest average after-tax income at $39,700 compared to $29,200 in Saskatchewan (the lowest in the region). It is important to note that higher income does not always mean higher standard of living as many factors such as housing and utility costs must also be considered. Nonetheless, a gap of over $10,000 in average annual income indicates that very different economic conditions prevail in each jurisdiction.

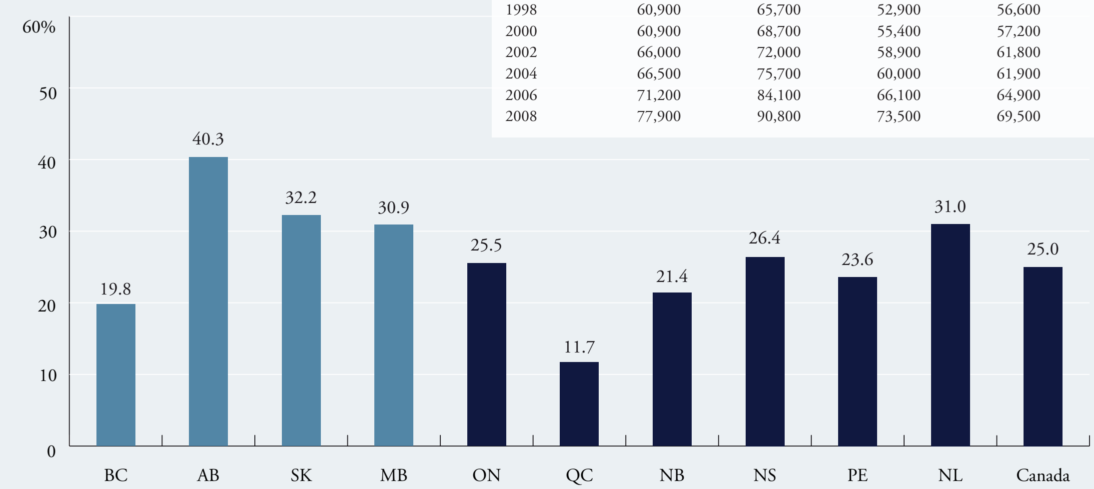
Adjusting for inflation, average after-tax income for single people is up across the West. The percent change between 1976 and 2008 for Alberta is a whopping 50.4%. The growth in Manitoba was 40.4%, 30.9% in Saskatchewan and only 15.9% in BC.

Alberta also boasts the highest average after-tax family income in the country

FIGURE 98: AVERAGE AFTER-TAX ANNUAL INCOME OF ECONOMIC FAMILIES (TWO PERSONS OR MORE) % CHANGE 1976-2008 (2008 CONSTANT DOLLARS)

Average After-Tax Income (2008 Constant $)

	BC	*AB*	*SK*	*MB*	*Canada*
1976	65,000	64,700	55,600	53,100	59,700
1978	64,800	66,100	56,300	54,600	60,100
1980	67,900	69,600	58,900	57,900	61,000
1982	62,200	68,900	57,100	56,000	58,500
1984	58,200	60,000	54,600	56,200	57,600
1986	59,100	62,600	53,400	55,400	59,100
1988	60,500	60,900	53,100	56,000	60,400
1990	60,600	61,000	51,800	54,800	59,400
1992	61,400	58,900	52,600	54,400	57,800
1994	59,300	58,800	49,900	53,700	56,800
1996	59,400	59,300	50,700	53,300	57,200
1998	60,900	65,700	52,900	56,600	60,700
2000	60,900	68,700	55,400	57,200	64,500
2002	66,000	72,000	58,900	61,800	67,100
2004	66,500	75,700	60,000	61,900	68,200
2006	71,200	84,100	66,100	64,900	70,700
2008	77,900	90,800	73,500	69,500	74,600



Source: Statistics Cansim Table 202-0702.

At over $90,000, Alberta has the highest average after-tax family income in the country. The next highest provincial average is Ontario's at $78,700. Manitoba and Saskatchewan are both below the national average in this regard.

The prairie provinces have seen strong growth in average after-tax family income since the 1970s with each provincial average growing by at least 30% over this period. As with unattached individual income, growth in BC has been more modest at just under 20% between 1976 and 2008.

After-tax income varies from city to city

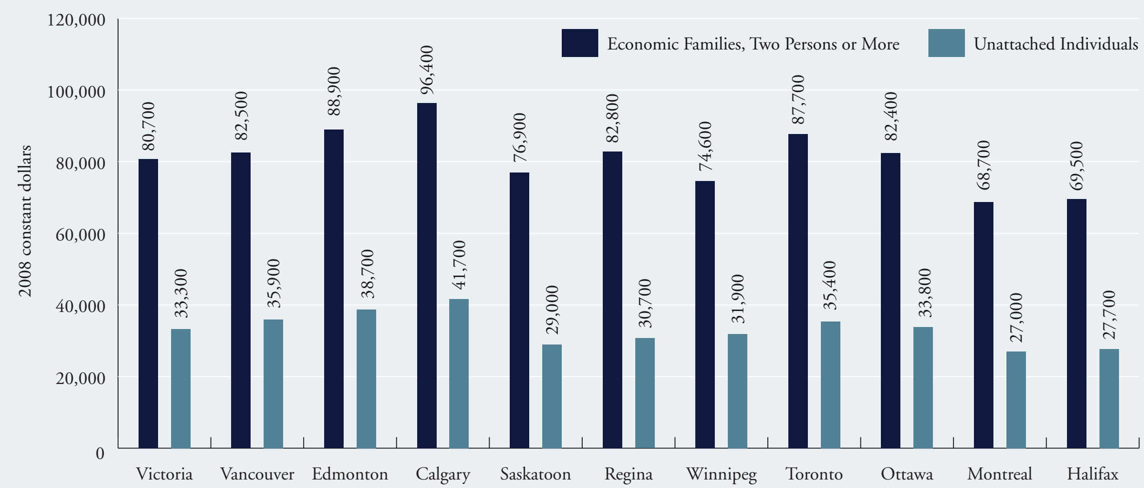
FIGURE 99: AVERAGE ANNUAL AFTER-TAX INCOME BY ECONOMIC FAMILY TYPE FOR SELECT CMAS 2008 (2008 CONSTANT DOLLARS)

Economic Families, Two Persons or More

	Winnipeg	*Calgary*	*Edmonton*	*Vancouver*	*Victoria*	*Regina*	*Saskatoon*
1998	61,600	75,800	64,000	67,000	58,300	63,700	57,000
1999	60,200	72,300	66,200	66,500	61,100	64,400	56,300
2000	61,600	77,900	68,400	66,200	59,300	66,900	57,600
2001	64,200	81,400	73,700	69,800	64,500	69,400	60,400
2002	65,800	77,300	69,300	72,000	73,800	71,300	61,800
2003	63,400	77,800	73,400	70,400	68,600	72,700	62,300
2004	66,100	81,400	75,400	70,600	78,500	72,700	63,100
2005	67,300	83,900	79,000	72,400	85,900	79,200	62,300
2006	69,100	90,900	82,800	77,900	71,400	79,000	67,200
2007	73,100	99,800	89,200	83,300	80,300	82,300	71,800
2008	74,600	96,400	88,900	82,500	80,700	82,800	76,900

Unattached Individuals

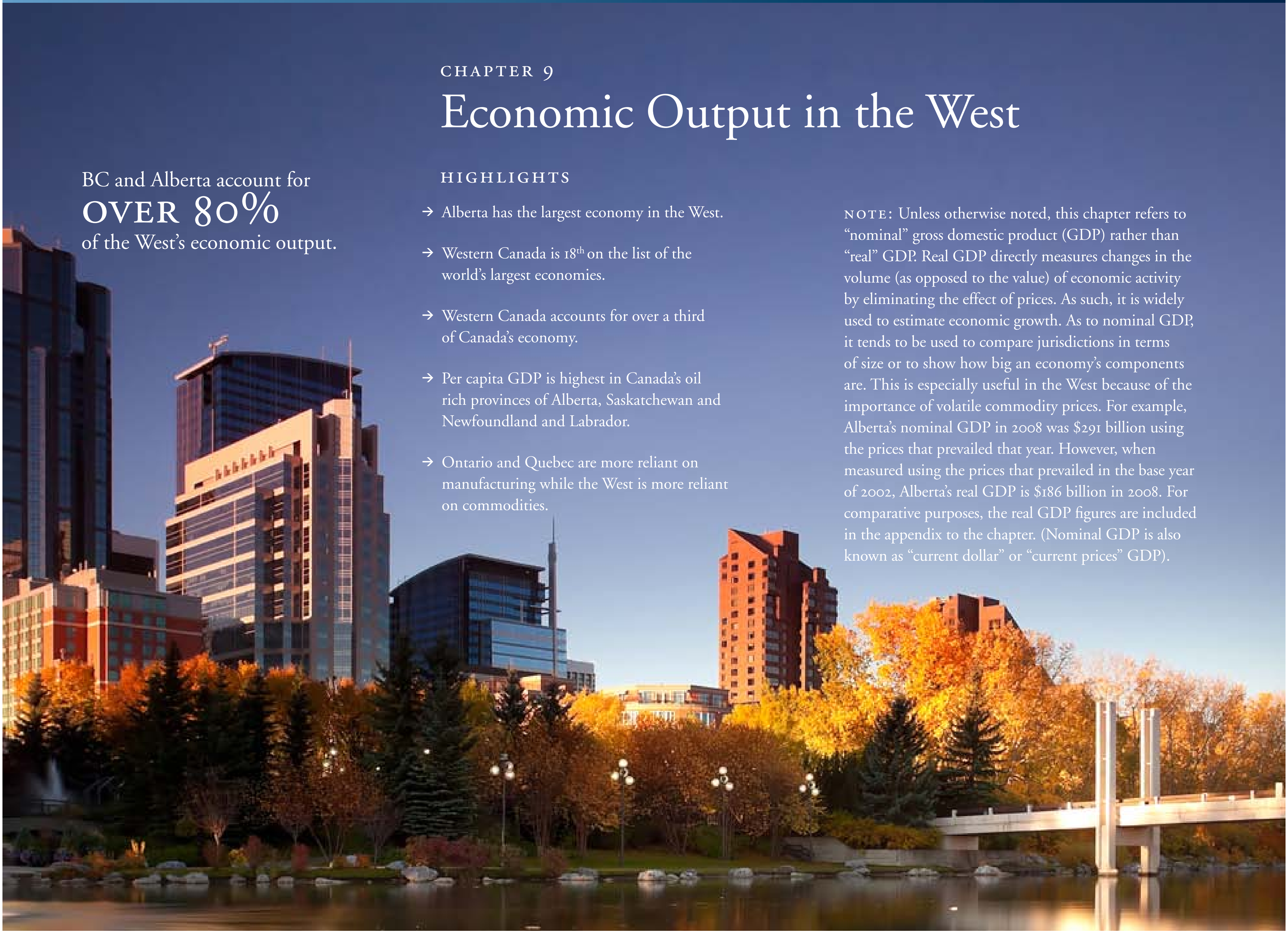
	Winnipeg	*Calgary*	*Edmonton*	*Vancouver*	*Victoria*	*Regina*	*Saskatoon*
1998	24,700	25,700	26,500	28,300	23,000	24,600	22,800
1999	25,300	25,700	28,200	27,700	25,600	23,800	22,900
2000	26,800	30,000	29,400	29,100	26,600	24,500	21,900
2001	27,000	31,300	29,800	29,700	29,000	25,600	25,200
2002	25,800	32,900	28,800	30,100	29,400	25,200	25,300
2003	26,900	29,400	29,400	30,200	24,200	27,600	27,100
2004	26,000	35,500	29,500	31,100	25,900	25,300	25,800
2005	25,700	37,600	30,900	33,100	25,100	23,300	23,100
2006	27,000	41,400	32,800	34,300	28,900	25,400	24,800
2007	29,400	40,000	38,100	34,100	27,400	31,300	27,700
2008	31,900	41,700	38,700	35,900	33,300	30,700	29,000



Source: Statistics Canada Cansim Table 202-0601.

As with the provinces, average income varies across Canada's large urban areas. Both Calgary and Edmonton have higher after-tax income levels than Toronto, with Calgary leading the nation in this regard. Within the West, unattached individuals in Saskatoon make the least and economic families (two persons or more) that live in Winnipeg make the least.

Adjusting for inflation, residents of the big cities have more after-tax income than they did in the past. Despite having the highest average after-tax income, Calgary families actually saw a drop from $99,800 in 2007 to 96,400 in 2008. Edmonton and Vancouver families also saw their incomes drop between 2007 and 2008.



CHAPTER 9

Economic Output in the West

BC and Alberta account for
OVER 80%
of the West's economic output.

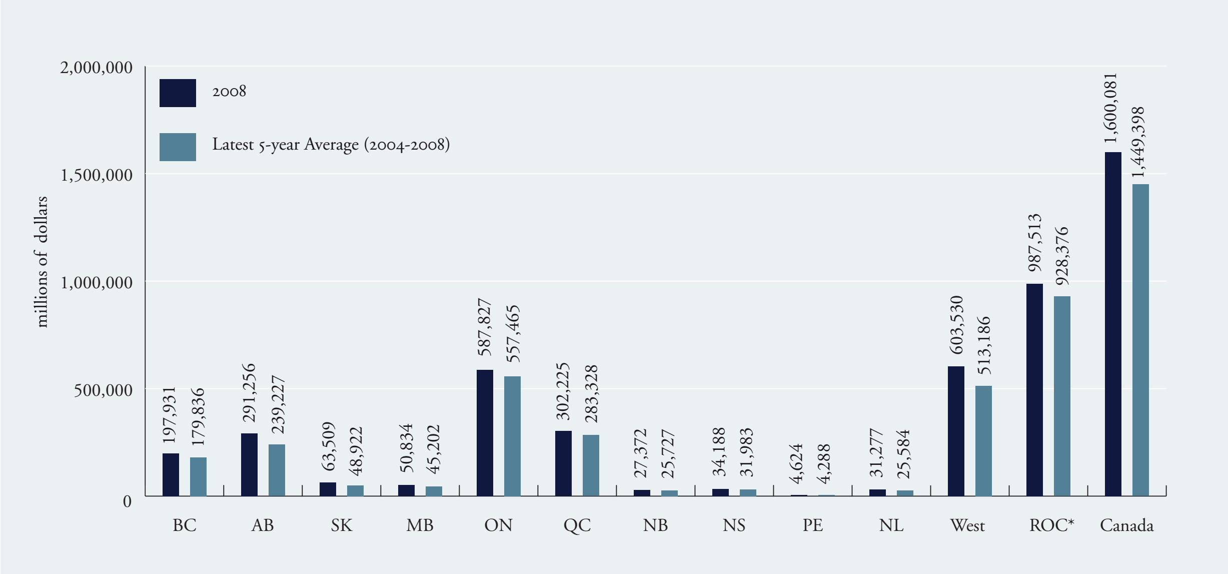
HIGHLIGHTS

- Alberta has the largest economy in the West.
- Western Canada is 18th on the list of the world's largest economies.
- Western Canada accounts for over a third of Canada's economy.
- Per capita GDP is highest in Canada's oil rich provinces of Alberta, Saskatchewan and Newfoundland and Labrador.
- Ontario and Quebec are more reliant on manufacturing while the West is more reliant on commodities.

NOTE: Unless otherwise noted, this chapter refers to "nominal" gross domestic product (GDP) rather than "real" GDP. Real GDP directly measures changes in the volume (as opposed to the value) of economic activity by eliminating the effect of prices. As such, it is widely used to estimate economic growth. As to nominal GDP, it tends to be used to compare jurisdictions in terms of size or to show how big an economy's components are. This is especially useful in the West because of the importance of volatile commodity prices. For example, Alberta's nominal GDP in 2008 was $291 billion using the prices that prevailed that year. However, when measured using the prices that prevailed in the base year of 2002, Alberta's real GDP is $186 billion in 2008. For comparative purposes, the real GDP figures are included in the appendix to the chapter. (Nominal GDP is also known as "current dollar" or "current prices" GDP).

Alberta generated the most gross domestic product in the West in 2008

FIGURE 100: NOMINAL GROSS DOMESTIC PRODUCT BY PROVINCE 2008



Source: Statistics Canada Cansim Table 384-0002 and author's calculations.
*ROC (not including the territories).

Just as the number of goals a hockey player scores is only one way to measure his or her performance on the ice, gross domestic product (GDP) is only one indicator of economic growth and success. But, in the same way hockey fans want to know how many goals a player scores, GDP is definitely a key statistic for understanding economic performance.

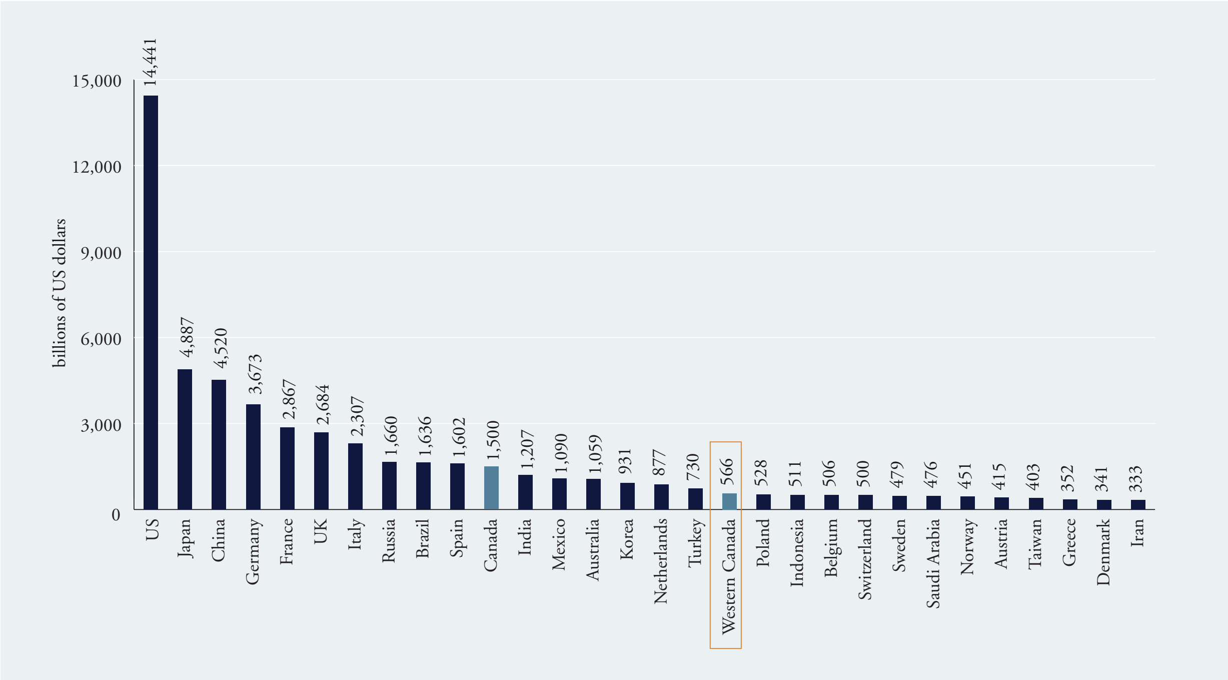
As of 2008 (the latest year for which comparative provincial figures were available at the time of writing), Alberta had the largest GDP in the West at over $291 billion. This is almost as high as Quebec's GDP despite the fact that Alberta's population is only half as large.

