

Big Cities and the Census

The Growing Importance of Big Cities on the Demographic Landscape

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Western Cities Project



Seizing the opportunities, and effectively addressing the challenges, facing Canada's big cities is critical to both economic prosperity and quality of life in Canada. The Canada West Foundation's Western Cities Project has been providing timely and accessible information about urban issues since 2000. The project is focused on six western Canadian urban areas—Vancouver, Calgary, Edmonton, Regina, Saskatoon, and Winnipeg—but it speaks to issues that affect urban areas across Canada.

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EXECUTIVE SUMMARY

Background

In 2000, the Canada West Foundation launched an ambitious multi-year research and communications initiative to highlight the growing demographic, economic, social, and cultural importance of western Canada's largest cities. Under the rubric of the *Western Cities Project*, the Foundation has been instrumental in renewing the interest of the national policy community in the important urban issues of our day.

Purpose of the Study

This study paints an accurate portrait of urbanization in Canada through the use of a consistent set of data, paying particular attention to provincial and regional nuances. A specific focus of the study is to uncover demographic trends of the nation's *census metropolitan areas* or *CMAs* — a somewhat exclusive group of very large city-regions. The task is complicated by the lack of comparable data on big cities as they exist today, and as they used to exist some 50 years ago. As the *Western Cities Project* has progressed, researchers at the Foundation have been building and maintaining several large demographic, economic, and fiscal databases on the country's largest cities. As these databases were utilized, refinements were made to improve data quality. The result is a set of highly comparable population data on Canada's CMAs running the 45 year period from 1961 to 2006.

Key Research Findings

No other region of the country has experienced the effects of rapid urbanization more than western Canada, where the demographic landscape has been dramatically and permanently altered. While western Canada used to be much less urban than the rest of the country, that is hardly the case today. The West is now as urban as other regions of the country. Furthermore, the West is home to Canada's fastest growing CMAs. Abbotsford, Kelowna, Vancouver, Victoria, Calgary, Edmonton and Saskatoon all emerge in the top five within their respective size categories whether growth is considered over the short-term (2001-2006) or the long-term (1961-2006).

British Columbia remains the most urbanized province in western Canada. Each of its large city-regions (Abbotsford, Kelowna, Vancouver, and Victoria) are in the top five when it comes to both

short-term and long-term growth. No other province even comes close to sharing Alberta's urbanization experience. Five decades ago, the province was less urban than Manitoba and only slightly ahead of Saskatchewan. In Alberta, the urbanization story clearly centres around Calgary and Edmonton, which emerge as the fastest growing large CMAs in the country. The rapid ascendancy of Calgary and Edmonton is striking in scope, and has clearly helped shift the focus of Canada's urban experience toward the West.

Saskatchewan and Manitoba remain less urbanized than either British Columbia or Alberta. But this is only half the story. Saskatchewan has witnessed a massive rural depopulation over the last 45 years. This, combined with modest growth in Regina and relatively strong growth in Saskatoon has considerably elevated the importance of that province's two large CMAs. The future of Saskatchewan's population growth is completely dependent on developments in Regina and Saskatoon. All other urban and rural areas — when combined — have less people today than in either 2001 or 1961. No other city stands out like Winnipeg, which continues to dominate political, economic, and demographic life in Manitoba. Almost two-thirds of Manitobans live in Winnipeg. The future of Manitoba is strongly linked to the future of Winnipeg.

In central Canada, growth in Ontario's CMAs between 1961 and 2006 represented almost 92% of total provincial population growth. Between 2001 and 2006, this increased to almost 95%. Atlantic Canada remains the least urbanized region in Canada, but provincial populations in Nova Scotia, New Brunswick, and Newfoundland are completely dependent on the growth of their largest city-regions. Between 2001 and 2006, Atlantic Canada experienced a net loss of just under 1,000 residents. At the same time, the combined population of the region's four CMAs (Halifax, St. John, Moncton, St. John's) grew by some 30,000 people.

Conclusion

The attention of Canadians must begin turning more substantially toward our large urban centres. The undeniable reality is that Canada's demographic future rests in our large city-regions. As the Foundation begins the last year of its *Western Cities Project*, we underscore once again the tremendous importance of Canada's big cities to our future economic prospects, standard of living, and quality of life.

INTRODUCTION

In 2000, the Canada West Foundation embarked on an ambitious multi-year research initiative to highlight the growing demographic, economic, social, and cultural importance of western Canada's largest cities. Under the rubric of the *Western Cities Project*, the Foundation has been instrumental in renewing the interest of the national policy community in the important urban issues of our day. One of the first documents published by the Foundation on urban issues was entitled *Cities@2000*. This document, released in November 1999, presented a range of key demographic, economic, and social data on Canada's *census metropolitan areas (CMAs)*.

A key objective of *Cities@2000* was to demonstrate the fundamental and growing importance of large city-regions on the national demographic landscape. The document concluded that, if Canadians ignore the importance of their large urban areas, we do so at our own peril. Since *Cities@2000* was first published, Statistics Canada has conducted the 2001 and 2006 censuses. With data now emerging from the 2006 census, the Foundation believes it is time to refresh some of the key information originally presented in *Cities@2000*.

PURPOSE OF THIS REPORT

Over the last two decades, cities across Canada have played an increasingly important role in the economic, political, and social lives of Canadians. In *Cities@2000*, the Foundation predicted that this trend will only accelerate in the decades to come. Has this prediction rung true? In answering the question, this study explores the following:

- How is urbanization proceeding in Canada? In particular, how is urbanization occurring within a national, regional, and provincial context?
- What is the role being played by Canada's big cities in the larger urbanization trend? Are there any significant provincial or regional differences worth noting?
- Can the role being played by Canada's big cities even be accurately determined given the data that are publicly available? In other words, can the numerous difficulties in working with 50 years of census data be confidently bridged?

METHODOLOGY

Cities@2000 presented and analyzed growth data on Canada's CMAs based on the 1966 and 1996 census reports. The information presented was comprehensive and helpful, but the study suffered from several inherent weaknesses. The most obvious was the lack of comparable data on cities as they existed in the 1990s and as they existed in the 1960s. Unlike provincial or national borders that are fixed and unchanging, municipal boundaries are fluid and constantly shifting. The data published by Statistics Canada on the country's large cities is simply not comparable over long periods of time. As the years pass, each CMA has been expanded to include more and more outlying or metro-adjacent areas. Thus, the municipal entity reported on in earlier census documents is not the same entity being reported on today.

This study solves the problem. As such, it is a first in Canada. As the *Western Cities Project* has progressed, researchers at the Foundation have been building and maintaining several large demographic, economic, and fiscal databases on the country's largest cities. As the databases were utilized, refinements were made to improve data quality. The end result is a set of highly comparable demographic data on Canada's CMAs running the 45 year period from 1961 to 2006. The year 1961 was chosen as the start point for practical purposes. Since many data series produced by Statistics Canada have their historical start in 1961 (e.g., national and provincial economic accounts), a set of comparable population data on CMAs starting in the same year helps facilitate ongoing research in the urban policy community.

To build a set of consistent data for each CMA, researchers started with the 2006 census reports, which include data for 2006 and 2001 based on similar boundaries and the same census subdivisions. Moving to the 2001 census reports, various census subdivisions were added (or subtracted) in order to yield a CMA total for the years 2001 and 1996. If two similar totals could be constructed for 2001 - using the 2006 census report method and the 2001 census report method - then a similar total could be built for 1996. Furthermore, the consistency of the 2001 and 1996 data would be established. This process was repeated all the way back to the 1966 census, from which CMA totals were calculated for both 1966 and 1961. For some years, exact CMA totals were not always possible. In those cases, a statistical adjustment was made to link the years together. For most CMAs, such adjustments were very small, usually less than one-tenth of one percent of the total population count for any given census year.

CMA DATA: Handling Numbers With Care

Six columns of data in *Figure 1 (page 3)* highlight the problems that arise from a lack of comparable population counts. The first column shows the population totals for all 33 current CMAs as reported in the 1961 census. The second column shows the population totals reported for the same 33 CMAs according to the 2006 census. Columns three and four represent the population totals for the 33 CMAs for 1961 and 2006 on a consistent basis using the 2006 CMA boundaries. (Edmonton is an exception. The 2006 census excluded several census subdivisions that used to be included with the Edmonton CMA in prior years. Edmonton's 2006 count was adjusted upward to include a set of consistent census subdivisions.) The final two columns calculate the percentage difference between the 1961 reported and consistent population counts, and the 2006 reported and consistent population counts (only one minor change for Edmonton).

The reported population counts give a distorted and inflated picture of the growth of Canada's CMAs from 1961 to 2006. The difference between the reported population in 1961 and a consistent count for 1961 based on 2006 boundaries ranges from a low of 1.5% in Victoria (BC) to a whopping 186.7% for St. Catharines (ON). Many CMAs have differences that exceed 20% and even 30%.

Two important conclusions emerge from the exercise of securing better data. First, it is important to note that the differences between the reported 1961 CMA populations and a consistent 1961 CMA count are not at all the same across the various regions of the country. CMAs in Atlantic Canada show the most variance. For example, the difference between Atlantic Canada's reported CMA population in 1961 (426,931) and a consistent count for the same year (515,486) is 20.7%. The average difference across Atlantic Canada's four CMAs is 22.1%. The 20 CMAs in central Canada (Ontario and Quebec) also exhibit considerable variance. In 1961, the reported population for all central Canadian CMAs was 6,534,303. However, a consistent count for 1961 based on 2006 boundaries yields a total of 7,476,606 — a 14.4% difference. The average difference across central Canada's 20 CMAs is 31.1%.

All of this stands in stark contrast to the CMAs in western Canada, which show much smaller differences between the reported population for 1961 and the consistent counts based on 2006 boundaries. The difference between the reported CMA population in 1961 (2,280,796) and a consistent count for the same year (2,452,261) is only 7.5% for the western region as a whole. The average difference across western Canada's nine CMAs is 19.8%. Because of a lack of consistency in counting populations, the growth of all CMAs in Canada is somewhat overstated. But at the same time, it is important to note that CMAs in Atlantic and central Canada have been overstated much more relative to the CMAs in western Canada. In short, past analyses using the unadjusted data short-change CMA growth in western Canada relative to CMA growth in other parts of the country.

Second, the data help us get a better handle on the percentage of Canadians actually living in these large city-regions in 1961 and 2006. The original 18 CMAs in 1961 had a reported population of 8,263,691. The 33 CMAs in 2006 have a reported population of 21,508,575. Without adjusting for the new CMAs and finding a better way to count their size, one is left to conclude that the number of Canadians living in CMAs has grown from 45.3% to 68.0%. Using the reported population counts for all 33 CMAs and then comparing 1961 to 2006 improves the analysis somewhat. The percentage living in CMAs moves from 50.7% in 1961 to 68.0% in 2006.

But, the most accurate analysis would include all 33 CMAs for both 1961 and 2006 and then use a consistent method of counting populations. What emerges is a much more accurate picture. In 1961, 57.3% of Canadians lived in those areas that today comprise the 33 CMA areas of Canada. In 2006, that rose to 68.1%.

For some, all of this might seem rather academic, pedantic, if not downright picky. But if Canada is indeed an urban nation, then we should at least have some answers to the most basic of questions, especially considering the growing sense that Canada's economic future revolves around the health of our large city-regions. Over the past 50 years, what has been Canada's fastest growing CMA? Is it Vancouver? What about Calgary? Toronto? Without consistent data, one cannot even begin to answer this most simple question. Which provinces have seen the most robust growth in their CMA populations? Is it Alberta? Ontario? Quebec? What about the regions?

Most important, how heavy is the footprint of these large city-regions on the Canadian demographic landscape? How have they contributed to Canada's total population growth? What are the prospects for the future?

FIGURE 1: The Challenge of Counting Cities (1961 and 2006 Compared)

CMA	Reported	Population	Consister	t Population	% Dif	ference
	1961	2006	1961	2006	1961	2006
Abbotsford, BC	15,181	159,020	29,147	159,020	92.00%	0.00%
Kelown, BC	20,385	162,276	27,460	162,276	34.71%	0.00%
Vancouver, BC	790,165	2,116,581	826,719	2,116,581	4.63%	0.00%
Victoria, BC	154,152	330,088	156,442	330,088	1.49%	0.00%
Calgary, AB	279,062	1,079,310	289,517	1,079,310	3.75%	0.00%
Edmonton, AB	337,568	1,034,945	396,856	1,049,428	17.56%	1.40%
Regina, SK	112,176	194,971	119,847	194,971	6.84%	0.00%
Sasaktoon, SK	95,564	233,923	107,878	233,923	12.89%	0.00%
Winnipeg, MB	476,543	694,668	498,395	694,668	4.59%	0.00%
WESTERN CMAs	2,280,796	6,005,782	2,452,261	6,020,265	7.52%	0.24%
Barrie, ON	28,156	177,061	35,129	177,061	24.77%	0.00%
Brantford, ON	56,301	124,607	80,034	124,607	42.15%	0.00%
Guelph, ON	44,232	127,009	49,169	127,009	11.16%	0.00%
Hamilton, ON	395,189	692,911	404,844	692,911	2.44%	0.00%
Kingston, ON	63,419	152,358	89,277	152,358	40.77%	0.00%
Kitchener, ON	154,864	451,235	164,136	451,235	5.99%	0.00%
London, ON	181,283	457,720	244,039	457,720	34.62%	0.00%
Oshawa, ON	80,918	330,594	108,345	330,594	33.89%	0.00%
Ottawa, ON	429,761	1,130,761	493,593	1,130,761	14.85%	0.00%
Peterborough, ON	51,982	116,570	72,142	116,570	38.78%	0.00%
Saint Catharines, ON	95,577	390,317	273,989	390,317	186.67%	0.00%
Sudbury, ON	110,799	158,258	140,372	158,258	26.69%	0.00%
Thunder Bay, ON	91,625	122,907	106,350	122,907	16.07%	0.00%
Toronto, ON	1,824,589	5,113,149	1,969,160	5,113,149	7.92%	0.00%
Windsor, ON	193,365	323,342	217,569	323,342	12.52%	0.00%
Montreal, PQ	2,110,679	3,635,571	2,273,744	3,635,571	7.73%	0.00%
Quebec City, PQ	357,568	715,515	404,258	715,515	13.06%	0.00%
Saguenay, PQ	105,393	151,643	140,094	151,643	32.93%	0.00%
Sherbrooke, PQ	70,253	186,952	105,941	186,952	50.80%	0.00%
Trois-Rivieres, PQ	88,350	141,529	104,421	141,529	18.19%	0.00%
CENTRAL CMAs	6,534,303	14,700,009	7,476,606	14,700,009	14.4%	0.00%
Halifax, NS	183,946	372,858	225,723	372,858	22.71%	0.00%
Moncton, NB	55,768	126,424	77,337	126,424	38.68%	0.00%
Saint John, NB	95,563	120,424	102,653	120,424	7.42%	0.00%
Saint John's, NFD	93,363	181,113	102,033	181,113	19.77%	0.00%
ATLANTIC CMAs	426,931	802,784	515,486	802,784	20.7%	0.00%
ALLANTIO GIVIAS	720,701	002,704	313,700	002,704	20.7/0	0.00/0
ALL CMAs	9,242,030	21,508,575	10,444,353	21,523,058	13.01%	0.07%
				* * *		

DATA HIGHLIGHTS
Population of Canada
• Population in 1961
CMAs Reported by Statistics Canada
 18 CMAs in 1961 Reported 1961 CMA Population 8,263,691 % Living in a CMA in 1961 45.3%
 33 CMAs in 2006 Reported 2006 CMA Population 21,508,575 % Living in a CMA in 2006 68.0%
Adjust the Number of CMAs
 33 Relevant CMAs in 1961 Reported 1961 CMA Population 9,242,030 % Living in a CMA in 1961 50.7%
 33 Relevant CMAs in 2006 Reported 2006 CMA population 21,508,575 % Living in a CMA in 2006 68.0%
Consistent Number and Counting of CMAs
 33 Relevant CMAs in 1961 Consistent 1961 Population
• 33 Relevant CMAs in 2006 • Consistent 2006 Population

SOURCE: Developed by the Canada West Foundation (CWF) based on Statistics Canada census reports, 1961-2006.