Alberta's GDP was larger than BC's from 1981 to 1986 but fell behind thereafter. Alberta's GDP once again surpassed BC's in 2000 and has been higher ever since. The price of oil is a key factor in the see-sawing of Alberta's GDP and the overall size of its economy relative to its population.

As a whole, the West's average annual economic output between 2004 and 2008 is just over $513 billion compared to just over $928 billion in the other provinces.

Western Canada's economic output places it on the same list as the world's 20 largest national economies

FIGURE 101: THE 30 LARGEST NATIONAL ECONOMIES IN THE WORLD, 2008 (BILLIONS OF US DOLLARS, NOMINAL GDP)



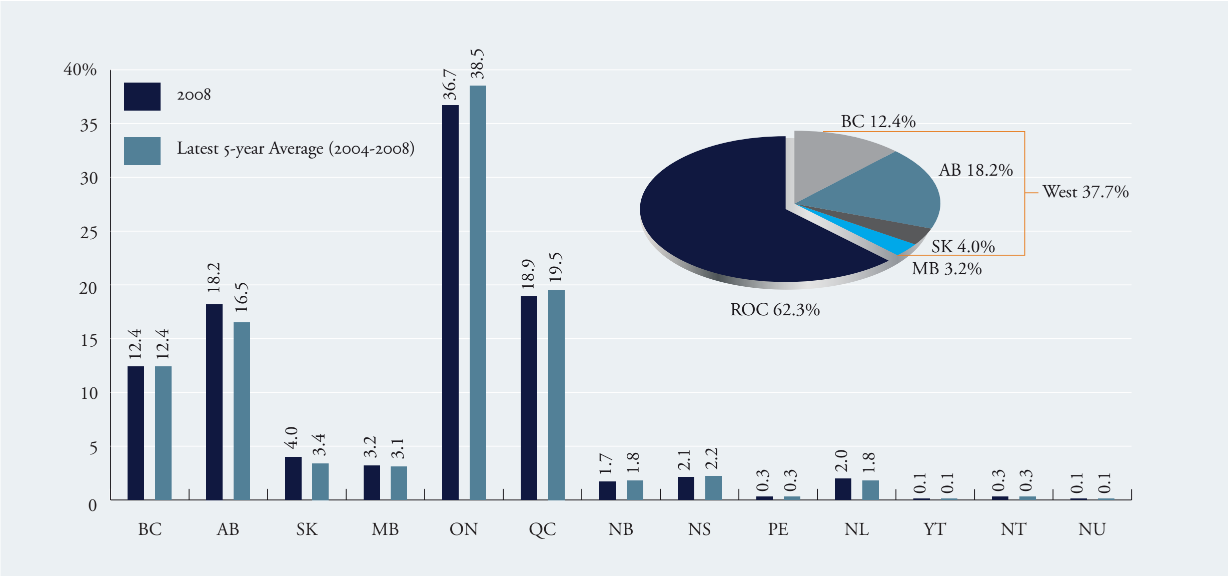
Source: International Monetary Fund, Bank of Canada, Statistics Canada and author's calculations.

Like Canadians in general, there is a certain modesty at work in western Canada that leads us to underestimate our place in the world. We tend to think of ourselves as a small player on the world economic stage. However, Canada sits at 11th on the list of the world's largest economies and, if western Canada were added to the list, it would sit at 18th. These rankings are nothing to snuff at and mean that both the region and the country are major economies rather than the bit players we sometimes think we are.

With that said, when we compare ourselves to the US, we are dwarfed by its massive economic output. Metropolitan Chicago alone, for example, generates almost as much GDP as western Canada.

Western Canada accounts for over a third of Canada's national economic output

FIGURE 102: NOMINAL GROSS DOMESTIC PRODUCT AS A PERCENTAGE OF THE NATIONAL TOTAL 2008



Source: Statistics Canada Cansim Table 384-0002 and author's calculations.

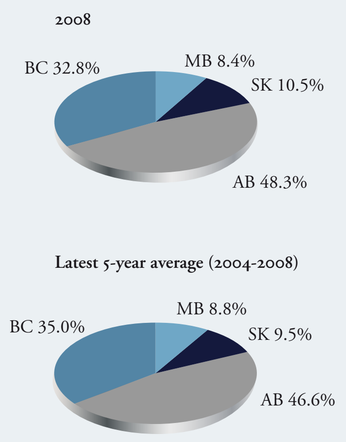
Looking at the 2008 numbers, we see that the West accounted for 37.7% of the nation's economic output—a larger percentage than its share of the national population (30.6%). This is just slightly higher than Ontario's share of the national GDP (36.7%) and almost double that of Quebec (18.9%)

At 18.2% of Canada's GDP, but just 10.9% of its population, Alberta is punching way above its demographic weight when it comes to economic output.

GDP, especially in a commodity-based economy like western Canada, is prone to significant annual fluctuations. Hence, it makes sense to step back somewhat from annual data and look at a five-year average to make sure we are not seeing a one-time blip. When we do this, we find that not much changes in terms of the relative contributions of the provinces except for a slight dip in the prairie numbers and a slight rise in the Quebec and Ontario numbers.

Alberta accounted for almost half of the West's GDP in 2008

FIGURE 103: NOMINAL GROSS DOMESTIC PRODUCT AS A PERCENTAGE OF THE REGIONAL TOTAL 2008 AND FIVE-YEAR AVERAGE



	2008 $ Millions	*Latest 5-year Average $ Millions*
BC	197,931	179,836
AB	291,256	239,227
SK	63,509	48,922
MB	50,834	45,202
West	603,530	513,186

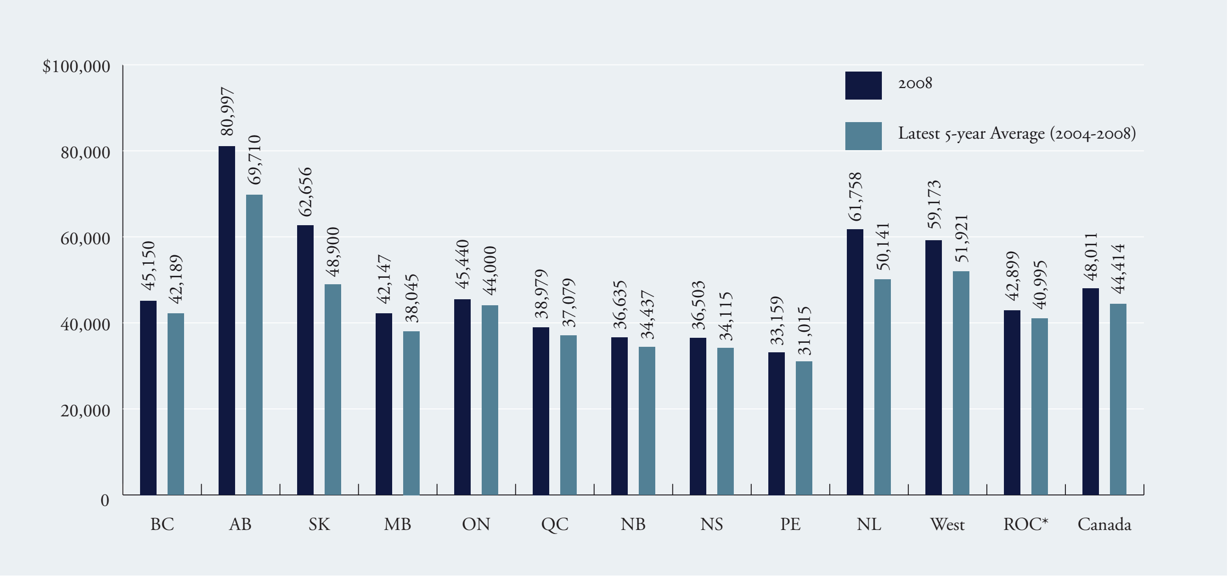
Source: Statistics Canada Cansim Table 384-0002 and author's calculations.

Within the West, BC and Alberta account for the majority of the region's economic output (81.8% in 2008 and 81.1% between 2004 and 2008). Alberta's contribution to regional output is the largest (48.3% in 2008 and 46.6% between 2004 and 2008).

Alberta's share of the regional GDP was the lowest in 1992 when it was 36.1%. Despite strong economic performance in recent years, Saskatchewan's share of the regional GDP remains lower than it was in the early 1980s. Manitoba has also seen its share of regional GDP decrease from where it was in the 1980s and 1990s.

The effect of commodity prices is clearly evident in provincial per capita GDP figures

FIGURE 104: NOMINAL GROSS DOMESTIC PRODUCT PER CAPITA 2008 AND FIVE-YEAR AVERAGE



Source: Statistics Canada Cansim Tables 051-0001 and 384-0002 and author's calculations.
*ROC (not including the territories).

Alberta, Saskatchewan and Newfoundland and Labrador all have significantly higher per capita GDP levels than the national average. This is due in large part to the impact of oil prices on the economy of each of these provinces. When prices are strong, nominal (current price) economic output spikes. While the effects on individual residents tend to be small, the relatively high levels of per capita GDP in these provinces means that there is—at times—a lot of money sloshing around their economies and available to government via natural resource royalties and taxes.

Oil and gas are much more important to Alberta and Saskatchewan than to Manitoba and BC

FIGURE 105: NOMINAL GDP BY INDUSTRY (NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM) 2006

	BC $ Millions	*% of Industries*	*AB $ Millions*	*% of Industries*	*SK $ Millions*	*% of Industries*	*MB $ Millions*	*% of Industries*	*West $ Millions*	*% of Industries*
All industries	167,340	100.0	230,098	100.0	43,121	100.0	41,878	100.0	482,437	100.0
Agriculture, forestry, fishing and hunting	4,388	2.6	3,087	1.3	1,904	4.4	1,509	3.6	10,888	2.3
Mining and oil and gas extraction	10,783	6.4	71,116	30.9	10,549	24.5	1,979	4.7	94,427	19.6
Utilities	2,792	1.7	4,590	2.0	971	2.3	1,603	3.8	9,956	2.1
Construction	12,140	7.3	20,618	9.0	2,703	6.3	1,991	4.8	37,452	7.8
Manufacturing	15,796	9.4	16,520	7.2	2,692	6.2	5,354	12.8	40,362	8.4
Goods-producing industries	**45,898**	**27.4**	**115,931**	**50.4**	**18,819**	**43.6**	**12,437**	**29.7**	**193,085**	**40.0**
Wholesale trade	7,647	4.6	10,286	4.5	2,364	5.5	2,501	6.0	22,798	4.7
Retail trade	10,328	6.2	9,396	4.1	2,113	4.9	2,660	6.4	24,496	5.1
Transportation and warehousing	10,469	6.3	11,241	4.9	2,485	5.8	2,664	6.4	26,860	5.6
Information and cultural industries	6,141	3.7	5,576	2.4	1,017	2.4	1,340	3.2	14,074	2.9
Finance and insurance, real estate and renting and leasing and management of companies and enterprises	35,902	21.5	29,469	12.8	5,968	13.8	7,417	17.7	78,756	16.3
Professional, scientific and technical services	7,725	4.6	10,105	4.4	821	1.9	1,178	2.8	19,828	4.1
Administrative and support, waste management and remediation services	3,808	2.3	4,187	1.8	477	1.1	749	1.8	9,220	1.9
Educational services	8,194	4.9	7,239	3.1	2,071	4.8	2,217	5.3	19,721	4.1
Health care and social assistance	10,970	6.6	8,828	3.8	2,642	6.1	3,380	8.1	25,820	5.4
Arts, entertainment and recreation	2,012	1.2	1,311	0.6	344	0.8	380	0.9	4,047	0.8
Accommodation and food services	4,895	2.9	4,355	1.9	783	1.8	876	2.1	10,909	2.3
Other services (except public administration)	4,954	3.0	4,836	2.1	1,013	2.3	1,173	2.8	11,976	2.5
Public administration	8,399	5.0	7,339	3.2	2,203	5.1	2,907	6.9	20,848	4.3
Services-producing industries	**121,442**	**72.6**	**114,167**	**49.6**	**24,302**	**56.4**	**29,441**	**70.3**	**289,353**	**60.0**

Note: GDP for “all industries” does not exactly match total GDP in other charts due to methodological differences. Source: Statistics Canada Cansim Table 379-0025 and author’s calculations.

In 2006, the mining and oil and gas extraction sector accounted for 30.9% of Alberta’s GDP; the figure for Saskatchewan was 24.5%. At 6.4% and 4.7% respectively, BC and Manitoba’s mining and oil and gas sectors are far less important to these provinces than the same sectors in Alberta and Saskatchewan.

When mining is taken out of the equation, oil and gas extraction accounted for 30.6% of GDP in Alberta and 19.4% of GDP in Saskatchewan. The larger difference in Saskatchewan is due largely to the presence of potash and uranium mining.

The oil and gas industry in Alberta and Saskatchewan skew the proportion of the West’s GDP generated by the goods-producing sector. The West’s goods-producing sector accounted for 40% of GDP compared to 28.6% in the rest of Canada (not including the territories). However, when looking at the individual western provinces, the relative size of Manitoba’s and BC’s goods-producing sectors are roughly in line with the rest of the country (with the exception of Newfoundland and Labrador).

Relative to the rest of its economy, Manitoba has the largest manufacturing sector in the region. Although larger in relative terms, it is important to note that the GDP produced by the manufacturing sectors of Alberta ($16.5 billion) and BC ($15.8 billion) are triple that of Manitoba’s ($5.4 billion).

CHAPTER 10

Trade and the West

The western provinces exported **$117.2 BILLION** of goods and services to other provinces in 2008. This represents 35.7% of the region's total exports (international plus interprovincial).

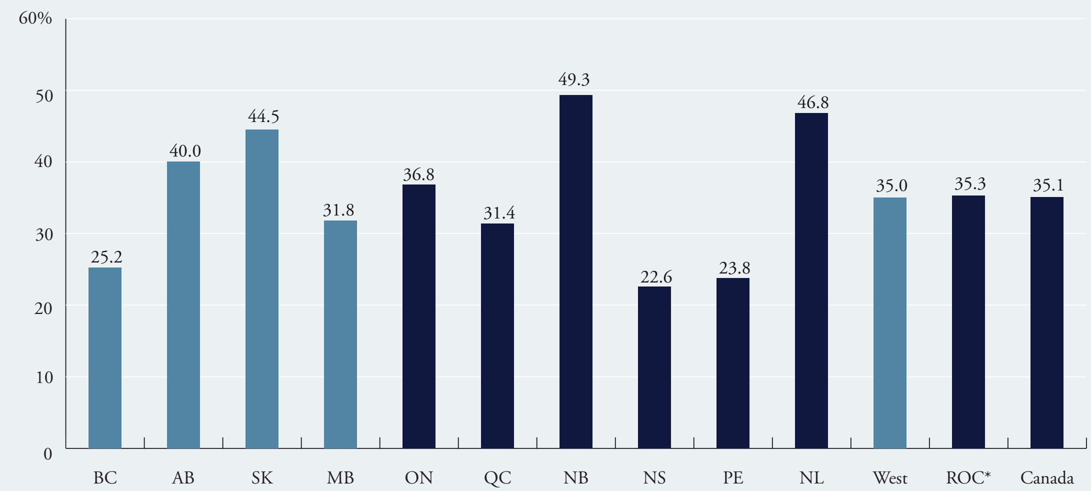
HIGHLIGHTS

- → The western provinces exported $211 billion of goods and services to other countries in 2008.
- → Imports to the West equaled 24.4% of its GDP compared to 39.2% for the rest of Canada.
- → If western Canada was a country, it would rank 26th on the list of the world's largest exporters.
- → The western provinces traded $51.51 billion amongst themselves in 2006.
- → The US is the West's most important customer. The US bought $92.3 billion of western Canadian goods in 2009.
- → Japan and China are more important export customers to the West than to the rest of Canada.
- → The West exports more commodities and less manufactured goods than the rest of Canada.
- → Oil and gas exports are a major component of the West's and Canada's trade with the United States.

Exports represent a third of economic output in the West

FIGURE 106: INTERNATIONAL EXPORTS OF GOODS AND SERVICES 2008 (CURRENT PRICES) (MILLIONS OF DOLLARS AND % OF GDP)

	BC Intern'l Exports	*% of GDP*	*AB Intern'l Exports*	*% of GDP*	*SK Intern'l Exports*	*% of GDP*	*MB Intern'l Exports*	*% of GDP*	*West Intern'l Exports*	*% of GDP*	*ROC* Intern'l Exports*	*% of GDP*	*Canada Intern'l Exports*	*% of GDP*
2000	46,028	35.0	61,198	42.3	14,684	43.4	10,471	30.7	132,381	38.5	357,028	49.1	490,688	45.6
2001	44,933	33.7	64,802	42.8	13,747	41.5	11,074	31.5	134,556	38.1	346,591	46.2	482,463	43.5
2002	41,624	30.1	58,811	39.1	14,278	41.6	11,383	31.1	126,096	35.1	351,667	44.6	479,185	41.6
2003	41,372	28.4	65,041	38.2	13,601	37.1	11,356	30.3	131,370	33.7	329,074	40.3	462,473	38.1
2004	45,445	28.8	75,608	39.8	15,605	38.3	11,992	30.2	148,650	34.7	344,845	40.3	495,980	38.4
2005	48,658	28.7	88,345	40.2	17,102	38.9	12,821	30.8	166,926	35.1	350,365	39.3	519,435	37.8
2006	49,487	27.1	89,992	37.7	17,934	39.4	14,027	31.2	171,440	33.5	350,896	37.7	524,358	36.2
2007	49,649	25.9	92,323	35.9	20,357	40.1	16,311	33.5	178,640	32.6	353,638	36.2	534,557	34.9
2008	49,942	25.2	116,580	40.0	28,284	44.5	16,179	31.8	210,985	35.0	348,310	35.3	562,174	35.1



Source: Statistics Canada Cansim Table 384-0002 and author's calculations. *ROC not including the territories or outside Canada.

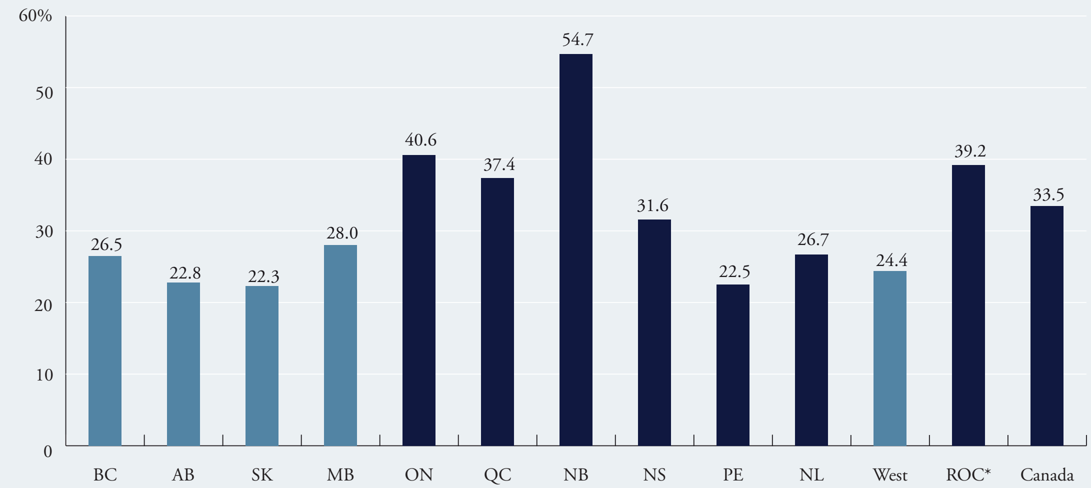
The western provinces exported $211.0 billion to other countries in 2008. This represents 37.5% of Canada's total international exports and over a third (35.0%) of the region's GDP. Of the four western provinces, Saskatchewan is the most trade dependent with exports equal to 44.5% of its GDP in 2008 followed by Alberta at 40.0%.

Manitoba and BC are somewhat less trade dependent with exports equal to 31.8% and 25.2% of their respective provincial GDPs. With the exception of BC, the export-to-GDP ratio is generally higher in each of the western provinces than it was in the 1980s before free trade with the US began.

The West's import-to-GDP ratio is lower than the rest of Canada's

FIGURE 107: INTERNATIONAL IMPORTS OF GOODS AND SERVICES 2008 (CURRENT PRICES) (MILLIONS OF DOLLARS AND % OF GDP)

	BC Intern'l Imports	*% of GDP*	*AB Intern'l Imports*	*% of GDP*	*SK Intern'l Imports*	*% of GDP*	*MB Intern'l Imports*	*% of GDP*	*West Intern'l Imports*	*% of GDP*	*% of GDP*	*ROC* Intern'l Exports*	*Canada Intern'l Imports*	*% of GDP*
2000	38,240	29.1	40,419	27.9	9,367	27.7	10,473	30.8	98,499	28.6	329,114	45.2	428,754	39.8
2001	38,903	29.1	42,512	28.1	9,306	28.1	10,414	29.6	101,135	28.6	316,321	42.2	418,836	37.8
2002	38,855	28.1	43,267	28.7	9,623	28.0	11,079	30.3	102,824	28.6	324,080	41.1	428,301	37.1
2003	38,377	26.4	43,440	25.5	9,456	25.8	11,100	29.6	102,373	26.3	313,161	38.3	416,856	34.4
2004	40,396	25.6	46,223	24.4	9,768	23.9	11,319	28.5	107,706	25.2	331,100	38.7	440,314	34.1
2005	43,332	25.5	53,389	24.3	10,815	24.6	11,682	28.0	119,218	25.1	347,358	39.0	468,270	34.1
2006	46,735	25.6	59,486	25.0	11,590	25.5	12,149	27.0	129,960	25.4	356,040	38.3	487,757	33.7
2007	49,952	26.1	62,198	24.2	12,494	24.6	12,700	26.1	137,344	25.1	365,277	37.4	504,618	32.9
2008	52,530	26.5	66,389	22.8	14,175	22.3	14,239	28.0	147,333	24.4	387,191	39.2	536,792	33.5



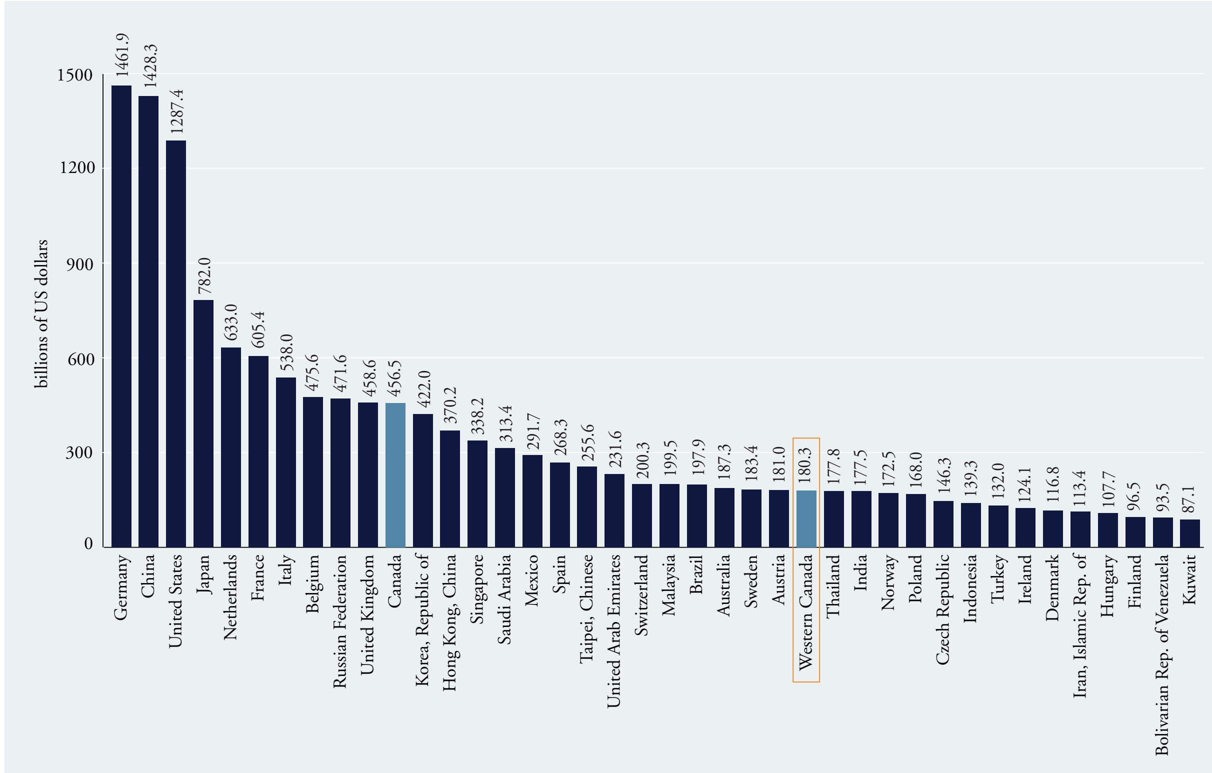
Source: Statistics Canada Cansim Table 384-0002 and author's calculations. *ROC not including the territories or outside Canada.

Imports are a less important component of the economy in the West than in the rest of Canada. Imports equaled 24.4% of the West's GDP in 2008 compared to 39.2% for the rest of Canada. Imports to the West accounted for 27.4% of all imports into Canada in 2008.

The import-to-GDP ratio of all four western provinces is lower than the national average. With the exception of BC, imports are lower than exports in the West. In total, the West imported $147.3 billion worth of goods and services in 2008 compared to $211.0 in exports.

Western Canada is one of the largest trading regions in the world

FIGURE 108: LEADING EXPORTERS IN WORLD MERCHANDISE TRADE 2008 (BILLIONS OF US DOLLARS)



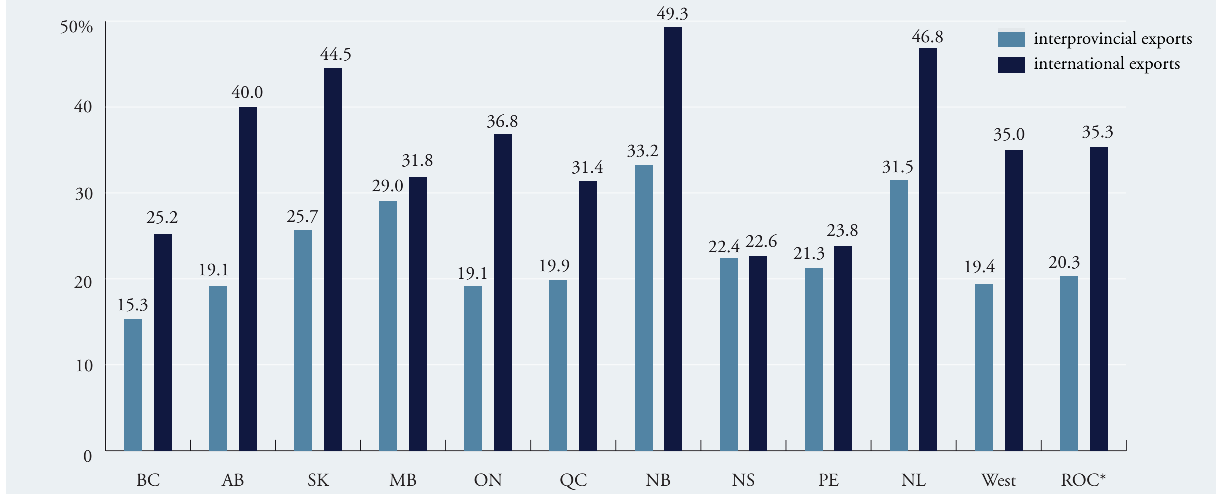
Source: World Trade Organization, International Trade Statistics 2009, Table 1.8. Western Canadian Exports, Statistics Canada Cansim Table 384-0002, Bank of Canada (average 2008 US exchange rate 0.9381) and author's calculations.

When western Canada's international merchandise exports are ranked against the world's leading exporters, we find that it ranks 26th as of 2008 (Canada ranks 11th). Western Canada exports more than countries with much larger populations such as India and Indonesia. Although dwarfed by the exporting power of Germany, China and the US, both Canada and western Canada are far from minor footnotes in global trade. With that said, the list of competitors hoping to get a piece of Canada's international trade pie is long. Hence, honing our competitive skills is a constant requirement for success in the global marketplace.

Although they are a smaller percentage of GDP than international exports, interprovincial exports are still significant

FIGURE 109: INTERPROVINCIAL EXPORTS OF GOODS AND SERVICES 2000-2008 (CURRENT PRICES) (MILLIONS OF DOLLARS AND % OF GDP)

	BC Interprovincial Exports	*% of GDP*	*AB Interprovincial Exports*	*% of GDP*	*SK Interprovincial Exports*	*% of GDP*	*MB Interprovincial Exports*	*% of GDP*	*West Interprovincial Exports*	*% of GDP*	*ROC* Interprovincial Exports*	*% of GDP*
2000	19,570	14.9	34,952	24.1	9,240	27.3	10,957	32.2	74,719	21.7	141,911	19.5
2001	20,621	15.4	34,922	23.1	9,790	29.6	11,242	32.0	76,575	21.7	148,500	19.8
2002	21,082	15.3	35,185	23.4	9,676	28.2	11,203	30.6	77,146	21.4	154,158	19.6
2003	22,477	15.4	40,649	23.9	10,301	28.1	11,277	30.1	84,704	21.7	160,915	19.7
2004	24,320	15.4	43,344	22.8	11,900	29.2	12,056	30.3	91,620	21.4	167,658	19.6
2005	26,747	15.8	47,139	21.4	12,617	28.7	12,247	29.4	98,750	20.8	175,450	19.7
2006	28,522	15.6	50,075	21.0	13,194	29.0	13,084	29.1	104,875	20.5	185,759	20.0
2007	29,626	15.5	51,265	20.0	13,819	27.2	13,750	28.2	108,460	19.8	195,405	20.0
2008	30,309	15.3	55,770	19.1	16,325	25.7	14,753	29.0	117,157	19.4	200,142	20.3



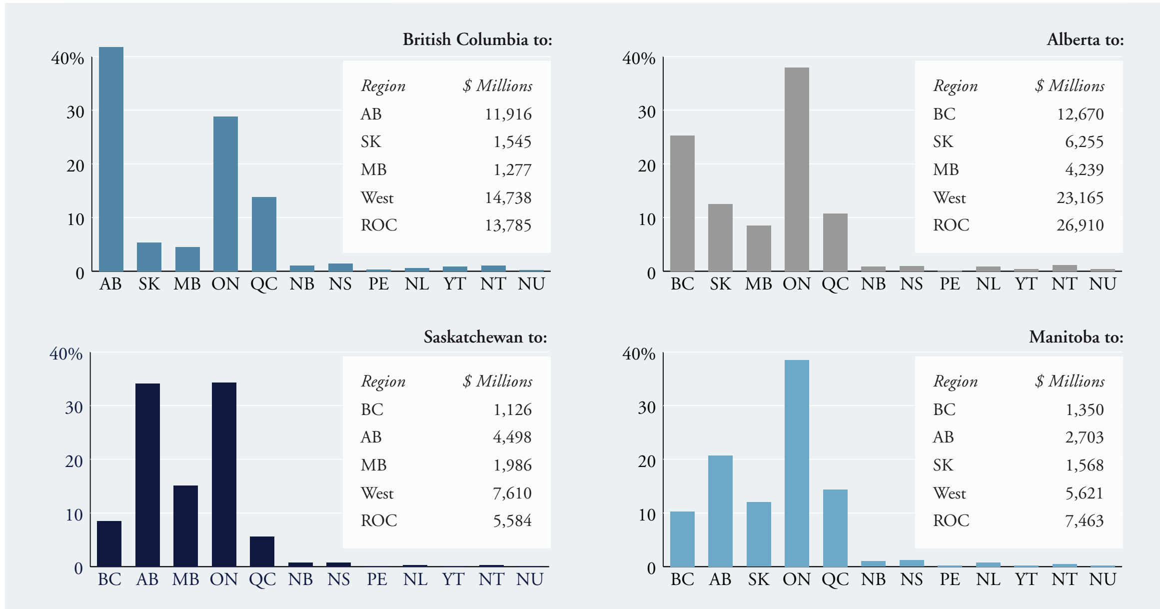
Source: Statistics Canada Cansim Table 384-0002 and author's calculations. *ROC not including the territories or outside Canada.

The western provinces exported $117.2 billion worth of goods and services within Canada in 2008, which is equivalent to 19.4% of the region's GDP. This is much less than the $211.0 billion of international exports that same year, but it is still a huge amount of internal trade.

Within the West, BC has the lowest internal exports-to-GDP ratio at 15.3% and Manitoba has the highest at 29.0%. With the exception of Alberta where the relative importance of internal trade has declined significantly, domestic trade as a percentage of GDP is roughly the same in the western provinces as it was in the 1980s.

The western provinces trade heavily with one another

FIGURE 110: INTERPROVINCIAL TRADE FLOWS FROM THE WESTERN PROVINCES 2006 TOTAL GOODS AND SERVICES (AT PRODUCER PRICES, ANNUALLY, DOLLARS AND % OF TOTAL)



Note: Due to different methodology, interprovincial export figures from this series do not exactly match those from table 384-0002.
Data for 2006 was the most recent available at the time of writing.
Source: Statistics Canada Cansim Table 386-0002 and author's calculations.

The western provinces traded $51.1 billion amongst themselves in 2006. This equates to 48.8% of the region's interprovincial trade that year. Thus, even though two-thirds of Canada's population is found outside the West, almost half of its internal trade is with the third of Canadians who live in the western provinces.

The new internal free trade agreement between BC, Alberta and Saskatchewan launched in April 2010 known at the New West Partnership seeks to reduce restrictions, and in turn increase, the $38.0 billion of trade between the three provinces. Unfortunately, Manitoba remains outside the agreement at this time.

The United States remains the West's biggest customer by a wide margin

FIGURE III: TOP TEN INTERNATIONAL MERCHANDISE TRADE DESTINATIONS 2009 (% OF TOTAL MERCHANDISE EXPORTS)

MB	*2009*	SK	*2009*
US	66.8	US	60.7
China	6.1	China	5.2
Japan	4.8	India	4.5
Mexico	2.5	UK	2.9
Hong Kong	1.7	Japan	2.9
Australia	1.2	Indonesia	1.9
Saudi Arabia	1.0	Mexico	1.7
UK	0.9	Bangladesh	1.6
Iraq	0.9	Italy	1.4
Russia	0.7	Morocco	1.0

AB	*2009*	BC	*2009*
US	83.4	US	50.1
China	3.8	Japan	13.6
Japan	2.3	China	10.1
Mexico	1.5	Korea, South	6.8
Korea, South	0.8	Taiwan (Taipei)	1.8
Netherlands	0.4	Netherlands	1.7
Australia	0.4	Italy	1.3
Russia	0.4	UK	1.1
Singapore	0.3	Brazil	1.0
Saudi Arabia	0.3	Germany	1.0

Canada	*2009*
United States	75.0
UK	3.4
China	3.1
Japan	2.3
Mexico	1.3
Germany	1.0
Korea, South	1.0
Netherlands	0.8
France	0.8
India	0.6

% of Exports to China and Japan Combined	
MB	11.0
SK	9.6
AB	6.1
BC	23.7
West	10.6
Canada	5.4
ROC	2.5

Source: Industry Canada, Trade Data Online.

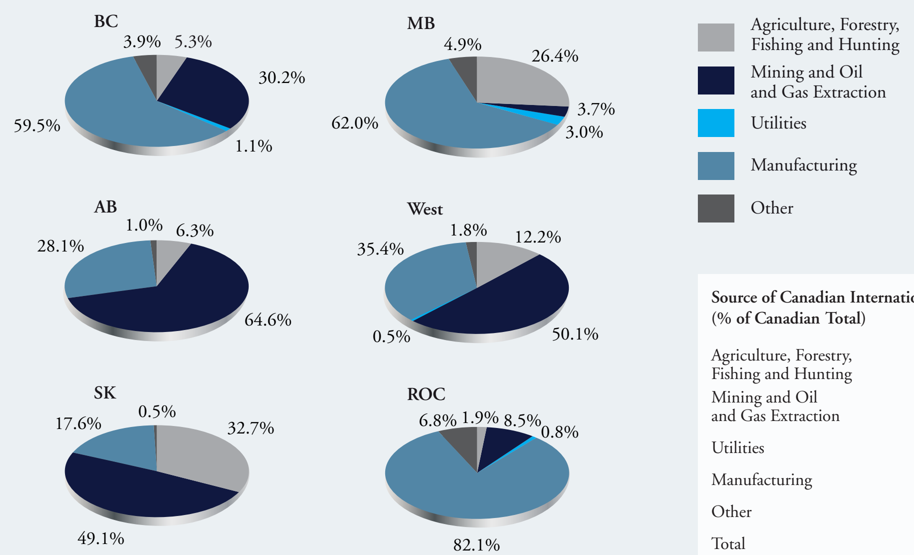
Despite significant variation across the region, the United States is the West's most important customer. BC sends the smallest proportion of its merchandise exports to the US (50.1% in 2009) and Alberta sends the largest (83.4%). The national proportion is 75.0% (77% for Canada less the West). The four western provinces exported a total of $92.3 billion worth of goods to the US in 2009.

The volatility of the commodity market is exemplified by the changes in the value of trade between Alberta and the US between 2007 and 2009. In 2007, Alberta sold $70.8 billion worth of goods to the US. This jumped to $96.7 billion in 2008 and dropped again in 2009 to $58.9 billion. The changes, mostly due to volatile oil and gas prices, represent a swing of $63.5 billion dollars in just three years.

A key difference between the West and the rest of Canada lies in the relative importance of Japan and China to the region. Sales to Japan and China accounted for 10.6% of the West's merchandise exports in 2009 compared to just 2.5% in the rest of Canada. In absolute terms, the West sold Japan and China $13.7 billion dollars worth of goods in 2009 compared to just $5.8 billion for the rest of Canada. Within the West, BC sold 23.7% of its exports to Japan and China in 2009, Manitoba 11.0%, Saskatchewan 9.6% and Alberta 6.1%.

The relative importance of manufacturing exports varies across the West

FIGURE 112: INTERNATIONAL MERCHANDISE EXPORTS BY MAJOR SECTOR (TWO-DIGIT NAICS CODES) 2009 (% OF TOTAL)



Source of Canadian International Exports by Category (% of Canadian Total)

	West	*ROC*
Agriculture, Forestry, Fishing and Hunting	78.0	22.0
Mining and Oil and Gas Extraction	76.8	23.2
Utilities	26.1	73.9
Manufacturing	19.4	80.6
Other	13.1	86.9
Total	35.8	64.2

Note: NAICS = North American Industrial Classification System.
Source: Industry Canada, Trade data online plus author's calculations.