The differences between the reported CMA population and a consistent count are not the same across the regions of the country. CMAs in Atlantic Canada show the most variance. For example, the difference between Atlantic Canada's reported CMA population in 1961 (426,931) and a consistent count for the same year (515,486) is 20.7%. The average difference across Atlantic Canada's four CMAs is 22.1%. The 20 CMAs in central Canada also exhibit considerable variance. In 1961, the reported population for central Canadian CMAs was 6,534,303. However, a consistent count for 1961 based on 2006 boundaries yields a total of 7,476,606 — a 14.4% difference. The average difference across central Canada's 20 CMAs is 31.1%. CMAs in western Canada show much smaller differences. The difference between the reported CMA population in 1961 (2,280,796) and a consistent count for the same year (2,452,261) is 7.5%. The average difference across western Canada's nine CMAs is 19.8%.

Because of a lack of consistency in counting population, the growth of all CMAs in Canada is somewhat overstated. At the same time, CMAs in Atlantic and central Canada have been overstated much more relative to the CMAs in western Canada.

A summary of the Canada West Foundation CMA dataset is shown in *Appendix A*. This summary provides a consistent population count for each census year from 1961 to 2006 based on how the CMA was calculated for the 2006 census year. A more detailed explanation of the methodology is discussed in *Appendix B*.

URBANIZATION IN CANADA

As Canada passed into the 21st century, the process of urbanization has continued unabated — molding and reshaping the national demographic landscape. The great bulk of Canadians now live in urban environments, and this holds for both the country as a whole and its provinces and various regions. Canada is no longer a nation of rural dwellers, and this reflects one of the most important and dramatic changes of the last century — a huge shift from the rural countryside to the village, town, and city.

In 1901, only 37.0% of Canadians lived in an urban centre. By 2006, 80.0% of Canadians lived in an urban centre (*Figure 2, Chart 1*). To be sure, the definition of what constitutes "urban" has changed over time. Between 1871-1941, any person living in an incorporated village, town or city was considered urban regardless of the municipality's size or population density. The definition of "urban" was changed in 1951, and again in 1956, 1961, 1976 and 1981. Today, a person is considered urban if they live in an area with a population of 1,000 or more that also has a population density equal or more than 400 persons per square kilometre.

The fact that most Canadians now live in urban environments is not a strikingly new finding, nor is it particularly surprising. However, two items are worth noting. First, while the urbanization rate for the country as a whole is already quite high, it also continues to ratchet upward. While the rate of urbanization grows only in very small increments, it does continues to climb. There is little to no evidence that the plateau has yet been reached.

Second, the urbanization phenomenon has clearly hit with harder force in western Canada (*Figure 2, Chart 2*). In 1911, only 39.1% of western Canadians were considered urban in any meaningful sense of the term. This was considerably lower than urbanization rates in the rest of Canada, which reached upwards of 50%. However, the gap has completely disappeared. The post WWII period saw rapidly advancing urbanization in the West. Today, 79.6% of western Canadians are considered urban compared to 79.7% of the rest of Canada.

FIGURE 2: Urban Population Profile of Canada

CHART 1: Urban Population as a % of Total Population in Canada, 1901-2006

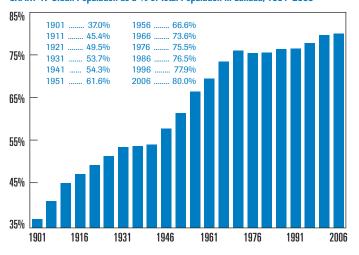


CHART 2: Urbanization Rates in Western Canada and the Rest of Canada, 1911-2001

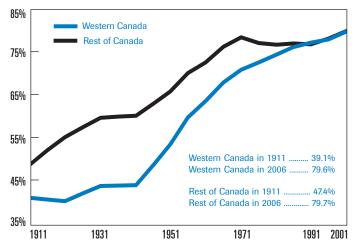
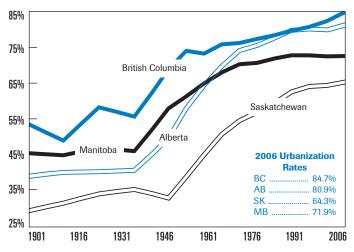


CHART 3: Urbanization Rates in the Four Western Provinces, 1911-2001



SOURCE: Developed by CWF based on Statistics Canada census reports, 1961-2006.

Finally, there are also some key differences of note within western Canada. British Columbia has always been the most urban among the four western provinces, and it has held this position throughout the 20th century (Figure 2, Chart 3). Beginning in the early 1940s, however, Alberta began to close British Columbia's lead. Today, the two provinces share a very close rate of urbanization — 84.7% for British Columbia and 80.9% for Alberta (Figure 3). As urbanization picked up steam in Alberta, that province also unseated Manitoba as the second most urbanized western province. Today, urbanization rates in Manitoba and Saskatchewan are considerably lower than BC and Alberta — 71.9% for Manitoba and 64.3% for Saskatchewan.

Canada continues to experience an urban renaissance at the expense of its rural areas, and nowhere is this more true than in western Canada. Development of the West over the past 100 years has been intimately linked to a noticeable and relatively rapid trend of urbanization. This trend includes those living in both very large and very small urban centres. What is more, the definition of what constitutes "urban" has frequently changed. No matter. The heart of Canada's real urbanization story actually lies elsewhere — in the nation's large census metropolitan areas or CMAs.

WHAT IS A CMA?

A conceptual model for a CMA is shown in *Figure 4* using the greater Vancouver area as an example. CMAs are statistical constructs as opposed to legally incorporated municipal entities. CMAs are essentially city-regions. Statistics Canada defines a CMA as a very large urban area, together with neighbouring urban and rural areas, that share a high degree of economic and social integration. To qualify as a CMA, a city-region must have an urban core — comprised of a large anchor city and other highly urbanized areas in the immediate vicinity — of at least 100,000 people.