The percentage of international merchandise exports produced by the manufacturing sector varies in the West from a high of 62.0% in Manitoba to a low of 17.6% in Saskatchewan (as of 2009). Not surprisingly, the mining and oil and gas extraction sector is the largest export industry in Alberta, accounting for 64.6% of its international exports in 2009.

While significant across the West, agricultural goods are major component of Manitoba's and Saskatchewan's export mix at 26.4% and 32.7% respectively.

The different industrial structure of the West is evinced by the fact that 78.0% of agriculture, forestry, fishing and hunting sector international exports and 76.8% of mining and oil and gas extraction sector international exports come from the West. Conversely, 80.6% of Canada's manufacturing exports come from the rest of Canada.

Oil and gas represent a fifth of Canada's exports to the US

FIGURE 113: TOP TEN MERCHANDISE EXPORTS TO THE UNITED STATES BY INDUSTRY (FIVE-DIGIT NAICS CODES) 2009 (% OF TOTAL)

BC		AB	
Oil and Gas Extraction	15.3	Oil and Gas Extraction	75.4
Sawmills and Wood Preservation	13.6	Petroleum Refineries	4.1
Paper Mills	7.2	Resin and Synthetic Rubber Manufacturing	3.5
Pulp Mills	4.2	Fertilizer Manufacturing	1.5
Veneer, Plywood and Engineered Wood Product Manufacturing	3.1	Animal Slaughtering and Processing	1.4
Non-Ferrous Metal (except Aluminum) Smelting and Refining	3.0	Pulp Mills	1.0
Animal Aquaculture	2.5	Petrochemical Manufacturing	0.9
Electric Power Generation	2.3	Other Basic Organic Chemical Manufacturing	0.9
Petroleum Refineries	2.1	Beef Cattle Ranching and Farming, including Feedlots	0.8
Recyclable Metal Wholesaler-Distributors	1.8	Mining and Oil and Gas Field Machinery Manufacturing	0.7
Sub-total	55.0	Sub-total	90.1
Others	45.0	Others	9.9

SK		MB	
Oil and Gas Extraction	54.1	Non-Ferrous Metal (except Aluminum) Smelting and Refining	6.4
Other Non-Metallic Mineral Mining and Quarrying	17.0	Starch and Vegetable Fat and Oil Manufacturing	5.7
Starch and Vegetable Fat and Oil Manufacturing	4.0	Aerospace Product and Parts Manufacturing	5.2
Wheat Farming	3.0	Oil and Gas Extraction	4.8
Agricultural Implement Manufacturing	2.5	Electric Power Generation	4.5
Other Basic Inorganic Chemical Manufacturing	2.4	Agricultural Implement Manufacturing	4.5
Other Grain Farming	2.2	Frozen Food Manufacturing	4.1
Iron and Steel Pipes and Tubes Manufacturing from Purchased Steel	2.1	Pharmaceutical and Medicine Manufacturing	4.1
Oilseed (except Soybean) Farming	1.5	Motor Vehicle Body and Trailer Manufacturing	3.5
Petroleum Refineries	1.4	Heavy-Duty Truck Manufacturing	2.7
Sub-total	90.2	Sub-total	45.6
Others	9.8	Others	54.4

Source: Industry Canada, Trade data online.

Most of what the West sells the US is either raw natural resources or processed natural resources. The natural resource sector dominates the lists of what the western provinces export to the US market. Oil and gas extraction tops the list of export sectors in BC, Alberta and Saskatchewan. In the case of BC, however, when you add up sectors related to forestry, you find that oil and gas slips to number two. Manitoba's export profile to the US is the most diversified of the western provinces with no single sector dominating. The importance of oil and gas to the Canadian economy is evinced by the fact that it accounted for over 20% of the country's exports to the United States in 2009.

CHAPTER 11

Natural Resources in the West

ABOUT 40% of Canada's forest cover is found in western Canada.

The West is home **TO 73%** of Canada's dependable agricultural land.

HIGHLIGHTS

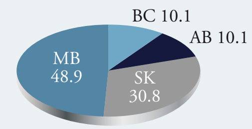
- The West has one-fifth of Canada's freshwater surface area and almost a third of its annual streamflow.
- BC and Manitoba generate most of their electricity using waterpower.
- Irrigation is particularly important to Alberta's agriculture sector and accounts for nearly two-thirds of agricultural water use in Canada.
- BC is Canada's largest forestry producer.
- BC's forest resource has been devastated by the mountain pine beetle.
- The Alberta oil sands puts Canada second in the world behind Saudi Arabia in terms of oil reserves.
- Oil, natural gas, uranium and potash prices are extremely volatile.
- Saskatchewan is a major supplier of uranium and potash to global markets.
- The West is home to most of Canada's coal reserves.

Freshwater is unevenly distributed in the West

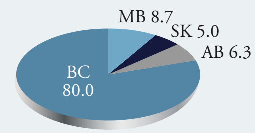
FIGURE 114: FRESHWATER RESOURCES IN CANADA

	Total Area (Land +Freshwater)(km²)	*Freshwater Area (km²)*	*% of Jurisdiction Covered by Freshwater*	*% of Total Canadian Freshwater Area*	*% of Total Canadian Streamflow*
BC	**944,735**	**19,549**	**2.1**	**2.2**	**24.0**
AB	**661,848**	**19,531**	**3.0**	**2.2**	**1.9**
SK	**651,036**	**59,366**	**9.1**	**6.7**	**1.5**
MB	**647,797**	**94,241**	**14.5**	**10.6**	**2.6**
ON	1,076,395	158,654	14.7	17.8	8.9
QC	1,542,056	176,928	11.5	19.9	21.6
NB	72,908	1,458	2.0	0.2	1.3
NS	55,284	1,946	3.5	0.2	1.2
PE	5,660	0	0.0	0.0	0.1
NL	405,212	31,340	7.7	3.5	8.6
YT	482,443	8,052	1.7	0.9	4.2
NT	1,346,106	163,021	12.1	18.3	24.0
NU	2,093,190	157,077	7.5	17.6	*
Canada	9,984,670	891,163	8.9	100.0	100.0

Percentage of the West's Freshwater Area



Percentage of the West's Streamflow



Note: Streamflow is a measure of the amount of water in streams and rivers. It is the volume of water passing a given point in a stream or river at a particular point in time (e.g., cubic metres per second).
*Nunavut included with Northwest Territories
Source: Natural Resources Canada, Statistics Canada, *Human Activity and the Environment: Annual Statistics 2009* and author's calculations.

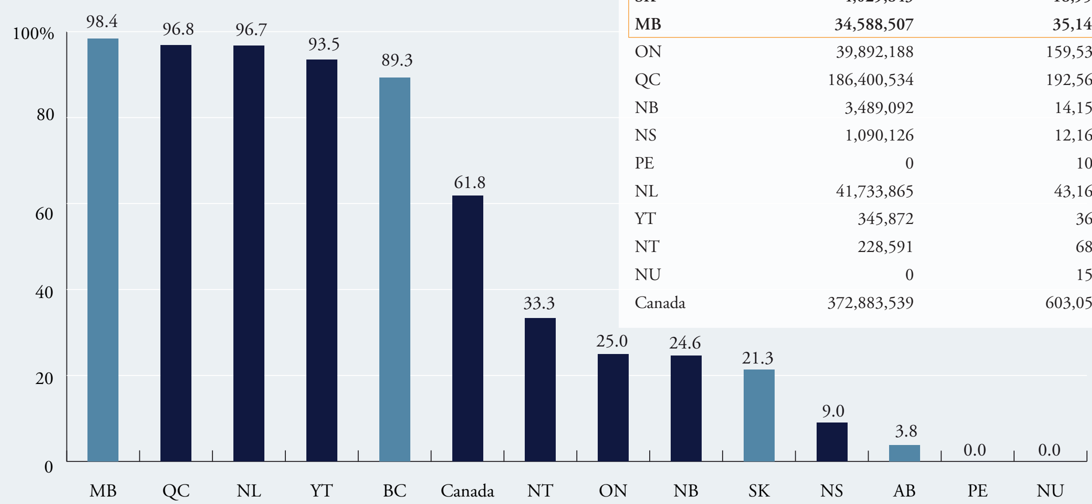
With about 7% of the world's renewable freshwater flow, Canada has a lot of water relative to its population. At the same time, Canada is the second highest per capita water user among OECD countries (see OECD Factbook 2008).

Even in water-rich Canada, however, water is not always there when and where it is needed and keeping it clean is an ongoing challenge. Southern Alberta, for example, is a relatively dry place with a lot of thirsty farms and urbanites competing for a limited and seasonally variable supply.

Measuring water resources is a tricky business—a full account would include the effects of precipitation, more information on groundwater, data on the volume of lakes rather than their surface area, better statistics on snowpack and glaciers, and accurate estimates of change in water stocks over time. Unfortunately, a handy source that pulls all this information together on a provincial basis is lacking. Using the information we do have, we find that the West has 21.6% of Canada's freshwater (measured in terms of surface area) and 30.0% of the country's annual streamflow. Within the West, Manitoba is home to almost half of the region's freshwater area (48.9%) whereas BC is home to 80% of the region's streamflow.

Water is a critical source of electric power in BC and Manitoba

FIGURE 115: HYDRO-ELECTRIC POWER GENERATION AS % OF TOTAL ELECTRIC POWER GENERATION, 2008



	Hydro Power Generation (Megawatt Hours)	*Total Electric Power Generation (Megawatt Hours)*
BC	**58,773,685**	**65,824,059**
AB	**2,311,236**	**60,236,096**
SK	**4,029,843**	**18,955,933**
MB	**34,588,507**	**35,144,419**
ON	39,892,188	159,530,002
QC	186,400,534	192,569,564
NB	3,489,092	14,156,182
NS	1,090,126	12,164,400
PE	0	106,019
NL	41,733,865	43,161,902
YT	345,872	369,934
NT	228,591	685,607
NU	0	155,263
Canada	372,883,539	603,059,380

Source: Statistics Canada, *Human Activity and the Environment: Annual Statistics 2009.*

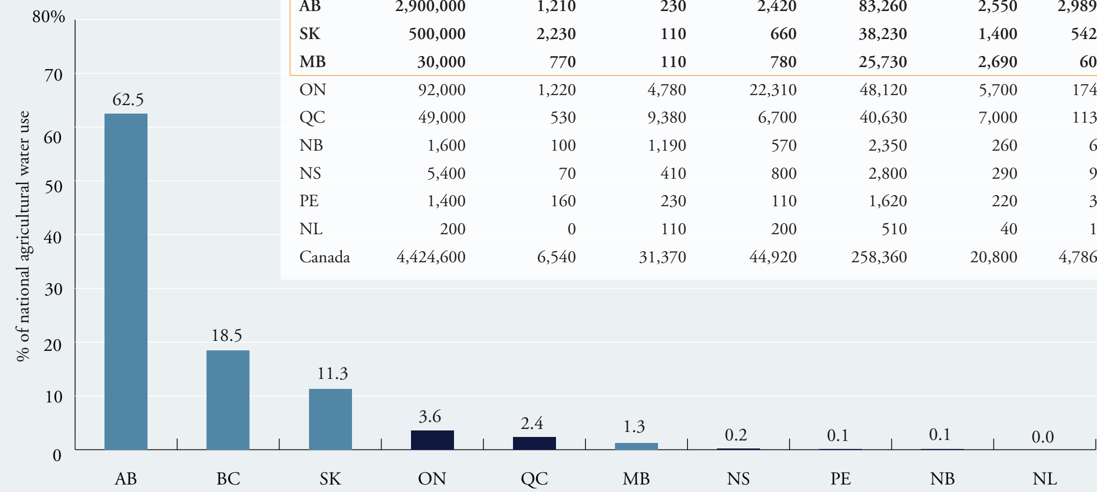
Using moving water to generate electricity (hydropower) is an example of an *in situ* or instream use of water because the water is not "withdrawn" as it is for thermal power generation, manufacturing, residential use and irrigation. The importance of hydropower varies greatly in the West. Virtually all of Manitoba's electricity and just under 90% of BC's electricity is generated by hydropower.

The story in Alberta and Saskatchewan is much different. A relative lack of hydroelectric options means that only a fifth of Saskatchewan's electric power comes from hydro with Alberta's hydropower sources contributing a paltry 3.8% of the province's electricity output.

On a national level, over 60% of Canada's electricity is from hydro. The regional differences are important for a variety of reasons, not the least of which is the higher levels of greenhouse gases produced by generating electricity by burning coal rather than damming rivers.

Alberta farmers are the most dependent on irrigation

FIGURE 116: TOTAL AGRICULTURAL WATER USE 2001



Water Use (thousand cubic metres)

	Crop Water Use Irrigation	*Spraying*	*Washing*	*Greenhouse**	*Livestock Water Use Watering*	*Farm use*	*Total*
BC	**845,000**	**240**	**14,820**	**10,360**	**15,120**	**650**	**886,190**
AB	**2,900,000**	**1,210**	**230**	**2,420**	**83,260**	**2,550**	**2,989,670**
SK	**500,000**	**2,230**	**110**	**660**	**38,230**	**1,400**	**542,630**
MB	**30,000**	**770**	**110**	**780**	**25,730**	**2,690**	**60,080**
ON	92,000	1,220	4,780	22,310	48,120	5,700	174,130
QC	49,000	530	9,380	6,700	40,630	7,000	113,240
NB	1,600	100	1,190	570	2,350	260	6,070
NS	5,400	70	410	800	2,800	290	9,770
PE	1,400	160	230	110	1,620	220	3,740
NL	200	0	110	200	510	40	1,060
Canada	4,424,600	6,540	31,370	44,920	258,360	20,800	4,786,590

Note: There is no significant agricultural activity in the territories. Due to rounding, figures may not add up to totals.
Source: Statistics Canada, Agriculture and Rural Working Paper Series, *Estimation of Water Use in Canadian Agriculture in 2001*.
*Includes water used for greenhouse irrigation, spraying pesticides and washing equipment.

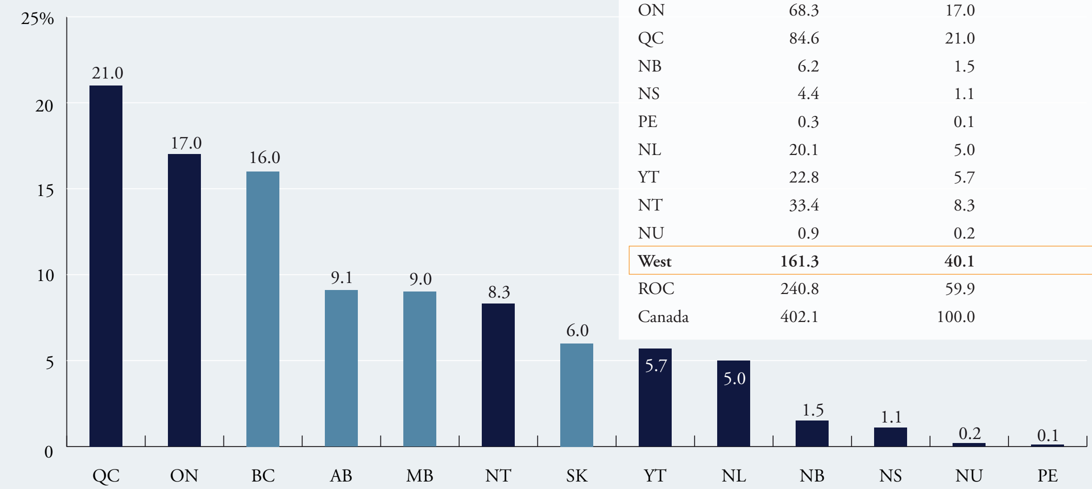
Agriculture accounts for less than 10% of annual water withdrawals. However, unlike the water used in thermal power generation, the majority of agricultural water withdrawals are not returned to the source. Agricultural water use is, in other words, more consumptive than uses such as power generation and residential water.

Dry conditions in Alberta mean that its agriculture sector relies heavily on irrigation such that the province accounts for nearly two-thirds of agricultural water use in Canada (3.0 billion cubic metres in 2001). At 18.5%, BC is the next heaviest user followed by Saskatchewan at 11.3%. Combined, Alberta, BC and Saskatchewan account for 92.3% of agricultural water withdrawals in Canada.

Over half of western Canada is covered by forest

FIGURE 117: FOREST AND OTHER WOODED LAND (% OF NATIONAL TOTAL)

	Million Hectares	*% of National Total*	*% of Global Total*
BC	**64.3**	**16.0**	**1.6**
AB	**36.4**	**9.1**	**0.9**
SK	**24.3**	**6.0**	**0.6**
MB	**36.4**	**9.0**	**0.9**
ON	68.3	17.0	1.7
QC	84.6	21.0	2.1
NB	6.2	1.5	0.2
NS	4.4	1.1	0.1
PE	0.3	0.1	0.0
NL	20.1	5.0	0.5
YT	22.8	5.7	0.6
NT	33.4	8.3	0.8
NU	0.9	0.2	0.0
West	**161.3**	**40.1**	**4.1**
ROC	240.8	59.9	6.1
Canada	402.1	100.0	10.2



Note: The estimates of Canada's forest cover presented in the Natural Resources Canada report do not exactly correspond to those found in the UN report.
Source: Natural Resources Canada, *The State of Canada's Forests, Annual Report 2009* and Food and Agriculture Organization of the United Nations, *State of the World's Forests 2009*.

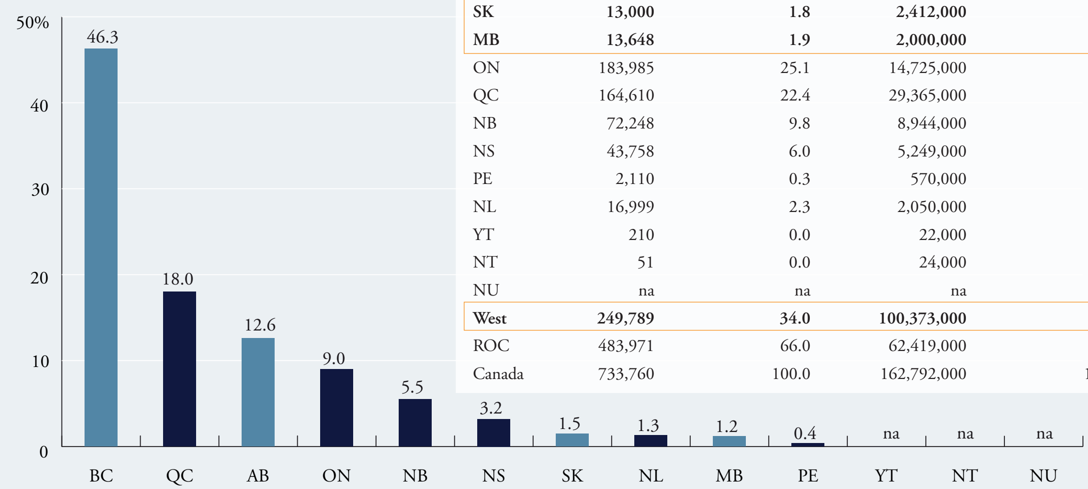
As with water, Canada has a lot of forest relative to its population with approximately 10% of the world's forest cover. About 40% of Canada's forest area and other woodland is located in the West (4% of the global total).

Quebec has the largest percentage of Canada's forests at 21.0% followed by Ontario with 17.0% and BC at 16.0%.

Approximately 55.8% of western Canada is covered by forest (41.1% of Canada as a whole is covered by forest and 58.7% of Canada less the West and North is covered by forest).