CMAs are important to our understanding of urbanization for two reasons. First, the concept of an incorporated municipality does not always match urban reality. For example, as of the 2006 census, the incorporated City of Vancouver has a population of less than 580,000. But the reality is that Vancouver serves as the anchor of a much larger urban area with a total population exceeding two million. In other words, Vancouver is only one part — and a small part at that — of a much larger metropolitan area that also includes Burnaby, Surrey, Richmond, Delta, North Vancouver, and West Vancouver among others. Talking about

FIGURE 3: Urbanization Rates by Province and Region
(% of Total Population Considered Urban, 1961-2001)

PROVINCE or REGION	2001	1996	1991	1986	1981	1976	1971	1966	1961
British Columbia	84.7%	82.1%	80.4%	79.3%	78.0%	76.9%	75.7%	75.3%	72.6%
Alberta	80.9%	79.5%	79.8%	79.4%	77.2%	75.0%	73.5%	68.9%	63.3%
Saskatchewan	64.3%	63.3%	63.0%	61.4%	58.2%	55.5%	53.0%	49.0%	43.0%
Manitoba	71.9%	71.8%	72.1%	72.1%	71.2%	69.9%	69.5%	67.1%	63.9%
WESTERN CANADA	79.6%	77.7%	76.9%	75.8%	74.0%	72.1%	70.3%	67.2%	62.7%
Ontario	84.7%	83.3%	81.8%	82.1%	81.7%	81.2%	82.4%	80.4%	77.4%
Quebec	80.4%	78.4%	77.6%	77.9%	77.6%	79.1%	80.7%	78.3%	74.3%
CENTRAL CANADA	83.0%	81.4%	80.1%	80.3%	79.9%	80.3%	81.6%	79.4%	75.9%
Nova Scotia	55.8%	54.8%	53.5%	54.0%	55.1%	55.8%	56.7%	58.1%	54.3%
New Brunswick	50.4%	48.8%	47.7%	49.4%	50.7%	52.3%	56.9%	50.6%	46.5%
Newfoundland and Labrador	57.8%	56.9%	53.6%	58.9%	58.6%	58.9%	57.2%	54.1%	50.7%
Prince Edward Island	44.9%	44.2%	39.9%	38.1%	36.3%	37.1%	38.3%	36.6%	32.4%
ATLANTIC CANADA	53.9%	52.8%	51.0%	52.9%	53.6%	54.5%	55.9%	53.6%	49.8%
NORTHERN TERRITORIES	51.1%	48.2%	43.9%	52.0%	53.4%	53.5%	52.7%	42.6%	37.1%
CANADA	79.7%	77.9%	76.6%	76.5%	75.7%	75.5%	76.1%	73.6%	69.6%

SOURCE: Developed by CWF based on Statistics Canada census reports, 1961-2006.

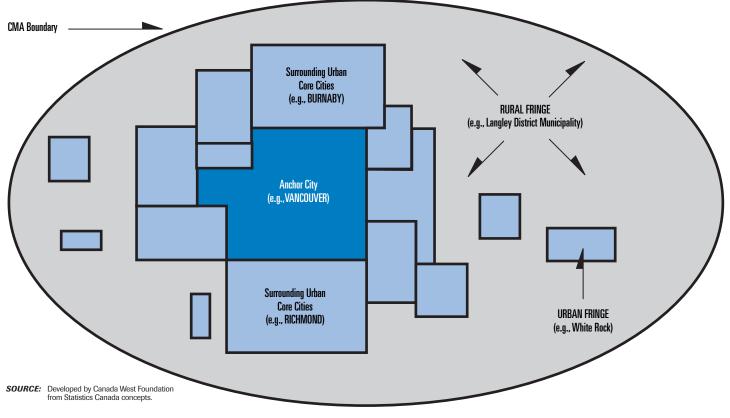
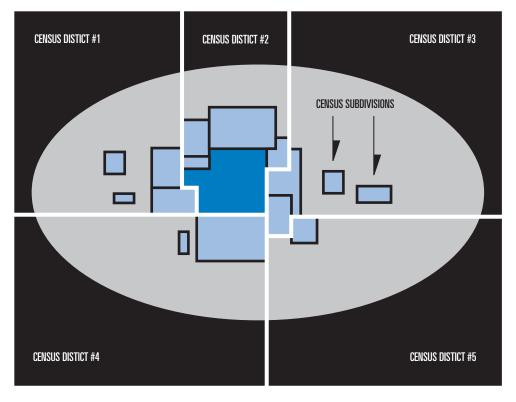


FIGURE 4: Census Metropolitan Areas (CMAs), Census Divisions (CDs), and Census Subdivisions (CSDs)

CMAs are statistical constructs as opposed to legally incorporated entities, and do not match with municipal boundaries. CMAs are comprised of three components. First, there is an urban core that includes an anchor city and all smaller cities and towns in immediate proximity. Second, there is an urban fringe comprised of towns and villages somewhat disconnected from the urban core. Finally, CMAs include a rural fringe — non-urban areas between the urban core and the urban fringe.



Canada's census is organized around four levels of data. Population figures are first gathered for the thousands of incorporated areas across the country (e.g., cities, towns, villages, municipal districts, townships, counties, etc.). These act as census subdivisions (CSDs) and represent the smallest geographical area for which data is published. All census subdivisions are then grouped into various census divisions (CDs). Adding census divisions yields a set of provincial and territorial population totals. These can then be combined to yield the national total.

Census Metropolitan Areas are comprised of numerous census subdivisions and can also cut across more than one census division. In building a consistent set of data for Canada's CMAs, the same census subdivisions must be included in the population count for each census year. For some CMAs, this task is as simple as finding all relevant census subdivisions and totalling the amounts. However, the task is complicated because some census subdivisions change over time - new municipalities are created, others are dissolved, and some are merged into entirely new entities. To sort through the changes, researchers often had to drill down into various census divisions in and around Canada's large city-regions.

Vancouver alone ignores literally millions of residents who live in highly dense urban areas that surround Vancouver — people who are just as much residents of "Vancouver" as the real Vancouverites themselves.

Second, in addition to a highly developed urban core, most CMAs also include an urban and rural fringe - areas that are somewhat disconnected from the essential core but are included within the CMA boundaries because they share a high degree of economic and social integration with the larger urban centre. The fact is, a large city's reach and influence extends well beyond its legal boundaries. People do not have to reside in a large city to be highly connected to it. People can be officially described as "rural" if they maintain a residence in a small town on the outskirts of Calgary or Toronto, but are they really "rural" if they spend fully 80% or even 90% of their waking time in a large city working, shopping, or enjoying the cultural amenities? As such, the concept of the CMA offers a way to measure urbanization by focusing on large urban centres and the millions of people closely associated with them regardless of the broader definition of "urban" and "rural."

URBANIZATION and the CMAs

In 2006, Canada was home to 33 CMAs. In the West, the list includes the nine city-regions of Abbotsford, Kelowna, Vancouver, and Victoria (BC); Edmonton and Calgary (AB); Regina and Saskatoon (SK); and Winnipeg (MB). In Ontario, the list includes 15 urban areas — Barrie, Brantford, Guelph, Hamilton, Kingston, Kitchener, London, Oshawa, Ottawa, Peterborough, St. Catharines, Sudbury, Thunder Bay, Toronto, and Windsor. Quebec has five CMAs — Montreal, Quebec City, Saguenay (formerly Chicoutimi-Jonquiere), Sherbrooke, and Trois-Rivieres. Atlantic Canada has four CMAs — Halifax (NS), Moncton and St. John (NB), and St. John's (NFD).

These 33 large city-regions are the primary drivers of urbanization in Canada. Furthermore, they are also responsible for driving total population growth in the country. However, it has traditionally been very difficult to determine the degree to which these city-regions are impacting the demographics of the country. Precious little comparable data exist over the long-term that can be used to take an accurate measurement. The remainder of this report looks at the urbanization phenomenon through the lens of the Canada West Foundation's CMA dataset, which allows for definitive comparisons.

1. CMA Growth Across the Short-Term

Any assessment of the demographic footprint of Canada's CMAs must begin with uncovering how they have grown in the short-term. Structuring this analysis is relatively straightforward since the 2006 census includes relatively comparable data for both 2006 and 2001. (The sole exception is Edmonton, whose population totals for both years had to be adjusted upward to include several census subdivisions that were for some reason excluded in the 2006 census reports but were always included in prior years.)

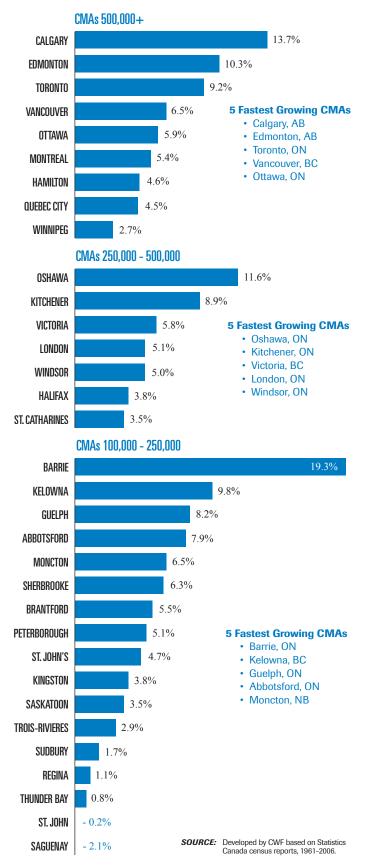
There are two ways to present the data. The first approach tracks the growth rates of the various CMAs (*Figure 5, page 8*). For this analysis, each CMA was first grouped according to size (either 100,000-250,000, 250,000-500,000, or more than 500,000). The increase in population for each CMA between 2001 and 2006 was calculated and then expressed as a percentage increase.

Calgary and Edmonton were the fastest growing CMAs in the 500,000 plus category, with growth rates of 13.7% and 10.3% respectively. Toronto came in third (9.2%), while Vancouver and Ottawa round out the top five (6.3% and 5.9% respectively). Between 2001 and 2006, Calgary grew at a rate almost three times the national population growth rate (5.4%). Edmonton grew by almost two times the national population growth rate.

The fastest growing mid-sized CMAs (250,000-500,000) were Oshawa (11.6%), Kitchener (8.9%), and Victoria (5.8%). This category includes the smallest number of CMAs. While Victoria is the only western CMA in this category, that city-region still finished among the top three. The largest category contains smaller CMAs with populations between 100,000-250,000. In this category, the fastest growing CMAs were Barrie (19.3%), Kelowna (9.8%), Guelph (8.2%), Abbotsford (7.9%), and Moncton (6.5%).

Scanning across the short-term, some of the fastest growing CMAs are found in western Canada. Three of the five biggest and fastest growing CMAs are in the West (Calgary, Edmonton, Vancouver). Two of the top five growing CMAs in the smallest category are also in the West (Abbotsford and Kelowna). Victoria is the West's only medium-sized CMA, but it does appear in the top three for that category as well. If size is ignored, the five fastest growing cities in Canada between 2001 and 2006 were Barrie, Calgary, Oshawa, Edmonton, and Kelowna. Three of the top five are in the West.

FIGURE 5: Short-Term Growth of CMAs (2001-2006)



Another approach that helps round out the short-term growth of Canadian CMAs is to calculate the increase in CMA populations as a percentage of the increase in total provincial, regional, and national populations (*Figure 6, page 9*). Between 2001 and 2006, Canada's population grew by about 1.6 million while the country's 33 CMAs grew by almost 1.4 million. In the past five years, growth of Canada's 33 CMAs represented 86.7% of the total increase in the national population. When all other urban and rural areas of the country are combined over the same time period, the net gain was a paltry 210,000 people.

The provincial picture is even more striking. In four of Canada's ten provinces, CMA growth represented 100% of the total increase in provincial population. In Saskatchewan, Nova Scotia, New Brunswick, and Newfoundland, the CMAs were the only geographic entities to see positive growth. In these provinces, all other urban and rural areas, when combined, actually lost population. What is more, Ontario and British Columbia run a very close second. In Ontario, CMA growth between 2001 and 2006 represented 94.0% of the total provincial population increase. In British Columbia, the relevant figure was 84.6%.

Turning to the regional perspective, CMAs in Atlantic Canada represented 100% of the total increase in the region's population. In other words, when all municipalities and areas outside of Atlantic Canada's four CMAs are combined, they actually lost population. In Atlantic Canada, population growth can be said to be entirely focused around the region's largest cities. Much the same is occurring in central Canada, where CMA growth between 2001 and 2006 represented almost 90% of Ontario and Quebec's total population growth.

Interestingly, western Canada appears to have a slightly smaller CMA contribution rate at 76.7%. This is somewhat surprising given the rather robust growth rates of many western CMAs. While the answer to this anomaly is far from clear, at least two factors are likely coming into play. First, while western Canada certainly has its share of very fast growing city-regions, it also contains some relatively large CMAs with more modest rates of growth (e.g., Regina and Winnipeg). Second, and perhaps more important, the economic boom across the West is serving to fuel growth of non-CMA urban centres. The spectacular growth of the Calgary-Edmonton corridor and resource centres like Fort McMurray have been well documented. Some of that growth could be offsetting the impact of the West's largest cities.

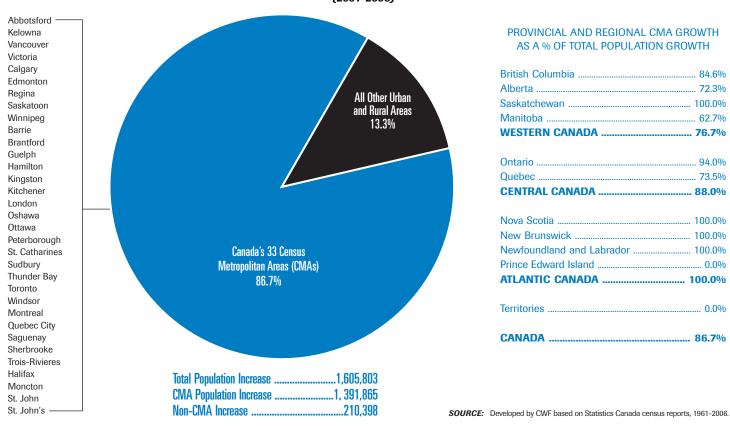


FIGURE 6: CMA and Non-CMA Contribution to Overall Population Growth (2001-2006)

2. CMA Growth Across the Long-Term

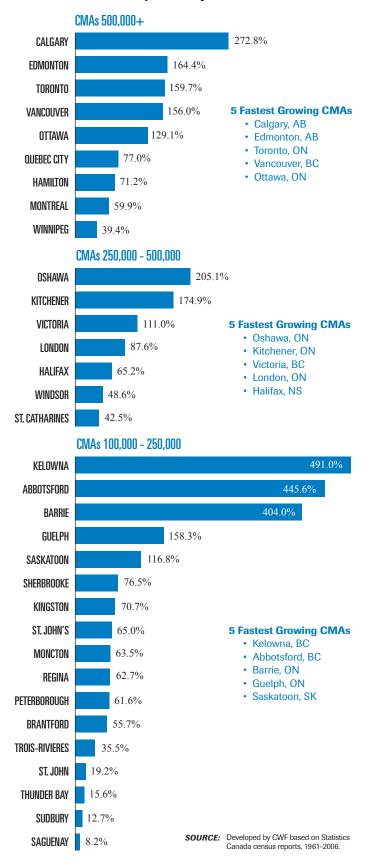
Canada's largest cities have certainly been flexing their demographic muscle over the last five years. Again, this may come as no big surprise. But the urbanizing power of CMAs goes well beyond the short-term. The trend of urbanization in Canada has its roots well back in the 20th century. What role have large cities played over the long-term? There are three ways to answer the question: 1) Assessing the growth rates of CMAs between 1961 and 2006; 2) determining the percentage of total population growth that can be attributed to CMAs; and 3) comparing the percentage of total population living in CMAs in 1961 and 2006.

To get a handle on the first approach, the population of all 33 current CMAs in Canada was first restated on a consistent basis that reflects the methodology employed in the 2006 census. Each CMA was then placed into one of three categories based on current population size. The population increase between 1961 and 2006 was calculated for each CMA and then expressed as a percentage increase. The results of the analysis appear in *Figure 7 (page 10)*.