The West accounted for over 60% of the forest harvest in 2007

FIGURE 118: HARVEST VOLUME AS % OF NATIONAL TOTAL, 2007



Harvest Area and Harvest Volume 2007

	Harvest Area (Hectares)	*Harvest Area as % of National Total*	*Harvest Volume (Cubic Metres)*	*Harvest Volume as % of National Total*
BC	**168,160**	**22.9**	**75,448,000**	**46.3**
AB	**54,981**	**7.5**	**20,513,000**	**12.6**
SK	**13,000**	**1.8**	**2,412,000**	**1.5**
MB	**13,648**	**1.9**	**2,000,000**	**1.2**
ON	183,985	25.1	14,725,000	9.0
QC	164,610	22.4	29,365,000	18.0
NB	72,248	9.8	8,944,000	5.5
NS	43,758	6.0	5,249,000	3.2
PE	2,110	0.3	570,000	0.4
NL	16,999	2.3	2,050,000	1.3
YT	210	0.0	22,000	0.0
NT	51	0.0	24,000	0.0
NU	na	na	na	na
West	**249,789**	**34.0**	**100,373,000**	**61.7**
ROC	483,971	66.0	62,419,000	38.3
Canada	733,760	100.0	162,792,000	100.0

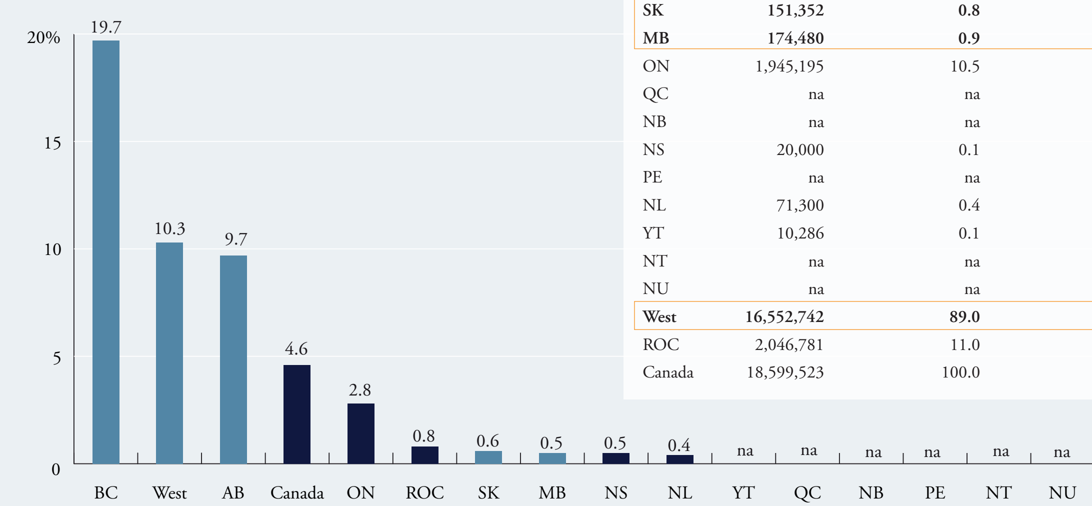
Source: Natural Resources Canada, *The State of Canada's Forests, Annual Report 2009.*

The West's forests are a valuable resource both as standing forests (e.g., habitat, carbon sequestration, recreation, air and water filtration) and as harvested wood for domestic use and export.

About 0.15% of the West's forest area was harvested in 2007 (249,789 hectares). In terms of volume, BC is by far Canada's largest forestry producer accounting for 46.3% of the national total. The next biggest producer is Quebec at 18.0% of the national cut followed by Alberta at 12.6% and Ontario at 9.0%. In terms of the value of forest exports, BC led the nation in 2008 selling $10.0 billion worth of forest products abroad (mostly to the US) followed by Quebec at $9.3 billion and Ontario at $5.4 billion.

The pine beetle is devastating BC's forests

FIGURE 119: AREA DEFOLIATED BY INSECTS AND BEETLE-KILLED TREES 2007 (% OF THE JURISDICTION'S FOREST AREA DEFOLIATED)



	Defoliated Hectares	*% of Total Defoliation in Canada*	*% of the Jurisdiction's Forest Area Defoliated*
BC	**12,689,356**	**68.2**	**19.7**
AB	**3,537,554**	**19.0**	**9.7**
SK	**151,352**	**0.8**	**0.6**
MB	**174,480**	**0.9**	**0.5**
ON	1,945,195	10.5	2.8
QC	na	na	na
NB	na	na	na
NS	20,000	0.1	0.5
PE	na	na	na
NL	71,300	0.4	0.4
YT	10,286	0.1	0.0
NT	na	na	na
NU	na	na	na
West	**16,552,742**	**89.0**	**10.3**
ROC	2,046,781	11.0	0.8
Canada	18,599,523	100.0	4.6

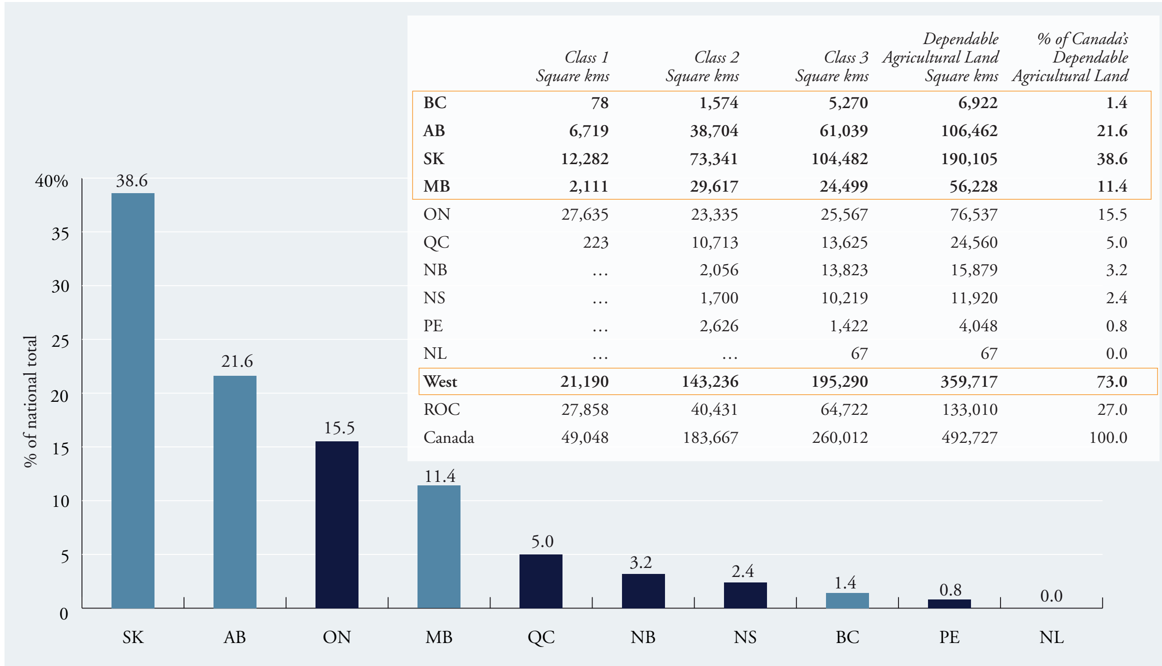
Source: Natural Resources Canada, *The State of Canada's Forests, Annual Report 2009.*

Every year, a certain amount of forest is damaged by insects. In BC (and now Alberta) the mountain pine beetle has been more active than usual, killing millions of trees in BC and Alberta. In 2007, 19.7% of BC's forest area was defoliated by the pine beetle and other insects and 9.7% of Alberta's suffered the same fate.

This has caused a spike in harvesting as loggers race to salvage the beetle-ravaged trees while they are still marketable, but will have severe effects on the industry in the years ahead.

The West is home to almost three-quarters of Canada's dependable agricultural land

FIGURE 120: DEPENDABLE AGRICULTURAL LAND BY PROVINCE (% OF NATIONAL TOTAL)



	Class 1 Square kms	*Class 2 Square kms*	*Class 3 Square kms*	*Dependable Agricultural Land Square kms*	*% of Canada's Dependable Agricultural Land*
BC	**78**	**1,574**	**5,270**	**6,922**	**1.4**
AB	**6,719**	**38,704**	**61,039**	**106,462**	**21.6**
SK	**12,282**	**73,341**	**104,482**	**190,105**	**38.6**
MB	**2,111**	**29,617**	**24,499**	**56,228**	**11.4**
ON	27,635	23,335	25,567	76,537	15.5
QC	223	10,713	13,625	24,560	5.0
NB	…	2,056	13,823	15,879	3.2
NS	…	1,700	10,219	11,920	2.4
PE	…	2,626	1,422	4,048	0.8
NL	…	…	67	67	0.0
West	**21,190**	**143,236**	**195,290**	**359,717**	**73.0**
ROC	27,858	40,431	64,722	133,010	27.0
Canada	49,048	183,667	260,012	492,727	100.0

Note: Dependable agricultural land includes all land areas that are not hampered by severe constraints for crop production. The amount of available dependable agricultural land is estimated by subtracting the area of dependable land occupied for urban and other non-agricultural uses.
Source: Statistics Canada, *Rural and Small Town Canada Analysis Bulletin*, Vol. 6, No. 1, Catalogue 21-006-XIE.

Ontario has the most Class 1 agricultural land (i.e., land with the highest capability to support agriculture) with 27,635 square kilometres followed by Saskatchewan with 12,282 square kilometres. When "dependable" agricultural land is considered, the West accounts for 73.0% of the national total.

BC has relatively little agricultural land, but it makes good use of what it has in areas like the Okanogan Valley.

Despite the bounty of agricultural land in the West, concerns have been raised about preserving it for both future domestic needs and for helping to feed the world's growing population. This often leads to conflicts with other land uses such as urban development, recreation areas and natural resource extraction.

Alberta leads the nation in the wind-generated electricity

FIGURE 121: GENERATION OF ELECTRIC ENERGY BY UTILITIES AND INDUSTRY 2007 (MEGAWATT HOURS)

	Hydro	*Wind and Tidal*	*Thermal Total*	*Thermal Steam*	*Thermal Nuclear*	*Thermal Internal Combustion*	*Thermal Combustion Turbine*	*Total Energy Generated*	*Percentage of Canadian Total*
BC	**64,288,157**	**0**	**7,544,855**	**5,008,592**	**0**	**82,664**	**2,453,599**	**71,833,012**	**11.6**
AB	**2,141,189**	**715,553**	**64,575,617**	**50,180,443**	**0**	**492,488**	**13,902,686**	**67,432,359**	**10.9**
SK	**4,392,985**	**579,488**	**15,601,976**	**14,271,754**	**0**	**1,395**	**1,328,827**	**20,574,449**	**3.3**
MB	**33,513,217**	**325,115**	**564,170**	**511,502**	**0**	**12,934**	**39,734**	**34,402,502**	**5.6**
ON	34,336,031	492,947	123,405,432	34,343,191	79,750,154	2,878,664	6,433,423	158,234,410	25.6
QC	181,099,757	617,379	10,244,962	2,562,433	4,321,577	271,998	3,088,964	191,962,098	31.1
NB	2,802,981	0	14,835,866	8,595,138	4,118,700	6,088	2,115,940	17,638,847	2.9
NS	924,514	177,060	11,472,468	11,218,593	0	0	253,875	12,574,042	2.0
PE	0	39,633	5,099	5,360	0	116	-377	44,732	0.0
NL	40,048,491	0	1,534,822	1,255,915	0	43,426	235,481	41,583,313	6.7
YT	330,632	407	23,655	0	0	23,655	0	354,694	0.1
NT	250,246	0	436,006	0	0	297,529	138,477	686,252	0.1
NU	0	0	148,881	0	0	148,881	0	148,881	0.1
Canada	364,128,200	2,947,582	250,393,809	127,952,921	88,190,431	4,259,828	29,990,629	617,469,591	100.0

	Total Exported to Other Countries	*Exported as % of National Total*	*Total Imported From Other Countries*	*Exports minus Imports*
BC	**4,438,820**	**9.9**	**7,288,705**	**-2,849,885**
AB	**154,748**	**0.3**	**222,902**	**-68,154**
SK	**391,579**	**0.9**	**203,343**	**188,236**
MB	**11,092,806**	**24.8**	**534,285**	**10,558,521**
ON	11,089,756	24.8	7,070,359	4,019,397
QC	15,711,988	35.2	3,355,838	12,356,150
NB	1,780,259	4.0	641,755	1,138,504
NS	30,634	0.1	62,917	-32,283
PE	0	0.0	0	0
NL	0	0.0	0	0
YT	0	0.0	0	0
NT	0	0.0	0	0
NU	0	0.0	0	0
Canada	44,690,590	100.0	19,380,104	25,310,486

Source: Statistics Canada, *Electric Power Generation, Transmission and Distribution 2007*, Catalogue 57-202-X.

How electricity is generated varies greatly across the West and the country. Alberta and Saskatchewan are particularly reliant on thermal electricity sources (especially coal) whereas BC and Manitoba generate most of their electricity at hydro stations. No western province uses nuclear power while half of Ontario's electricity is generated by nuclear facilities.

Both Alberta and BC are net importers of electricity from other countries. The reverse is true of Manitoba and Saskatchewan. Manitoba is Canada's second largest electricity exporter behind Quebec. Manitoba exported 30.7% of the electricity it generated to other countries in 2007.

Alberta is home to Canada's oil sands industry

FIGURE 122: OIL RESERVES AT DECEMBER 31, 2008

	Crude Oil Reserves	*Net Crude Oil Production 2008*	*Pentanes Plus Reserves*	*Net Pentanes Plus Production 2008*	*Marketable Natural Gas Reserves*	*Net Marketable Natural Gas Production 2008*	*Liquified Petroleum Gases Reserves*	*Net Liquified Petroleum Gases Production 2008*	*Total Developed Non-Conventional Oil (Oil Sands) Reserves*	*Net Developed Non-Conventional Oil (Oil Sands) Production 2008*
	Million Barrels	*Million Barrels*	*Million Barrels*	*Million Barrels*	*Million Cubic Metres*	*Thousand Cubic Metres*	*Thousand Cubic Metres*	*Thousand Cubic Metres*	*Million Barrels*	*Million Barrels*
BC	**104**	**9**	**60**	**2**	**483,051**	**28,653**	**24,895**	**451**	**…**	**…**
AB	**1,589**	**186**	**306**	**52**	**1,138,557**	**125,692**	**107,823**	**16,986**	**15,781**	**443**
SK	**1,228**	**160**	**2**	**1**	**88,621**	**5,745**	**1,130**	**210**	**…**	**…**
MB	**57**	**9**	**…**	**…**	**0**	**…**	**…**	**…**	**…**	**…**
ON	10	1	0	…	19,637	265	…	…	…	…
QC	…	…	0	…	105	…	…	…	…	…
NB	…	…	0	…	…	…	…	…	…	…
Mainland Territories	18	6	16	…	10,089	163	…	…	…	…
Eastcoast Offshore	1,469	126	34	7	14,174	4,335	…	…	…	…
Mackenzie/Beaufort	340	…	…	…	…	…	…	…	…	…
Total Crude Oil	4,815	496	418	63	1,754,234	164,853	133,848	17,647	15,781	443

Numbers may not add due to rounding.

Note: 1 Canadian barrel = 0.15891 cubic metres
Pentanes plus is a crude oil equivalent.

Established reserves are those reserves recoverable under current technology and present and anticipated economic conditions, specifically proved by drilling, testing or production, plus that judgement portion of contiguous recoverable reserves that are interpreted to exist from geological, geophysical or similar information with reasonable certainty.

Marketable natural gas is natural gas which is available to a transmission line after removal of certain hydrocarbons and non-hydrocarbon compounds present in the raw natural gas and which meets specifications for use as a domestic, commercial or industrial fuel. Marketable natural gas excludes field and plant fuel and losses, excepting those related to downstream reprocessing plants.

Liquefied petroleum gases consist primarily of the hydrocarbon components of propane or butanes, or a combination thereof.

Developed bitumen reserves are those recoverable from developed experimental/demonstration and commercial projects. The developed reserves figure is much lower than the undeveloped established reserves figure which is over 170 billion barrels (estimates vary from about 170 billion barrels to 173 billion barrels). If we could squeeze every bit of bitumen out of the oil sands, it is estimated that there is over 2.5 trillion barrels of ultimate volume in place.

Developed synthetic crude oil reserves are those recoverable from developed commercial projects.

Developed bitumen reserves are those recoverable from developed experimental/demonstration and commercial projects.

Source: Canadian Association of Petroleum Producers, Statistical Handbook 2010.

http://www.capp.ca/library/statistics/handbook/pages/statisticalTables.aspx?sectionNo=2#S3vmqRo8CNbC

Using the Canadian Association of Petroleum Producers' (CAPP) definitions and estimates, it is clear that Alberta is Canada's largest oil province in terms of both reserves and production. Alberta has the most crude oil, natural gas and bitumen and produces the most of each on an annual basis. Saskatchewan and Newfoundland (offshore) also have significant crude oil reserves and annual production levels.

In terms of "developed bitumen reserves," Alberta has 15.8 billion barrels in its oil sands (57.9% of which are mineable and 42.1% recoverable in situ). These reserve figures are lower than the estimated 170-173 billion barrels of undeveloped established reserves.

Alberta has the second largest proven oil reserves in the world

FIGURE 123: PROVEN OIL RESERVES (MILLIONS OF BARRELS) – TOP 50 COUNTRIES

Rank	*Country*	*Reserves (000,000s)*
1	Saudi Arabia	266,700
2	**Canada (with Alberta oil sands included)**	**178,100**
3	Iran	137,600
4	Iraq	115,000
5	Kuwait	104,000
6	Venezuela	99,380
7	United Arab Emirates	97,800
8	Russia	79,000
9	Libya	43,660
10	Nigeria	36,220
11	Kazakhstan	30,000
12	Qatar	27,190
13	United States	21,320
14	China	16,000
15	Brazil	12,620
16	Algeria	12,200
17	Mexico	10,500

Rank	*Country*	*Reserves (000,000s)*
18	Angola	9,040
19	Azerbaijan	7,000
20	Sudan	6,800
21	Norway	6,680
22	European Union	5,718
23	India	5,625
24	Oman	5,500
–	**Canada (with Alberta oil sands excluded)**	**5,233**
25	Vietnam	4,700
26	Ecuador	4,660
27	Egypt	4,400
28	Malaysia	4,000
29	Indonesia	3,990
30	United Kingdom	3,410
31	Yemen	3,300
32	Argentina	2,616
33	Syria	2,500

Rank	*Country*	*Reserves (000,000s)*
34	Gabon	2,000
35	Colombia	1,668
36	Congo, Republic of the	1,600
37	Australia	1,500
38	Chad	1,500
39	Brunei	1,100
40	Equatorial Guinea	1,100
41	Denmark	1,060
42	Trinidad and Tobago	728
43	Turkmenistan	700
44	Romania	600
45	Uzbekistan	594
46	Timor-Leste	554
47	Bolivia	465
48	Thailand	441
49	Tunisia	425
50	Peru	416

Note: Proved reserves are those quantities of petroleum which, by analysis of geological and engineering data, can be estimated with a high degree of confidence to be commercially recoverable from a given date forward, from known reservoirs and under current economic conditions.
Source: CIA World Factbook, https://www.cia.gov/library/publications/the-world-factbook/rankorder/2178rank.html, Estimates as Jan 1 2009.

When the Alberta oil sands are included, Canada's oil reserves are second only to Saudi Arabia's. However, if you add up the big players in the Middle East, Canada's reserves are quite small by comparison. If the Alberta oil sands are taken out, Canada drops to 25th on the list.