At first glance, the long-term picture for CMAs in the 500,000 plus category does not seem to diverge widely from the earlier short-term analysis. Calgary and Edmonton remain the fastest growing CMAs from 1961 to 2006 (272.8% and 164.4% respectively). Calgary and Edmonton are again followed by Toronto (159.7%), Vancouver (156.0%), and Ottawa (129.1%). At the same time, there are several nuances in the data worth noting. First, Calgary is far and away the fastest growing CMA over the past 45 years with a growth rate well beyond its competitors. Calgary has almost quadrupled in size since 1961. The growth rates of the next closest cities are much more modest, and furthermore, very similar. This is unlike the short-term experience where growth rates of the top five fastest growing cities exhibit wider divergence.

The ordering of CMAs in the medium-sized category is also remarkably familiar. Oshawa (205.1%), Kitchener (174.9%), Victoria (111.0%), and London (87.6%) are again the fastest growing CMAs. Halifax (65.2%) emerges as the fifth fastest growing CMA replacing Windsor (48.6%) which was fifth in the short-term. Across the long-term, Windsor is closer to the bottom of the pack, indicating that its growth is a relatively recent phenomenon.

FIGURE 7: Long-Term Growth of CMAs (1961-2006)



The five leaders of the smaller CMAs are in two distinct groups. First are CMAs with tremendous growth between 1961 and 2006. There are three such CMAs, led by Kelowna (491.0%), Abbotsford (445.6%) and Barrie (404.0%). This trio emerges as the fastest growing CMAs of any size in the country. The second group includes Guelph (158.3%) and Saskatoon (116.8%). Both are also in the top five but their rates of growth are far more modest.

With the regional picture in mind, western Canadian CMAs appear to exercise at least some limited dominance when it comes to CMA growth between 1961 and 2006. Three of the five fastest growing large CMAs are in the West (Calgary, Edmonton, Vancouver). Three of the five fastest growing small CMAs are also in the West (Kelowna, Abbotsford, Saskatoon). The West has only one CMA (Victoria) that qualifies as a medium-sized CMA. But it too claims a top spot in the category.

Figure 8 (page 11) caps the discussion of CMA growth rates across the long-term by presenting actual figures and percentage increases in CMA and non-CMA populations by province and region. Three trends are worthy of particular note. First, in every province and region, growth of CMAs has clearly outstripped growth of other urban and rural non-CMA areas. Second, CMA growth has been the most impressive in western Canada, where CMA populations have increased by 145.5% since 1961 compared to 96.6% for central Canada and 53.7% in Atlantic Canada. Third, the West also shows the largest difference between rates of CMA growth and non-CMA growth. For example, all CMA populations in western Canada increased by 145.5% since 1961. Non-CMA populations increased by 48.6%. Subtracting the two rates yields a difference of 96.9 percentage points. The comparative figures for central and atlantic Canada are 72.0 and 48.5 percentage points.

When the growth of Canada's CMAs between 1961 and 2006 is taken as a percentage of the increase in total provincial, regional, and national populations over the same period, a wider view on the long-term emerges. Between 1961 and 2006, Canada's total population increased by 13.3 million. The 33 current CMAs grew by 11.0 million. Over the past 45 years, CMAs in Canada represented 82.8% of the total increase in population (*Figure 9, page 12*).

The provincial and regional results are interesting. Central Canada is the undisputed leader, with CMA growth representing 88.0% of total regional growth from 1961-2006. Much of this is fuelled by Ontario, where 91.5% of population growth over the long-term has been in the CMAs. Quebec's results are lower at 78.8%.

FIGURE 8: Rates of CMA and Non-CMA Population Growth by Province and Region (1961-2006)

PROVINCE or REGION	ı	POPULATION INCREASES (1961-2	006)		GROWTH RATES	
	CMA Increase	Non-CMA Increase	TOTAL Increase	CMA Population	Non-CMA Population	TOTAL Population
British Columbia	1,728,197	756,208	2,484,405	166.2%	128.3%	152.5%
Alberta	1,442,365	516,041	1,958,406	210.1%	79.9%	147.0%
Saskatchewan	201,169	-158,193	42,976	88.3%	- 22.7%	4.7%
Manitoba	196,273	30,442	226,715	39.4%	7.2%	24.6%
WESTERN CANADA	3,568,004	1,144,498	4,712,502	145.5%	48.6%	98.0%
Ontario	5,420,651	503,539	5,924,190	121.9%	28.2%	95.0%
Quebec	1,802,752	484,168	2,286,920	59.5%	21.7%	43.5%
CENTRAL CANADA	7,223,403	987,707	8,211,110	96.6%	24.6%	71.4%
Nova Scotia	147,135	29,320	176,455	65.2%	5.7%	23.9%
New Brunswick	68,823	63,238	132,061	38.2%	15.1%	22.1%
Newfoundland and Labrador	71,340	23,724	47,616	65.0%	-6.8%	10.4%
Prince Edward Island	0	31,222	31,222	0.0%	29.8%	29.8%
ATLANTIC CANADA	287,298	100,056	387,354	55.7%	7.2%	20.4%
NORTHERN TERRITORIES	0	63,684	63,684	0.0%	169.3%	169.3%
CANADA	11,078,705	2,295,945	13,374,650	106.1%	29.5%	73.3%

SOURCE: Developed by CWF based on Statistics Canada census reports, 1961-2006.

In Newfoundland and Labrador, all population growth from 1961-2006 has centered around St. John's — other areas of the province have been in decline. In Nova Scotia, 83.8% of all population growth has occurred in Halifax. CMA growth in Atlantic Canada as a region is responsible for 74.2% of all population growth.

In western Canada, several interesting patterns emerge. The power of CMA growth has arguably been felt the most in Saskatchewan. Since 1961, the growth of Regina and Saskatoon together represents all population growth in the province. In both the short and long-term, Regina and Saskatoon are the only geographic areas in the province that show positive population growth. From 1961 to 2006, all other rural and urban centres have lost almost 160,000 people (Figure 8). Rural Saskatchewan has experienced a significant collapse, and this has clearly elevated the importance of the province's two CMAs. The situation in Manitoba is similar and only slightly less dramatic. Between 1961 and 2006, Winnipeg accounted for 86.6% of total provincial growth. Winnipeg grew by 196,273 compared to 30,442 for all other urban and rural areas. Alberta's twin CMAs have been responsible for almost three-quarters of the province's population increase (73.7%) while British Columbia's four CMAs account for slightly less (69.6%).

An interesting way to view the data is to calculate the percentage of provincial and regional populations that lived in a CMA in 1961, and then compare that to the percentage living in a CMA in 2006 (Figure 10, page 13). In 1961, 57.3% of all Canadians lived in the same areas that comprise today's 33 CMAs. By 2006, that number had increased to 68.1%. Again, the biggest changes can be seen in western Canada. In 1961, 51.0% of westerners lived in one of the region's nine CMAs. By 2006, the comparative figure is 63.2%. The percentage difference between these two rates is 24.0%. While the rate differential in Atlantic Canada is slightly larger at 29.3%, the effect is somewhat dulled by the fact that only 35.1% of all Atlantic Canadians currently reside in a CMA.

Urbanization in Canada over the last 45 years has clearly revolved around its largest city-regions. Eight out of every ten new Canadians since 1961 have eventually found their way to one of the nation's 33 major CMAs. Furthermore, this trend is accelerating. Since 2001, nine out of every ten new Canadians resides in one of Canada's CMAs. Canada's largest cities are the primary growth pockets of the country. What is more, the strength of this conclusion does not rest on inconsistently reported data that artificially inflate CMA growth.