Canada is a relatively small player when it comes to natural gas reserves

FIGURE 124: PROVEN NATURAL GAS RESERVES – TOP 50 COUNTRIES (MILLIONS OF CUBIC METRES)

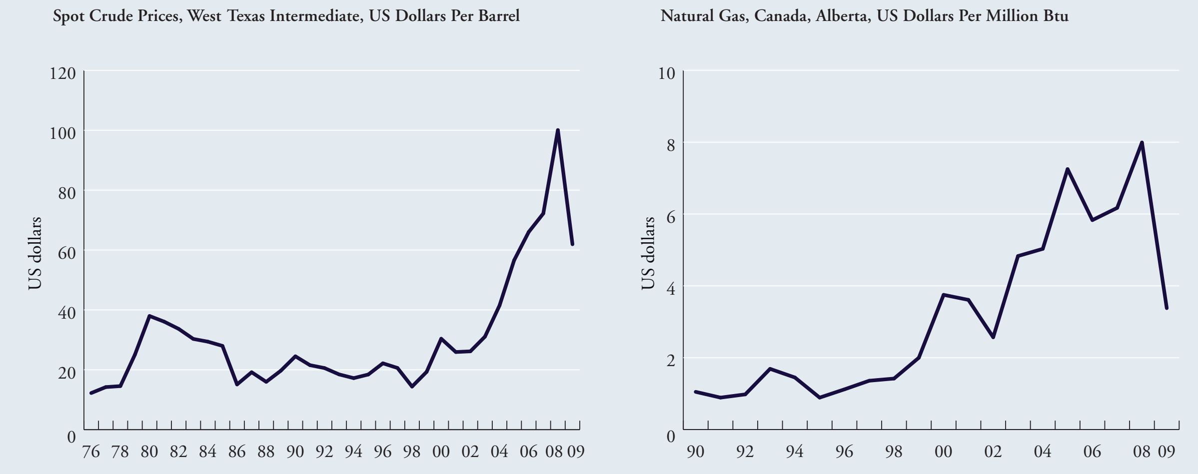
Rank	*Country*	*Reserves (000,000s)*
1	Russia	47,570,000
2	Iran	29,610,000
3	Qatar	25,260,000
4	Turkmenistan	7,940,000
5	Saudi Arabia	7,319,000
6	United States	6,731,000
7	United Arab Emirates	6,071,000
8	Nigeria	5,215,000
9	Venezuela	4,840,000
10	Algeria	4,502,000
11	Iraq	3,170,000
12	Indonesia	3,001,000
13	Kazakhstan	2,407,000
14	Malaysia	2,350,000
15	European Union	2,318,000
16	Norway	2,313,000
17	China	2,265,000
18	Uzbekistan	1,841,000
19	Kuwait	1,794,000
20	Egypt	1,656,000
21	**Canada**	**1,640,000**
22	Libya	1,540,000
23	Netherlands	1,416,000
24	Ukraine	1,104,000
25	India	1,075,000
26	Pakistan	885,300
27	Australia	849,500
28	Azerbaijan	849,500
29	Oman	849,500
30	Bolivia	750,400
31	Vietnam	610,000
32	Trinidad and Tobago	531,500
33	Yemen	478,500
34	Argentina	441,700
35	Brunei	390,800
36	Mexico	372,700
37	Brazil	365,000
38	United Kingdom	342,900
39	Peru	335,300
40	Thailand	317,100
41	Burma	283,200
42	Angola	269,800
43	Syria	240,700
44	Papua New Guinea	226,500
45	Timor-Leste	200,000
46	Germany	175,600
47	Poland	164,800
48	Bangladesh	141,600
49	Cameroon	135,100
50	Mozambique	127,400

Notes: Proved reserves are those quantities of natural gas, which, by analysis of geological and engineering data, can be estimated with a high degree of confidence to be commercially recoverable from a given date forward, from known reservoirs and under current economic conditions. Estimates as Jan 1 2009. The CIA estimate is slightly lower than the estimate reported by the Canadian Association of Petroleum Producers (1,754,234,000,000).
Source: CIA World Factbook, https://www.cia.gov/library/publications/the-world-factbook/rankorder/2179rank.html

About two-thirds of Canada's natural gas reserves are found in Alberta, which would put it 24th on the list of the world's largest natural gas reserves. All in, Canada's natural gas reserves rank of 21st on the list. Luckily, Alberta and Canada are right next door to the world's largest economy and both have done well selling natural gas to the US market using a highly developed pipeline system. It is worth noting, that natural gas royalties are the main source of the Alberta government's natural resource revenue—a fact that is often overlooked while the focus is on oil prices.

Oil and gas prices are very volatile

FIGURE 125: OIL AND GAS PRICES



Source: BP Statistical Review of World Energy, June 2010.

The oil and gas sector is painfully aware of the price fluctuations that complicate the industry. As recently as 2002, a barrel of West Texas Intermediate (the most common benchmark oil price) average just $26.16 a barrel. The rapid rise of the price of oil in 2008 was a windfall for the industry, but created all sorts of problems for end users who had to accommodate cost spikes.

The same is true of natural gas prices. The 2008 average price was just under $8 per million Btu, but only $3.38 in 2009.

Saskatchewan is one of the world's largest suppliers of uranium

FIGURE 126: URANIUM RESERVES AND PRODUCTION – SELECT COUNTRIES

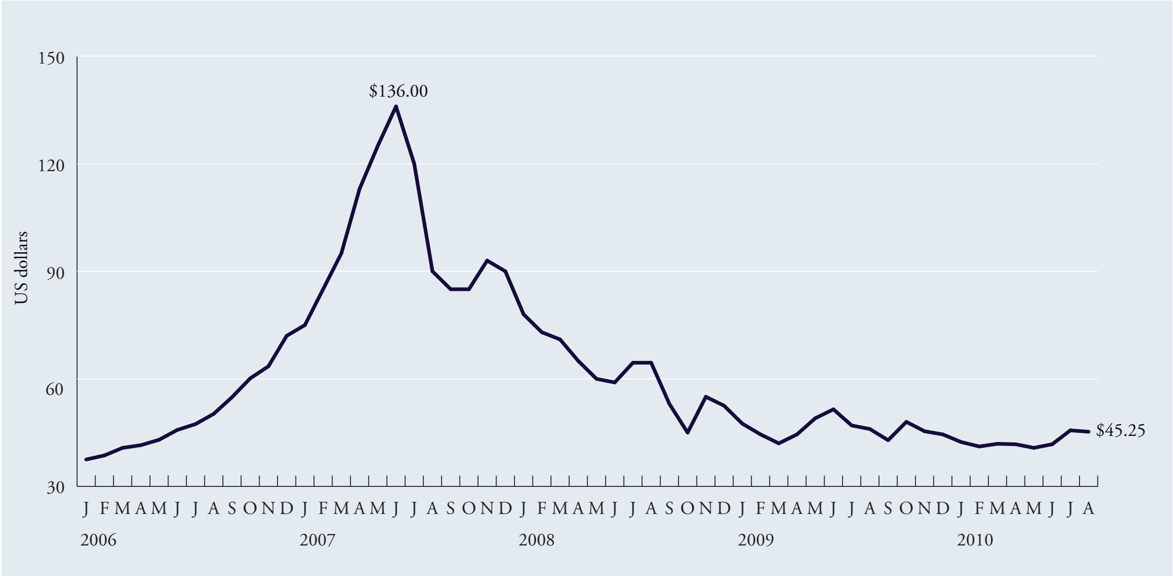
	*Reserves (Tonnes Recoverable at <260 US Dollars Per kg)***	*% of Total Reserves*	*Production 2008 (Tonnes)*	*% of Total Production*
Canada*	**544,700**	**8.6**	**9,000**	**20.5**
Australia	1,679,000	26.6	8,433	19.2
Kazakhstan	832,000	13.2	8,512	19.4
Russian Federation	566,300	9.0	3,521	8.0
United States	472,100	7.5	1,492	3.4
Namibia	284,200	4.5	4,400	10.0
Niger	275,500	4.4	3,032	6.9
Total	6,306,300	100.0	43,880	100.0

*Located and produced in Saskatchewan.
**Identified resources recoverable as of January 1, 2009.
Source: Uranium 2009: *Resources, Production and Demand,* A joint report by the OECD Nuclear Energy Agency and the International Atomic Energy Agency 2010.

Saskatchewan is home to major deposits of uranium. As of January 2009, the province had 8.6% of the world's recoverable uranium reserves. More important in the short-term, Saskatchewan accounted for 20.5% of global production in 2009, just ahead of Kazakhstan and Australia.

Like most commodities, uranium is subject to wild price swings

FIGURE 127: URANIUM SPOT PRICES (US DOLLARS PER POUND)



Source: Ux Consulting Company via http://www.cameco.com/marketing/uranium_prices_and_spot_price/spot_price_5yr_history/

Saskatchewan's uranium industry must, like oil and gas producers, deal with extreme price volatility. Uranium was selling for $37.50 in January 2006, $136.00 in June 2007 and was back down to $45.25 as of August 2010. Can you imagine the planning problems caused for a car manufacturer if car prices were as volatile as uranium prices? If this was the case, a car that sold for $10,000 in 2006 would have sold for $36,267 in 2007 and then $12,066 in 2010?

Saskatchewan has the largest reserve of potash in the world

FIGURE 128: MARKETABLE POTASH, WORLD PRODUCTION AND RESERVES BY COUNTRY (METRIC TONS OF K2O EQUIVALENT)

	Thousands							
	2004	*2005*	*2006*	*2007*	*2008*	*% of Global Production in 2008*	*Reserves*	*% of Global Reserve Total*
Belarus	4,600	4,844	4,605	4,972	4,968	14.3	750,000	8.8
Brazil	403	405	403	471	471	1.4	300,000	3.5
Canada (SK)	**10,100**	**10,140**	**8,518**	**11,085**	**10,455**	**30.1**	**4,400,000**	**51.8**
Chile	559	547	496	515	559	1.6	10,000	0.1
China	770	1,500	1,800	2,600	2,750	7.9	200,000	2.4
Germany	3,627	3,664	3,625	3,637	3,280	9.5	710,000	8.4
Israel	2,138	2,224	2,187	2,182	2,300	6.6	40,000	0.5
Jordan	1,180	1,115	1,036	1,096	1,223	3.5	40,000	0.5
Russia	6,405	7,131	6,610	7,275	6,730	19.4	1,800,000	21.2
Spain	590	575	435	435	435	1.3	20,000	0.2
Ukraine	10	13	8	12	11	0.0	25,000	0.3
United Kingdom	547	439	420	427	427	1.2	22,000	0.3
United States	1,200	1,200	1,100	1,100	1,100	3.2	90,000	1.1
Other Countries	…	…	…	…	…		50,000	0.6
Total	32,200	33,800	31,200	35,800	34,700	100.0	8,500,000	100.0

Source: United States Geological Survey, http://minerals.usgs.gov/minerals/pubs/commodity/potash/

Potash is shorthand for various compounds that contain potassium. Potash is a key ingredient in fertilizer and is a major reason that agriculture is able to feed a global population of almost 7 billion people. Saskatchewan has the good fortune to be the location of massive potash deposits (51.8% of global reserves). The US Geological Survey estimates that Saskatchewan has about 4.4 billion metric tons of recoverable potash.

Saskatchewan is also the world's largest potash producer, accounting for 30.1% of global production in 2008-most of which is exported to the US and China. Potash prices have been on a rollercoaster the last few years. Prices were under 200 US$ per tonne for most of the 2000s but then spiked to over 800 US$ only to drop back to the mid-300 US$ range in 2010 (Scotiabank Commodity Price Index).

Virtually all of Canada's coal is mined in BC, Alberta and Saskatchewan

FIGURE 129: COAL PRODUCTION BY PROVINCE 2008 (PRELIMINARY ESTIMATES)

	(000 Tonnes)	*% of National Production*
BC	26,590	39.0
AB	31,535	46.3
SK	9,921	14.6
NB	x	limited amount
NS	x	limited amount
Total	68,106	100.0

Source: Minerals and Mining Statistics Division, Natural Resources Canada, Statistical Report.

Coal is a plentiful fossil fuel around the world. In Canada, most of the coal, and virtually all of the current production, is found in Saskatchewan, Alberta and BC. Alberta is the largest coal producer (46.3% of the total in 2008 followed by BC at 39.0%).

Over half of the coal mined each year is used to generate electricity in Alberta, Saskatchewan, Nova Scotia, New Brunswick, Ontario and a very small amount in Manitoba.

APPENDIX

Nominal and Real GDP

FIGURE A.1: NOMINAL GROSS DOMESTIC PRODUCT BY PROVINCE 1981-2008 (MILLIONS)

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NL	WEST	ROC*	CANADA
1981	44,869	53,391	14,776	13,625	131,064	80,494	6,346	7,970	1,067	5,154	126,661	232,095	360,471
1982	45,024	56,803	15,008	14,053	138,741	85,218	7,052	9,186	1,153	5,609	130,888	246,959	379,859
1983	47,477	58,397	15,969	15,106	154,682	91,832	8,046	10,364	1,356	5,988	136,949	272,268	411,386
1984	49,840	62,282	17,031	16,998	172,842	100,292	8,818	11,437	1,389	6,373	146,151	301,151	449,582
1985	53,540	66,785	17,926	18,536	189,125	107,391	9,373	12,393	1,445	6,647	156,787	326,374	485,714
1986	56,547	57,961	17,772	19,260	208,460	117,156	10,462	13,403	1,630	7,244	151,540	358,355	512,541
1987	62,515	60,070	18,195	20,385	230,778	128,438	11,572	14,432	1,737	7,763	161,165	394,720	558,949
1988	69,408	63,936	18,850	22,016	256,441	140,845	12,438	15,294	1,911	8,467	174,210	435,396	613,094
1989	75,582	67,377	19,977	23,370	278,791	148,431	13,128	16,306	2,059	8,995	186,306	467,710	657,728
1990	79,350	73,257	21,227	24,193	282,834	153,330	13,458	16,993	2,169	9,219	198,027	478,003	679,921
1991	81,849	72,892	21,393	24,029	283,094	155,156	13,647	17,650	2,255	9,587	200,163	481,389	685,367
1992	87,242	74,936	21,220	24,434	286,493	158,362	14,038	18,094	2,345	9,549	207,832	488,881	700,480
1993	94,077	81,179	22,928	24,590	293,405	162,229	14,693	18,343	2,471	9,771	222,774	500,912	727,184
1994	100,512	88,041	24,480	25,958	311,096	170,478	15,286	18,667	2,521	10,264	238,991	528,312	770,873
1995	105,670	92,036	26,425	26,966	329,317	177,331	16,380	19,296	2,662	10,652	251,097	555,638	810,426
1996	108,865	98,634	28,944	28,434	338,173	180,526	16,626	19,512	2,823	10,417	264,877	568,077	836,864
1997	114,383	107,048	29,157	29,751	359,353	188,424	16,845	20,368	2,800	10,533	280,339	598,323	882,733
1998	115,641	107,439	29,550	30,972	377,897	196,258	17,633	21,401	2,981	11,176	283,602	627,346	914,973
1999	120,921	117,080	30,778	31,966	409,020	210,809	19,041	23,059	3,159	12,184	300,745	677,272	982,441
2000	131,333	144,789	33,828	34,057	440,759	224,928	20,085	24,658	3,366	13,922	344,007	727,718	1,076,577
2001	133,514	151,274	33,127	35,157	453,701	231,624	20,684	25,909	3,431	14,179	353,072	749,528	1,108,048
2002	138,193	150,594	34,343	36,559	477,763	241,448	21,169	27,082	3,701	16,457	359,689	787,620	1,152,905
2003	145,642	170,113	36,653	37,451	493,081	250,752	22,366	28,851	3,798	18,119	389,859	816,967	1,213,175
2004	157,675	189,743	40,796	39,748	516,106	262,761	23,672	29,853	3,983	19,407	427,962	855,782	1,290,906
2005	169,664	219,810	43,996	41,681	537,383	272,049	24,716	31,199	4,096	21,960	475,151	891,403	1,373,845
2006	182,310	238,410	45,498	45,029	560,286	282,220	25,884	31,743	4,249	26,052	511,247	930,434	1,449,215
2007	191,598	256,915	50,811	48,718	585,723	297,384	26,993	32,933	4,490	29,226	548,042	976,749	1,532,944
2008	197,931	291,256	63,509	50,834	587,827	302,225	27,372	34,188	4,624	31,277	603,530	987,513	1,600,081
latest 5-year average	179,836	239,227	48,922	45,202	557,465	283,328	25,727	31,983	4,288	25,584	513,186	928,376	1,449,398

Source: Statistics Canada Cansim Table 384-0002 and author's calculations.

*ROC not including the territories or outside Canada.

FIGURE A.2: REAL GROSS DOMESTIC PRODUCT BY PROVINCE 1981-2008 (MILLIONS OF CHAINED 2002 DOLLARS)

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NL	WEST	ROC*	CANADA
1981	84,482	81,989	23,389	24,629	251,445	155,209	12,102	15,975	2,112	9,365	214,489	446,208	647,323
1982	79,324	79,381	22,953	23,981	244,652	149,611	12,330	16,571	2,131	9,458	205,639	434,753	628,816
1983	79,824	78,445	23,616	24,152	255,630	152,399	13,192	16,982	2,333	9,755	206,037	450,291	645,906
1984	80,440	81,781	24,099	26,144	275,906	158,970	13,471	18,043	2,386	10,024	212,464	478,800	683,462
1985	86,026	88,332	24,729	27,835	287,400	164,089	13,883	18,920	2,378	10,161	226,922	496,831	716,132
1986	86,187	86,340	26,144	27,897	299,125	167,354	14,841	19,300	2,481	10,168	226,568	513,269	733,468
1987	91,503	88,135	26,259	28,316	314,100	174,585	15,624	19,935	2,518	10,517	234,213	537,279	764,664
1988	96,824	95,173	25,362	28,167	330,988	182,548	15,717	20,175	2,600	11,172	245,526	563,200	802,702
1989	100,007	96,522	25,977	28,916	342,136	183,638	15,864	20,633	2,670	11,648	251,422	576,589	823,728
1990	101,408	98,683	27,793	29,629	336,227	184,297	15,772	20,576	2,687	11,662	257,513	571,221	825,318
1991	101,593	99,169	28,098	28,634	323,008	179,324	15,771	20,400	2,680	11,715	257,494	552,898	808,051
1992	104,216	100,085	27,020	28,933	325,941	180,068	16,027	20,687	2,753	11,541	260,254	557,017	815,123
1993	108,874	107,266	28,797	29,038	329,057	183,659	16,488	20,885	2,785	11,635	273,975	564,509	834,185
1994	111,945	113,942	30,047	30,171	348,503	191,774	16,837	20,972	2,922	12,137	286,105	593,145	874,261
1995	114,620	117,518	30,382	30,253	360,789	195,009	17,384	21,323	3,108	12,411	292,773	610,024	898,814
1996	117,442	119,905	31,267	31,182	364,762	196,932	17,509	21,454	3,201	11,835	299,796	615,693	913,364
1997	121,177	128,018	32,486	32,343	381,235	203,253	17,712	22,376	3,213	11,979	314,024	639,768	951,962
1998	122,766	134,750	33,868	33,716	399,655	209,715	18,361	23,210	3,360	12,631	325,100	666,932	990,968
1999	126,708	136,603	33,936	34,248	429,697	222,716	19,508	24,482	3,502	13,323	331,495	713,228	1,045,786
2000	132,578	144,886	34,820	35,708	455,234	232,378	19,917	25,234	3,570	14,013	347,992	750,346	1,100,515
2001	133,403	147,394	34,487	35,996	463,357	235,832	20,248	26,036	3,532	14,233	351,280	763,238	1,120,146
2002	138,193	150,594	34,343	36,559	477,763	241,448	21,169	27,082	3,701	16,457	359,689	787,620	1,152,905
2003	141,435	155,359	35,921	37,059	484,341	244,422	21,765	27,464	3,778	17,419	369,774	799,189	1,174,592
2004	146,541	163,564	37,741	37,861	496,780	251,028	22,366	27,710	3,877	17,209	385,707	818,970	1,211,239
2005	153,489	170,872	38,904	38,860	510,509	255,559	22,638	28,016	3,921	17,593	402,125	838,236	1,247,807
2006	159,916	181,418	38,520	40,158	522,845	259,853	23,254	28,254	4,026	18,201	420,012	856,433	1,283,419
2007	164,519	185,870	39,896	41,593	534,880	267,033	23,356	28,598	4,126	19,856	431,878	877,849	1,315,907
2008	164,520	185,780	41,583	42,407	532,209	269,665	23,351	29,215	4,148	19,953	434,290	878,541	1,321,360
latest 5-year average	157,797	177,501	39,329	40,176	519,445	260,628	22,993	28,359	4,020	18,562	414,802	854,006	1,275,946

Source: Statistics Canada Cansim Table 384-0002 and author's calculations.
*ROC not including the territories or outside Canada.