FIGURE 9: CMA and Non-CMA Contribution to Overall Population Growth (1961-2006)

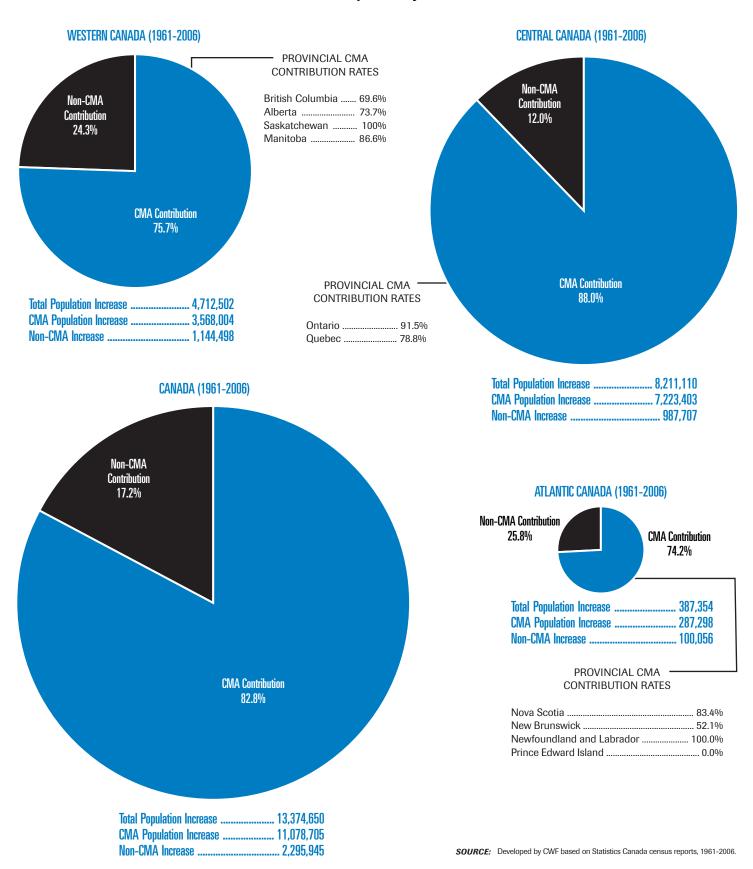


FIGURE 10: Percentage of Provincial and Regional Populations Living in a CMA (1961 and 2006)

PROVINCE or REGION	CMA PO	PULATION	TOTAL PO	PULATION	PERCENT LIV	VING IN CMA	% CHANGE IN CMA RATE
	1961	2006	1961	2006	1961	2006	1961-2006
British Columbia	1,039,768	2,767,965	1,629,082	4,113,487	63.83%	67.29%	+ 5.43
Alberta	686,373	2,128,738	1,331,944	3,290,350	51.53%	64.70%	+ 5.55
Saskatchewan	227,725	428,894	925,181	968,157	24.61%	44.30%	+ 79.98
Manitoba	498,395	694,668	921,686	1,148,401	54.07%	60.49%	+ 11.86
WESTERN CANADA	2,452,261	6,020,265	4,807,893	9,520,395	51.00%	63.24%	+ 23.98
Ontario	4,448,148	9,868,799	6,236,092	12,160,282	71.33%	81.16%	+ 13.78%
Quebec	3,028,458	4,831,210	5,259,211	7,546,131	57.58%	64.02%	+ 11.18%
CENTRAL CANADA	7,476,606	14,700,009	11,495,303	19,706,413	65.04%	74.60%	+ 14.69%
Nova Scotia	225,723	372,858	737,007	913,462	30.63%	64.02%	+ 33.28%
New Brunswick	179,990	248,813	597,936	729,997	30.10%	40.82%	+ 13.23%
Newfoundland and Labrador	109,773	181,113	457,853	505,469	23.98%	34.08%	+ 49.45%
Prince Edward Island	0	0	104,629	135,851	0.00%	0.00%	+ 0.00%
ATLANTIC CANADA	515,486	802,784	1,897,425	2,284,779	27.17%	35.14%	+ 29.33%
NORTHERN TERRITORIES	0	0	37,626	101,310	0.00%	0.00%	+ 0.00%
CANADA	10,444,353	21,523,058	18,238,247	31,612,897	57.27%	68.08%	+ 18.89%

SOURCE: Developed by CWF based on Statistics Canada census reports, 1961-2006.

A FOCUS ON CMA SIZE

Cities@2000 provided data on the average size of Canada's CMAs in 1966 and 1996. Since then, many additional city-regions have been added to the CMA roster and more accurate and consistent data is now available. In 2006, the average size of a CMA in Canada reached 652,000. This is more than double the average size of 316,000 in 1961 (Figure 11, page 14).

Three groups of provinces emerge with respect to overall CMA size. The first group is comprised of Alberta and Quebec, which together have the largest average CMAs. Alberta is dominated by Calgary and Edmonton, both of which have become very large metros exceeding one million. The sheer size of Montreal dominates relatively few smaller CMAs in Quebec (Sherbrooke, Saguenay, and Trois-Rivieres). CMAs in BC, Manitoba, and Ontario comprise the second group. In BC, the immensity of Vancouver is offset by a mid-sized CMA (Victoria) and two small CMAs (Kelowna and Abbotsford). In Ontario, Toronto, Ottawa, and Hamilton are the only real large CMAs. All others are either small or medium-sized. Saskatchewan combines with Atlantic Canada to form the third group. With the exception of Halifax, all CMAs in these provinces are under 250,000.

The CMA footprint on the larger provincial and regional landscape is pressing down the hardest in western Canada. For example, the combined population of Calgary and Edmonton has more than tripled in size between 1961 and 2006. British Columbia's CMAs are more than 2.5 times bigger in 2006 than in 1961, largely fuelled by tremendous growth in Vancouver. Saskatchewan is no slouch either. The combined populations of Regina and Saskatoon have almost doubled. While growth in Ontario CMAs has been quite robust as well, the same cannot be said of cities in Quebec or Atlantic Canada, whose growth has been relatively modest.

The last 45 years have seen the emergence in Canada of several large, powerful, and world class cities, particularly in the West. Clearly, Toronto and Montreal remain the two largest urban centres in the country and Ottawa continues to possess international caché as the nation's capital. But Canada's urban axis no longer spins entirely around this traditional trio. In 1961, the Vancouver CMA was slightly more than 800,000 people. It now exceeds two million and has won an enviable international reputation. In 1961, Calgary was about one-tenth the size of Montreal and less than two-thirds of Ottawa. Today, Calgary is almost one-third the size of Montreal and virtually the same size as Ottawa.

1.200.000 1961 2006 1.000,000 Average Canadian CMA Size in 1961: 316,496 Average Canadian CMA Size in 2006: 652,214 800,000 600,000 400,000 200,000 PQ NB NFL BC AB SK MB West NN Central NS Atlantic Canada

FIGURE 11: Average Size of CMA by Province and Region
(Average Size in 1961 Compared to 2006)

SOURCE: Developed by CWF based on Statistics Canada census reports, 1961-2006.

SUMMARY

The purpose of this study has been to draw a picture of urbanization in Canada by using consistent data and paying attention to provincial and regional nuances. In particular, the focus has been on uncovering the role being played by the nation's largest cityregions. The data can sometimes be overwhelming, and it can also be massaged and presented in numerous ways. At the same time, there are several important messages that must not become lost in the detail.

1. Western Canada

No other region of the country has experienced the effects of rapid urbanization more than western Canada, where the demographic landscape has been considerably altered. While western Canada used to be much less urban than the rest of the country, that is hardly the case today. The West is now as urban as other regions of the country. Furthermore, the West is home to some of Canada's fastest growing CMAs. Abbotsford, Kelowna, Vancouver, Victoria, Calgary, Edmonton and Saskatoon all emerge

as top five growing CMAs when considering either the short-term (2001-2006) or the long-term (1961-2006). In both the short and the long-term, three-quarters of all population growth in the West has centered around its nine large city-regions. There are, however, some interesting provincial trends as well.