FIGURE A.3: NOMINAL GROSS DOMESTIC PRODUCT AS A PERCENTAGE OF THE NATIONAL TOTAL 1981-2008

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NL	YK	NT*	NU	NT	NU	WEST	ROC	OUTSIDE CANADA
1981	12.4	14.8	4.1	3.8	36.4	22.3	1.8	2.2	0.3	1.4	0.1	0.3				**35.1**	64.8	0.1
1982	11.9	15.0	4.0	3.7	36.5	22.4	1.9	2.4	0.3	1.5	0.1	0.3				**34.5**	65.5	0.1
1983	11.5	14.2	3.9	3.7	37.6	22.3	2.0	2.5	0.3	1.5	0.1	0.3				**33.3**	66.6	0.1
1984	11.1	13.9	3.8	3.8	38.4	22.3	2.0	2.5	0.3	1.4	0.1	0.3				**32.5**	67.4	0.1
1985	11.0	13.7	3.7	3.8	38.9	22.1	1.9	2.6	0.3	1.4	0.1	0.3				**32.3**	67.6	0.1
1986	11.0	11.3	3.5	3.8	40.7	22.9	2.0	2.6	0.3	1.4	0.1	0.3				**29.6**	70.3	0.1
1987	11.2	10.7	3.3	3.6	41.3	23.0	2.1	2.6	0.3	1.4	0.2	0.3				**28.8**	71.1	0.1
1988	11.3	10.4	3.1	3.6	41.8	23.0	2.0	2.5	0.3	1.4	0.2	0.3				**28.4**	71.5	0.1
1989	11.5	10.2	3.0	3.6	42.4	22.6	2.0	2.5	0.3	1.4	0.2	0.3				**28.3**	71.6	0.1
1990	11.7	10.8	3.1	3.6	41.6	22.6	2.0	2.5	0.3	1.4	0.2	0.3				**29.1**	70.8	0.1
1991	11.9	10.6	3.1	3.5	41.3	22.6	2.0	2.6	0.3	1.4	0.1	0.3				**29.2**	70.7	0.1
1992	12.5	10.7	3.0	3.5	40.9	22.6	2.0	2.6	0.3	1.4	0.2	0.3				**29.7**	70.3	0.1
1993	12.9	11.2	3.2	3.4	40.3	22.3	2.0	2.5	0.3	1.3	0.1	0.3				**30.6**	69.3	0.0
1994	13.0	11.4	3.2	3.4	40.4	22.1	2.0	2.4	0.3	1.3	0.1	0.3				**31**	69	0.0
1995	13.0	11.4	3.3	3.3	40.6	21.9	2.0	2.4	0.3	1.3	0.1	0.3				**31**	69	0.0
1996	13.0	11.8	3.5	3.4	40.4	21.6	2.0	2.3	0.3	1.2	0.1	0.3				**31.7**	68.3	0.0
1997	13.0	12.1	3.3	3.4	40.7	21.3	1.9	2.3	0.3	1.2	0.1	0.3				**31.8**	68.2	0.0
1998	12.6	11.7	3.2	3.4	41.3	21.4	1.9	2.3	0.3	1.2	0.1	0.3				**31**	69	0.0
1999	12.3	11.9	3.1	3.3	41.6	21.5	1.9	2.3	0.3	1.2	0.1			0.2	0.1	**30.6**	69.4	0.0
2000	12.2	13.4	3.1	3.2	40.9	20.9	1.9	2.3	0.3	1.3	0.1			0.2	0.1	**32**	68	0.0
2001	12.0	13.7	3.0	3.2	40.9	20.9	1.9	2.3	0.3	1.3	0.1			0.3	0.1	**31.9**	68.1	0.0
2002	12.0	13.1	3.0	3.2	41.4	20.9	1.8	2.3	0.3	1.4	0.1			0.3	0.1	**31.2**	68.8	0.0
2003	12.0	14.0	3.0	3.1	40.6	20.7	1.8	2.4	0.3	1.5	0.1			0.3	0.1	**32.1**	67.8	0.0
2004	12.2	14.7	3.2	3.1	40.0	20.4	1.8	2.3	0.3	1.5	0.1			0.3	0.1	**33.2**	66.8	0.0
2005	12.3	16.0	3.2	3.0	39.1	19.8	1.8	2.3	0.3	1.6	0.1			0.3	0.1	**34.6**	65.4	0.0
2006	12.6	16.5	3.1	3.1	38.7	19.5	1.8	2.2	0.3	1.8	0.1			0.3	0.1	**35.3**	64.7	0.0
2007	12.5	16.8	3.3	3.2	38.2	19.4	1.8	2.1	0.3	1.9	0.1			0.3	0.1	**35.8**	64.2	0.0
2008	12.4	18.2	4.0	3.2	36.7	18.9	1.7	2.1	0.3	2.0	0.1			0.3	0.1	**37.7**	62.3	0.0
latest 5-year average	12.4	16.5	3.4	3.1	38.5	19.5	1.8	2.2	0.3	1.8	0.1			0.3	0.1	**35.4**	64.6	0

Source: Statistics Canada Cansim Table 384-0002 and author's calculations.
*NT including NU

FIGURE A.4: REAL GROSS DOMESTIC PRODUCT AS A PERCENTAGE OF THE NATIONAL TOTAL 1981-2008 (CHAINED 2002 DOLLARS)

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NL	WEST	ROC*	
1981	13.1	12.7	3.6	3.8	38.8	24.0	1.9	2.5	0.3	1.4	33.1	68.9	100
1982	12.6	12.6	3.7	3.8	38.9	23.8	2.0	2.6	0.3	1.5	32.7	69.1	100
1983	12.4	12.1	3.7	3.7	39.6	23.6	2.0	2.6	0.4	1.5	31.9	69.7	100
1984	11.8	12.0	3.5	3.8	40.4	23.3	2.0	2.6	0.3	1.5	31.1	70.1	100
1985	12.0	12.3	3.5	3.9	40.1	22.9	1.9	2.6	0.3	1.4	31.7	69.4	100
1986	11.8	11.8	3.6	3.8	40.8	22.8	2.0	2.6	0.3	1.4	30.9	70.0	100
1987	12.0	11.5	3.4	3.7	41.1	22.8	2.0	2.6	0.3	1.4	30.6	70.3	100
1988	12.1	11.9	3.2	3.5	41.2	22.7	2.0	2.5	0.3	1.4	30.6	70.2	100
1989	12.1	11.7	3.2	3.5	41.5	22.3	1.9	2.5	0.3	1.4	30.5	70.0	100
1990	12.3	12.0	3.4	3.6	40.7	22.3	1.9	2.5	0.3	1.4	31.2	69.2	100
1991	12.6	12.3	3.5	3.5	40.0	22.2	2.0	2.5	0.3	1.4	31.9	68.4	100
1992	12.8	12.3	3.3	3.5	40.0	22.1	2.0	2.5	0.3	1.4	31.9	68.3	100
1993	13.1	12.9	3.5	3.5	39.4	22.0	2.0	2.5	0.3	1.4	32.8	67.7	100
1994	12.8	13.0	3.4	3.5	39.9	21.9	1.9	2.4	0.3	1.4	32.7	67.8	100
1995	12.8	13.1	3.4	3.4	40.1	21.7	1.9	2.4	0.3	1.4	32.6	67.9	100
1996	12.9	13.1	3.4	3.4	39.9	21.6	1.9	2.3	0.4	1.3	32.8	67.4	100
1997	12.7	13.4	3.4	3.4	40.0	21.4	1.9	2.4	0.3	1.3	33.0	67.2	100
1998	12.4	13.6	3.4	3.4	40.3	21.2	1.9	2.3	0.3	1.3	32.8	67.3	100
1999	12.1	13.1	3.2	3.3	41.1	21.3	1.9	2.3	0.3	1.3	31.7	68.2	100
2000	12.0	13.2	3.2	3.2	41.4	21.1	1.8	2.3	0.3	1.3	31.6	68.2	100
2001	11.9	13.2	3.1	3.2	41.4	21.1	1.8	2.3	0.3	1.3	31.4	68.1	100
2002	12.0	13.1	3.0	3.2	41.4	20.9	1.8	2.3	0.3	1.4	31.2	68.3	100
2003	12.0	13.2	3.1	3.2	41.2	20.8	1.9	2.3	0.3	1.5	31.5	68.0	100
2004	12.1	13.5	3.1	3.1	41.0	20.7	1.8	2.3	0.3	1.4	31.8	67.6	100
2005	12.3	13.7	3.1	3.1	40.9	20.5	1.8	2.2	0.3	1.4	32.2	67.2	100
2006	12.5	14.1	3.0	3.1	40.7	20.2	1.8	2.2	0.3	1.4	32.7	66.7	100
2007	12.5	14.1	3.0	3.2	40.6	20.3	1.8	2.2	0.3	1.5	32.8	66.7	100
2008	12.5	14.1	3.1	3.2	40.3	20.4	1.8	2.2	0.3	1.5	32.9	66.5	100
latest 5-year average	12.4	13.9	3.1	3.1	40.7	20.4	1.8	2.2	0.3	1.5	32.5	66.9	100

Source: Statistics Canada Cansim Table 384-0002 and author's calculations.
*ROC not including the territories or outside Canada.

figure a.5: nominal gross domestic product as a percentage of the regional total 2008 and five-year average (millions)

	BC $	BC % of west	AB $	AB % of west	SK $	SK % of west	MB $	MB % of west	WEST $	WEST % of west
1981	44,869	35.4	53,391	42.2	14,776	11.7	13,625	10.8	126,661	100
1982	45,024	34.4	56,803	43.4	15,008	11.5	14,053	10.7	130,888	100
1983	47,477	34.7	58,397	42.6	15,969	11.7	15,106	11.0	136,949	100
1984	49,840	34.1	62,282	42.6	17,031	11.7	16,998	11.6	146,151	100
1985	53,540	34.1	66,785	42.6	17,926	11.4	18,536	11.8	156,787	100
1986	56,547	37.3	57,961	38.2	17,772	11.7	19,260	12.7	151,540	100
1987	62,515	38.8	60,070	37.3	18,195	11.3	20,385	12.6	161,165	100
1988	69,408	39.8	63,936	36.7	18,850	10.8	22,016	12.6	174,210	100
1989	75,582	40.6	67,377	36.2	19,977	10.7	23,370	12.5	186,306	100
1990	79,350	40.1	73,257	37.0	21,227	10.7	24,193	12.2	198,027	100
1991	81,849	40.9	72,892	36.4	21,393	10.7	24,029	12.0	200,163	100
1992	87,242	42.0	74,936	36.1	21,220	10.2	24,434	11.8	207,832	100
1993	94,077	42.2	81,179	36.4	22,928	10.3	24,590	11.0	222,774	100
1994	100,512	42.1	88,041	36.8	24,480	10.2	25,958	10.9	238,991	100
1995	105,670	42.1	92,036	36.7	26,425	10.5	26,966	10.7	251,097	100
1996	108,865	41.1	98,634	37.2	28,944	10.9	28,434	10.7	264,877	100
1997	114,383	40.8	107,048	38.2	29,157	10.4	29,751	10.6	280,339	100
1998	115,641	40.8	107,439	37.9	29,550	10.4	30,972	10.9	283,602	100
1999	120,921	40.2	117,080	38.9	30,778	10.2	31,966	10.6	300,745	100
2000	131,333	38.2	144,789	42.1	33,828	9.8	34,057	9.9	344,007	100
2001	133,514	37.8	151,274	42.8	33,127	9.4	35,157	10.0	353,072	100
2002	138,193	38.4	150,594	41.9	34,343	9.5	36,559	10.2	359,689	100
2003	145,642	37.4	170,113	43.6	36,653	9.4	37,451	9.6	389,859	100
2004	157,675	36.8	189,743	44.3	40,796	9.5	39,748	9.3	427,962	100
2005	169,664	35.7	219,810	46.3	43,996	9.3	41,681	8.8	475,151	100
2006	182,310	35.7	238,410	46.6	45,498	8.9	45,029	8.8	511,247	100
2007	191,598	35.0	256,915	46.9	50,811	9.3	48,718	8.9	548,042	100
2008	197,931	32.8	291,256	48.3	63,509	10.5	50,834	8.4	603,530	100
latest 5-year average	179,836	**35.0**	239,227	**46.6**	48,922	**9.5**	45,202	**8.8**	513,186	**100**

Source: Statistics Canada Cansim Table 384-0002 and author's calculations.

FIGURE A.6: REAL GROSS DOMESTIC PRODUCT AS A PERCENTAGE OF THE REGIONAL TOTAL 2008 AND FIVE-YEAR AVERAGE (MILLIONS OF CHAINED 2002 DOLLARS)

	BC		AB		SK		MB		WEST	
	#	% OF WEST	#	% OF WEST	#	% OF WEST	#	% OF WEST	#	% OF WEST
1981	84,482	39.4	81,989	38.2	23,389	10.9	24,629	11.5	214,489	100.0
1982	79,324	38.6	79,381	38.6	22,953	11.2	23,981	11.7	205,639	100.0
1983	79,824	38.7	78,445	38.1	23,616	11.5	24,152	11.7	206,037	100.0
1984	80,440	37.9	81,781	38.5	24,099	11.3	26,144	12.3	212,464	100.0
1985	86,026	37.9	88,332	38.9	24,729	10.9	27,835	12.3	226,922	100.0
1986	86,187	38.0	86,340	38.1	26,144	11.5	27,897	12.3	226,568	100.0
1987	91,503	39.1	88,135	37.6	26,259	11.2	28,316	12.1	234,213	100.0
1988	96,824	39.4	95,173	38.8	25,362	10.3	28,167	11.5	245,526	100.0
1989	100,007	39.8	96,522	38.4	25,977	10.3	28,916	11.5	251,422	100.0
1990	101,408	39.4	98,683	38.3	27,793	10.8	29,629	11.5	257,513	100.0
1991	101,593	39.5	99,169	38.5	28,098	10.9	28,634	11.1	257,494	100.0
1992	104,216	40.0	100,085	38.5	27,020	10.4	28,933	11.1	260,254	100.0
1993	108,874	39.7	107,266	39.2	28,797	10.5	29,038	10.6	273,975	100.0
1994	111,945	39.1	113,942	39.8	30,047	10.5	30,171	10.5	286,105	100.0
1995	114,620	39.1	117,518	40.1	30,382	10.4	30,253	10.3	292,773	100.0
1996	117,442	39.2	119,905	40.0	31,267	10.4	31,182	10.4	299,796	100.0
1997	121,177	38.6	128,018	40.8	32,486	10.3	32,343	10.3	314,024	100.0
1998	122,766	37.8	134,750	41.4	33,868	10.4	33,716	10.4	325,100	100.0
1999	126,708	38.2	136,603	41.2	33,936	10.2	34,248	10.3	331,495	100.0
2000	132,578	38.1	144,886	41.6	34,820	10.0	35,708	10.3	347,992	100.0
2001	133,403	38.0	147,394	42.0	34,487	9.8	35,996	10.2	351,280	100.0
2002	138,193	38.4	150,594	41.9	34,343	9.5	36,559	10.2	359,689	100.0
2003	141,435	38.2	155,359	42.0	35,921	9.7	37,059	10.0	369,774	100.0
2004	146,541	38.0	163,564	42.4	37,741	9.8	37,861	9.8	385,707	100.0
2005	153,489	38.2	170,872	42.5	38,904	9.7	38,860	9.7	402,125	100.0
2006	159,916	38.1	181,418	43.2	38,520	9.2	40,158	9.6	420,012	100.0
2007	164,519	38.1	185,870	43.0	39,896	9.2	41,593	9.6	431,878	100.0
2008	164,520	37.9	185,780	42.8	41,583	9.6	42,407	9.8	434,290	100.0
latest 5-year average	**157,797**	**38.0**	**177,501**	**42.8**	**39,329**	**9.5**	**40,176**	**9.7**	**414,802**	**100.0**

Source: Statistics Canada Cansim Table 384-0002 and author's calculations.

FIGURE A.7: NOMINAL GDP PER CAPITA 2008 AND FIVE-YEAR AVERAGE

YEAR	BC	AB	SK	MB	ON	QC	NB	NS	PE	NL	WEST	ROC*	CANADA
2008	45,150	80,997	62,656	42,147	45,440	38,979	36,635	36,503	33,159	61,758	59,173	42,899	48,011
Five-year average (2004-2008)	42,189	69,710	48,900	38,045	44,000	37,079	34,437	34,115	31,015	50,141	51,921	40,995	44,414

FIGURE A.8: REAL GDP PER CAPITA 2008 (CHAINED 2002 DOLLARS)

YEAR	BC	AB	SK	MB	ON	QC	NB	NS	PE	NL	WEST	ROC*	CANADA
2008	37,529	51,665	41,024	35,160	41,141	34,780	31,254	31,193	29,745	39,398	42,580	38,165	39,648
Five-year average (2004-2008)	37,046	51,905	39,347	33,831	41,014	34,117	30,776	30,248	29,074	36,345	42,039	37,723	39,125

Source: Statistics Canada Cansim Tables 051-0001 and 384-0002 and author's calculations.
*ROC not including the territories or outside Canada.

FIGURE A.9: NOMINAL GDP BY INDUSTRY (NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM) 2006 ($ MILLIONS)

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NL	WEST	ROC*
All industries	167,340	230,098	43,121	41,878	519,417	263,433	23,711	28,914	3,836	24,416	482,437	863,728
Agriculture, forestry, fishing and hunting	4,388	3,087	1,904	1,509	4,570	4,478	804	721	297	347	10,888	11,217
Mining and oil and gas extraction	10,783	71,116	10,549	1,979	6,216	2,483	865	1,390	0	9,393	94,427	20,347
Utilities	2,792	4,590	971	1,603	10,667	10,431	814	620	54	649	9,956	23,234
Construction	12,140	20,618	2,703	1,991	29,856	15,003	1,546	1,730	231	902	37,452	49,268
Manufacturing	15,796	16,520	2,692	5,354	88,271	48,019	2,988	2,662	331	942	40,362	143,213
Goods-producing industries	45,898	115,931	18,819	12,437	139,580	80,414	7,017	7,122	913	12,233	193,085	247,280
Wholesale trade	7,647	10,286	2,364	2,501	33,781	14,750	1,341	1,294	122	559	22,798	51,848
Retail trade	10,328	9,396	2,113	2,660	29,052	16,680	1,532	2,004	277	988	24,496	50,533
Transportation and warehousing	10,469	11,241	2,485	2,664	21,587	11,431	1,130	1,116	108	614	26,860	35,987
Information and cultural industries	6,141	5,576	1,017	1,340	21,572	10,094	774	1,025	130	539	14,074	34,134
Finance and insurance, real estate and renting and leasing and management of companies and enterprises	35,902	29,469	5,968	7,417	113,695	44,654	3,871	5,630	709	2,209	78,756	170,769
Professional, scientific and technical services	7,725	10,105	821	1,178	29,262	11,683	666	936	93	490	19,828	43,130
Administrative and support, waste management and remediation services	3,808	4,187	477	749	15,961	7,333	577	658	78	214	9,220	24,821
Educational services	8,194	7,239	2,071	2,217	24,975	13,449	1,365	1,732	262	2,954	19,721	44,739
Health care and social assistance	10,970	8,828	2,642	3,380	32,938	19,844	1,890	2,573	366	1,437	25,820	59,048
Arts, entertainment and recreation	2,012	1,311	344	380	5,060	2,814	137	203	39	59	4,047	8,312
Accommodation and food services	4,895	4,355	783	876	10,707	6,187	523	709	130	332	10,909	18,589
Other services (except public administration)	4,954	4,836	1,013	1,173	13,075	7,029	602	764	103	375	11,976	21,949
Public administration	8,399	7,339	2,203	2,907	28,171	17,069	2,287	3,148	503	1,412	20,848	52,590
Services-producing industries	121,442	114,167	24,302	29,441	379,837	183,019	16,695	21,792	2,923	12,183	289,353	616,449

Note: GDP for "all industries" does not exactly match total GDP in other charts due to methodological differences. 2006 is the most recent year for which current dollar GDP by industry data were available at the time of writing.
*ROC not including the territories or outside Canada.
Source: Statistics Canada Cansim Table 379-0025 and author's calculations.

FIGURE A.10: REAL GDP BY INDUSTRY (NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM) 2006 AND 2009 (MILLIONS OF CHAINED 2002 DOLLARS) P.1

PROVINCE	BC		AB		SK		MB		ON		QC	
DATE	2006	2009	2006	2009	2006	2009	2006	2009	2006	2009	2006	2009
All industries	**147,120**	**148,101**	**175,172**	**170,547**	**36,500**	**36,927**	**36,938**	**39,036**	**481,225**	**476,002**	**239,668**	**246,908**
Agriculture, forestry, fishing and hunting	4,827	3,517	5,184	4,484	3,791	4,476	1,808	1,907	5,382	4,849	4,636	4,181
Mining and oil and gas extraction	4,619	4,170	35,545	32,493	5,521	4,575	670	620	2,682	2,106	969	1,064
Utilities	2,891	2,861	3,465	3,598	899	866	1,555	1,507	9,933	9,372	9,506	9,597
Construction	9,069	9,053	15,504	12,331	2,078	2,456	1,623	2,075	24,341	23,778	12,604	15,117
Manufacturing	15,851	12,183	16,276	13,292	2,689	2,844	4,519	4,332	93,360	71,404	45,688	39,816
Goods-producing industries	**37,257**	**31,785**	**75,973**	**66,198**	**14,977**	**15,216**	**10,175**	**10,440**	**135,697**	**111,509**	**73,404**	**69,775**
Wholesale trade	6,936	6,628	9,215	8,943	1,994	2,077	2,295	2,458	30,100	29,291	13,199	13,282
Retail trade	9,530	9,898	8,478	8,758	1,928	2,393	2,423	2,891	26,830	28,278	15,417	17,056
Transportation and warehousing	9,530	9,195	9,811	9,625	2,300	2,306	2,639	2,652	19,063	18,353	10,554	10,473
Information and cultural industries	5,537	5,795	4,807	5,138	938	1,011	1,206	1,249	19,543	20,053	9,447	9,850
Finance and insurance, real estate and renting and leasing and management of companies and enterprises	33,230	36,484	27,105	30,074	5,565	6,078	6,862	7,387	105,712	113,745	41,000	44,391
Professional, scientific and technical service	7,016	7,382	8,795	9,303	723	790	1,000	1,092	26,791	28,330	10,695	11,382
Administrative and support, waste management and remediation services	3,258	3,438	3,475	3,589	429	452	661	661	14,235	13,905	6,353	6,423
Educational services	7,418	8,096	6,508	7,182	1,856	2,041	1,945	2,120	22,509	24,216	12,201	13,176
Health care and social assistance	9,460	10,136	7,559	8,879	2,284	2,429	2,942	3,129	28,937	31,273	17,552	18,907
Arts, entertainment and recreation	1,701	1,799	1,116	1,171	275	304	331	345	4,554	4,605	2,508	2,520
Accommodation and food services	4,368	4,433	3,838	3,877	695	775	771	797	9,420	9,458	5,432	5,605
Other services (except public administration)	4,415	4,585	4,360	4,697	919	997	1,047	1,138	11,670	12,349	6,354	6,547
Public administration	7,474	8,156	6,350	7,071	1,949	2,047	2,617	2,735	25,265	27,124	15,637	16,771
Services-producing industries	**109,873**	**116,025**	**101,416**	**108,305**	**21,855**	**23,701**	**26,740**	**28,654**	**344,627**	**360,980**	**166,348**	**176,383**

Source: Statistics Canada Cansim Table 379-0025 and author's calculations. Note: GDP for "all industries" does not exactly match total GDP in other charts due to methodological differences.

FIGURE A.10: REAL GDP BY INDUSTRY (NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM) 2006 AND 2009 (MILLIONS OF CHAINED 2002 DOLLARS) P.2

PROVINCE	NB		NS		PE		NL		WEST		ROC*	
DATE	2006	2009	2006	2009	2006	2009	2006	2009	2006	2009	2006	2009
All industries	**20,978**	**20,891**	**25,837**	**26,741**	**3,639**	**3,783**	**16,636**	**16,445**	**395,731**	**394,612**	**787,984**	**790,770**
Agriculture, forestry, fishing and hunting	787	618	753	793	334	305	360	311	15,610	14,383	12,251	11,057
Mining and oil and gas extraction	217	179	768	666	1	0	4,869	4,242	46,355	41,858	9,507	8,256
Utilities	678	592	564	571	50	50	551	486	8,809	8,832	21,281	20,666
Construction	1,352	1,365	1,538	1,775	188	201	676	638	28,273	25,915	40,698	42,875
Manufacturing	2,672	2,298	2,569	2,387	352	360	770	716	39,335	32,650	145,411	116,980
Goods-producing industries	**5,706**	**5,052**	**6,191**	**6,192**	**925**	**915**	**7,227**	**6,392**	**138,383**	**123,638**	**229,149**	**199,834**
Wholesale trade	1,187	1,141	1,187	1,223	113	103	490	583	20,440	20,106	46,275	45,623
Retail trade	1,374	1,528	1,765	1,895	262	287	872	1,049	22,358	23,940	46,519	50,094
Transportation and warehousing	1,172	1,170	1,037	1,081	89	96	512	510	24,280	23,779	32,428	31,684
Information and cultural industries	781	795	934	958	117	122	508	520	12,488	13,193	31,330	32,298
Finance and insurance, real estate and renting and leasing and management of companies and enterprises	3,771	3,939	5,354	5,723	677	721	2,099	2,302	72,763	80,023	158,613	170,821
Professional, scientific and technical service	599	661	823	883	82	86	409	477	17,533	18,567	39,398	41,819
Administrative and support, waste management and remediation services	503	467	586	645	65	66	188	199	7,823	8,139	21,930	21,705
Educational services	1,106	1,159	1,518	1,589	245	264	946	1,011	17,727	19,439	38,523	41,415
Health care and social assistance	1,638	1,759	2,231	2,315	340	356	1,294	1,399	22,245	24,573	51,991	56,008
Arts, entertainment and recreation	124	122	179	171	34	36	52	54	3,423	3,619	7,450	7,509
Accommodation and food services	462	485	632	629	122	121	297	327	9,672	9,882	16,367	16,625
Other services (except public administration)	542	551	652	669	94	99	335	346	10,740	11,417	19,646	20,560
Public administration	2,014	2,139	2,842	2,870	462	491	1,304	1,386	18,390	20,009	47,524	50,781
Services-producing industries	**15,271**	**15,915**	**19,740**	**20,652**	**2,703**	**2,847**	**9,305**	**10,163**	**259,883**	**276,684**	**557,993**	**586,940**

Source: Statistics Canada Cansim Table 379-0025 and author's calculations. Note: GDP for "all industries" does not exactly match total GDP in other charts due to methodological differences. *ROC not including the territories or outside Canada.

FIGURE A.11: NOMINAL GDP BY INDUSTRY SUB-SECTORS AS % OF ALL INDUSTRIES (NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM) 2006

	BC	AB	SK	MB	ON	QC	NB	NS	PE	NL	WEST	ROC*
All industries	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Agriculture, forestry, fishing and hunting	2.6	1.3	4.4	3.6	0.9	1.7	3.4	2.5	7.7	1.4	**2.3**	**1.3**
Mining and oil and gas extraction	6.4	30.9	24.5	4.7	1.2	0.9	3.6	4.8	0.0	38.5	**19.6**	**2.4**
Utilities	1.7	2.0	2.3	3.8	2.1	4.0	3.4	2.1	1.4	2.7	**2.1**	**2.7**
Construction	7.3	9.0	6.3	4.8	5.7	5.7	6.5	6.0	6.0	3.7	**7.8**	**5.7**
Manufacturing	9.4	7.2	6.2	12.8	17.0	18.2	12.6	9.2	8.6	3.9	**8.4**	**16.6**
Goods-producing industries	**27.4**	**50.4**	**43.6**	**29.7**	**26.9**	**30.5**	**29.6**	**24.6**	**23.8**	**50.1**	**40.0**	**28.6**
Wholesale trade	4.6	4.5	5.5	6.0	6.5	5.6	5.7	4.5	3.2	2.3	**4.7**	**6.0**
Retail trade	6.2	4.1	4.9	6.4	5.6	6.3	6.5	6.9	7.2	4.0	**5.1**	**5.9**
Transportation and warehousing	6.3	4.9	5.8	6.4	4.2	4.3	4.8	3.9	2.8	2.5	**5.6**	**4.2**
Information and cultural industries	3.7	2.4	2.4	3.2	4.2	3.8	3.3	3.5	3.4	2.2	**2.9**	**4.0**
Finance and insurance, real estate and renting and leasing and management of companies and enterprises	21.5	12.8	13.8	17.7	21.9	17.0	16.3	19.5	18.5	9.0	**16.3**	**19.8**
Professional, scientific and technical services	4.6	4.4	1.9	2.8	5.6	4.4	2.8	3.2	2.4	2.0	**4.1**	**5.0**
Administrative and support, waste management and remediation services	2.3	1.8	1.1	1.8	3.1	2.8	2.4	2.3	2.0	0.9	**1.9**	**2.9**
Educational services	4.9	3.1	4.8	5.3	4.8	5.1	5.8	6.0	6.8	12.1	**4.1**	**5.2**
Health care and social assistance	6.6	3.8	6.1	8.1	6.3	7.5	8.0	8.9	9.5	5.9	**5.4**	**6.8**
Arts, entertainment and recreation	1.2	0.6	0.8	0.9	1.0	1.1	0.6	0.7	1.0	0.2	**0.8**	**1.0**
Accommodation and food services	2.9	1.9	1.8	2.1	2.1	2.3	2.2	2.5	3.4	1.4	**2.3**	**2.2**
Other services (except public administration)	3.0	2.1	2.3	2.8	2.5	2.7	2.5	2.6	2.7	1.5	**2.5**	**2.5**
Public administration	5.0	3.2	5.1	6.9	5.4	6.5	9.6	10.9	13.1	5.8	**4.3**	**6.1**
Services-producing industries	**72.6**	**49.6**	**56.4**	**70.3**	**73.1**	**69.5**	**70.4**	**75.4**	**76.2**	**49.9**	**60.0**	**71.4**

Note: GDP for "all industries" does not exactly match total GDP in other charts due to methodological differences. 2006 is the most recent year for which current dollar GDP by industry data were available at the time of writing.
*ROC not including the territories or outside Canada.
Source: Statistics Canada Cansim Table 379-0025 and author's calculations.

FIGURE A.12: REAL GDP BY INDUSTRY (NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM) AS % OF ALL INDUSTRIES 2006 AND 2009 (CHAINED 2002 DOLLARS) P.1

PROVINCE	BC		AB		SK		MB		ON		QC	
DATE	2006	2009	2006	2009	2006	2009	2006	2009	2006	2009	2006	2009
All industries	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture, forestry, fishing and hunting	3.3	2.4	3.0	2.6	10.4	12.1	4.9	4.9	1.1	1.0	1.9	1.7
Mining and oil and gas extraction	3.1	2.8	20.3	19.1	15.1	12.4	1.8	1.6	0.6	0.4	0.4	0.4
Utilities	2.0	1.9	2.0	2.1	2.5	2.3	4.2	3.9	2.1	2.0	4.0	3.9
Construction	6.2	6.1	8.9	7.2	5.7	6.7	4.4	5.3	5.1	5.0	5.3	6.1
Manufacturing	10.8	8.2	9.3	7.8	7.4	7.7	12.2	11.1	19.4	15.0	19.1	16.1
Goods-producing industries	**25.3**	**21.5**	**43.4**	**38.8**	**41.0**	**41.2**	**27.5**	**26.7**	**28.2**	**23.4**	**30.6**	**28.3**
Wholesale trade	4.7	4.5	5.3	5.2	5.5	5.6	6.2	6.3	6.3	6.2	5.5	5.4
Retail trade	6.5	6.7	4.8	5.1	5.3	6.5	6.6	7.4	5.6	5.9	6.4	6.9
Transportation and warehousing	6.5	6.2	5.6	5.6	6.3	6.2	7.1	6.8	4.0	3.9	4.4	4.2
Information and cultural industries	3.8	3.9	2.7	3.0	2.6	2.7	3.3	3.2	4.1	4.2	3.9	4.0
Finance and insurance, real estate and renting and leasing and management of companies and enterprises	22.6	24.6	15.5	17.6	15.2	16.5	18.6	18.9	22.0	23.9	17.1	18.0
Professional, scientific and technical service	4.8	5.0	5.0	5.5	2.0	2.1	2.7	2.8	5.6	6.0	4.5	4.6
Administrative and support, waste management and remediation services	2.2	2.3	2.0	2.1	1.2	1.2	1.8	1.7	3.0	2.9	2.7	2.6
Educational services	5.0	5.5	3.7	4.2	5.1	5.5	5.3	5.4	4.7	5.1	5.1	5.3
Health care and social assistance	6.4	6.8	4.3	5.2	6.3	6.6	8.0	8.0	6.0	6.6	7.3	7.7
Arts, entertainment and recreation	1.2	1.2	0.6	0.7	0.8	0.8	0.9	0.9	0.9	1.0	1.0	1.0
Accommodation and food services	3.0	3.0	2.2	2.3	1.9	2.1	2.1	2.0	2.0	2.0	2.3	2.3
Other services (except public administration)	3.0	3.1	2.5	2.8	2.5	2.7	2.8	2.9	2.4	2.6	2.7	2.7
Public administration	5.1	5.5	3.6	4.1	5.3	5.5	7.1	7.0	5.3	5.7	6.5	6.8
Services-producing industries	**74.7**	**78.3**	**57.9**	**63.5**	**59.9**	**64.2**	**72.4**	**73.4**	**71.6**	**75.8**	**69.4**	**71.4**

Source: Statistics Canada Cansim Table 379-0025 and author's calculations.

FIGURE A.12: REAL GDP BY INDUSTRY (NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM) AS % OF ALL INDUSTRIES 2006 AND 2009 (CHAINED 2002 DOLLARS) P.2

PROVINCE	NB		NS		PE		NF		WEST		ROC*	
DATE	2006	2009	2006	2009	2006	2009	2006	2009	2006	2009	2006	2009
All industries	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Agriculture, forestry, fishing and hunting	3.7	3.0	2.9	3.0	9.2	8.1	2.2	1.9	3.9	3.6	1.6	1.4
Mining and oil and gas extraction	1.0	0.9	3.0	2.5	0.0	0.0	29.3	25.8	11.7	10.6	1.2	1.0
Utilities	3.2	2.8	2.2	2.1	1.4	1.3	3.3	3.0	2.2	2.2	2.7	2.6
Construction	6.4	6.5	6.0	6.6	5.2	5.3	4.1	3.9	7.1	6.6	5.2	5.4
Manufacturing	12.7	11.0	9.9	8.9	9.7	9.5	4.6	4.4	9.9	8.3	18.5	14.8
Goods-producing industries	**27.2**	**24.2**	**24.0**	**23.2**	**25.4**	**24.2**	**43.4**	**38.9**	**35.0**	**31.3**	**29.1**	**25.3**
Wholesale trade	5.7	5.5	4.6	4.6	3.1	2.7	2.9	3.5	5.2	5.1	5.9	5.8
Retail trade	6.6	7.3	6.8	7.1	7.2	7.6	5.2	6.4	5.6	6.1	5.9	6.3
Transportation and warehousing	5.6	5.6	4.0	4.0	2.5	2.5	3.1	3.1	6.1	6.0	4.1	4.0
Information and cultural industries	3.7	3.8	3.6	3.6	3.2	3.2	3.1	3.2	3.2	3.3	4.0	4.1
Finance and insurance, real estate and renting and leasing and management of companies and enterprises	18.0	18.9	20.7	21.4	18.6	19.1	12.6	14.0	18.4	20.3	20.1	21.6
Professional, scientific and technical service	2.9	3.2	3.2	3.3	2.3	2.3	2.5	2.9	4.4	4.7	5.0	5.3
Administrative and support, waste management and remediation services	2.4	2.2	2.3	2.4	1.8	1.7	1.1	1.2	2.0	2.1	2.8	2.7
Educational services	5.3	5.5	5.9	5.9	6.7	7.0	5.7	6.1	4.5	4.9	4.9	5.2
Health care and social assistance	7.8	8.4	8.6	8.7	9.3	9.4	7.8	8.5	5.6	6.2	6.6	7.1
Arts, entertainment and recreation	0.6	0.6	0.7	0.6	0.9	0.9	0.3	0.3	0.9	0.9	0.9	0.9
Accommodation and food services	2.2	2.3	2.4	2.4	3.4	3.2	1.8	2.0	2.4	2.5	2.1	2.1
Other services (except public administration)	2.6	2.6	2.5	2.5	2.6	2.6	2.0	2.1	2.7	2.9	2.5	2.6
Public administration	9.6	10.2	11.0	10.7	12.7	13.0	7.8	8.4	4.6	5.1	6.0	6.4
Services-producing industries	**72.8**	**76.2**	**76.4**	**77.2**	**74.3**	**75.3**	**55.9**	**61.8**	**65.7**	**70.1**	**70.8**	**74.2**

Source: Statistics Canada Cansim Table 379-0025 and author's calculations. *ROC not including the territories or outside Canada.

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