- BRITISH COLUMBIA: British Columbia remains the most urbanized province in western Canada. Each of its large city-regions (Abbotsford, Kelowna, Vancouver, and Victoria) are in the top five when considering growth across the short-term and the long-term. A significant part of the urbanization thrust in the West centres around this province, and will likely continue to do so in the future. Vancouver remains as one of the primary destinations for Canadian immigrants, which will continue to fuel growth in the future.
- ALBERTA: No other province even comes close to sharing Alberta's urbanization experience. Five decades ago, the province was less urban than Manitoba and only slightly ahead of Saskatchewan. In Alberta, the urbanization story clearly centres around Calgary and Edmonton, which emerge as the fastest growing large CMAs in the country. The demographic landscape

of the province has been dramatically and permanently changed. The rapid ascendancy of Calgary and Edmonton is striking in its scope, and has clearly helped shift the focus of Canada's urban experience toward the West.

- SASKATCHEWAN: While Saskatchewan is the least urbanized province in western Canada, this does not diminish some very dramatic demographic developments. While the growth of Regina has languished, Saskatoon has enjoyed a modicum of success. Over the past 45 years, Saskatoon emerges as one of the five fastest growing cities among similar-sized CMAs. Most notably, Saskatchewan has witnessed a massive rural depopulation since 1961. Similar to Alberta, Saskatchewan's twin cities have come to increasingly dominate the provincial landscape. Population growth in Saskatchewan is completely centered around Regina and Saskatoon. The population of all other urban and rural areas when combined is in decline.
- *MANITOBA:* The province of Manitoba has one of the most unique urbanization stories in Canada. The province is less urban than either BC or Alberta, and its overall population growth can only be described as slow but steady. Urbanization in Manitoba clearly centres around Winnipeg. In fact, no other large city-region in Canada dominates its provincial landscape like Winnipeg. Almost 90% of all provincial growth occurs in the Winnipeg CMA. Furthermore, just under two-thirds of all Manitobans lived in the city-region in 2006, compared to about 54% in 1961.

2. Central Canada

The provinces of Ontario and Quebec have traditionally served as the urban heartland of the country, serving as the home for Canada's two largest city-regions and 18 other large CMAs. While that dominance is being challenged by developments in western Canada, urbanization remains a powerful force in central Canada. The growth rates of central Canadian CMAs are generally lower than those seen in western Canada, but this has not lowered their overall demographic impact. From 2001–2006, growth of the region's CMAs represents 90% of all regional population growth. The 90% figure also applies across the 1961–2006 timeframe.

ONTARIO: The effects of urbanization in Ontario continue to be felt in a powerful way, largely driven by the sheer size of its five largest CMAs — Toronto, Ottawa, Hamilton, London, and

Kitchener. These five city-regions represent two-thirds of the province's 12 million inhabitants. Four of the five also emerge as some of the fastest growing cities, whether measured across the short-term or the long-term. The essential feature to keep in mind with respect to Ontario is the dominance exercised by its rapidly growing CMAs. From 1961-2006, CMA growth represented 91.5% of total provincial growth. That number is only exceeded by provinces like Saskatchewan that have experienced rapid rural decline, which is not the case in Ontario. More importantly, the contribution of CMA growth to total population growth in the province continues to rise. From 2001-2006, CMAs represented 94.0% of all provincial population growth.

QUEBEC: General patterns of urbanization in Canada's second most populous province do not leap off the page. The urban story in Quebec is perhaps less clear and slightly more complex, if not somewhat paradoxical. For example, Montreal has grown faster than Quebec City between 2001-2006, but that is not the case over the 1961-2006 period, where growth in Quebec City outpaced that of Montreal. The experience of several CMAs also stands in stark contrast. Sherbrooke, for example, is a relatively fast growing CMA, and almost made the top five list for both 2001-2006 and 1961-2006. But the province is also home to Saguenay (formerly Chicoutimi-Jonquiere) which rates as the slowest growing CMA in Canada across both the short-term and the and long-term. In 1961, about 57.6% of Quebecers lived in one of the province's five CMAs. This reflects the average seen across the nation as a whole. By 2006, 64.0% of Quebecers were living in CMAs, just sightly less than the national average.

3. Atlantic Canada

Atlantic Canada has traditionally been, and remains today, the least urbanized region in Canada. In 1961, just under half (49.8%) of Atlantic Canadians lived in an urban area. By 2006, that figure increased only modestly to 53.9%. However, this apparent lack of urbanization may very well be a function of how urban is defined. For a municipality to qualify as an urban centre, it must have a population of at least 1,000 with a population density of 400 per square kilometer. Across Atlantic Canada, there are certainly hundreds of villages and towns that appear more urban than rural, but they simply do not reach upward to the 1,000 mark.

When the focus shifts away from this broad definition of urban and moves to consider the region's CMAs, a very different picture emerges. From 1961-2006, CMA growth in the region represented 74.1% of total regional population growth. This has rapidly accelerated when moving to consider the short-term. Between 2001 and 2006, Atlantic Canada experienced a net loss of just under 1,000 residents. At the same time, the combined population of the region's four CMAs (Halifax, St. John, Moncton, St. John's) grew by some 30,000 people.

- NOVA SCOTIA: Atlantic Canada's most populous province is also home to the region's largest CMA. In 1961, Halifax held less than one-third of the province's total population. But in 2006, it represented almost two-thirds of the provincial population. At the same time, it is the recent past that holds the biggest urbanization story in Nova Scotia. Between the 2001 and 2006 census, Halifax grew by almost 14,000, but the provincial population increased by only about 5,500. Like Saskatchewan, all other urban and rural areas of the province when combined are exhibiting significant decline.
- NEW BRUNSWICK: New Brunswick is an interesting case study in modern urbanization trends. The province is home to two CMAs Moncton and St. John. Between 2001 and 2006, Moncton has demonstrated rather robust growth, taking fifth place among all Canadian cities in its relative size category. St. John, however, has actually lost a few hundred people between the two census dates. The province shares the same trend as Nova Scotia above. Between 2001 and 2006, the province grew by only around 500 people. However, Moncton grew by over 7,700. It is not difficult to see which city is driving the demographics in New Brunswick.
- NEWFOUNDLAND and LABRADOR: Newfoundland is in the unenviable position of being the only province in Canada to actually lose population between 2001 and 2006. In that five-year period, the population fell by almost 7,500 people. But like its regional neighbours, the province's sole CMA has still grown. Between 2001 and 2006, St. John's grew by some 8,200 people.
- PRINCE EDWARD ISLAND: PEI has the unique distinction of being Canada's least urbanized province. In 2006, only 44.9% of its residents were considered urban. Nonetheless, this urbanization rate is higher than the 32.4% registered in 1961. PEI contains no CMAs and its largest city Charlottetown was not examined. If Charlottetown were to serve as a proxy for a CMA, the same factors affecting the rest of the region would likely be seen in PEI as well.

CONCLUSION

The policy implications of steadily increasing urbanization and rapid growth of Canada's large city-regions has only recently begun to capture the imagination of decision-makers and the broader public policy community. Ten years ago, there was a noticeable lack of research, discussion, and debate about Canada's urban future. In some ways, Canadians appeared to have been infected with skepticism concerning the steady march of the nation's largest city-regions — viewing developments here as a mere "flash" in the pan. But this is simply not the case. Attention must turn toward Canada's urban centres. The reality is undeniable: Canada's future rests in its large city-regions.

Provincial populations in Saskatchewan, Nova Scotia, New Brunswick, and Newfoundland are completely dependent on the growth of their largest city-regions. In Ontario, 95% of all provincial growth occurs in that province's largest city-regions. British Columbia and Alberta are home to CMAs with absolutely astounding rates of growth. Winnipeg continues to dominate political, economic, and demographic life in Manitoba, and the percentage of Quebecers living in CMAs continues to rise steadily. For those Canadians currently unconvinced about the need to address the numerous policy challenges facing our nation's cities, then all of this serves as the clarion call for action.

Statistics Canada's census of population contains literally millions of data points that run from the Torontos and Vancouvers of the world right on down to the smallest municipalities in the country. The glaring absence lost in all this detail has been a lack of consistency in the published material measuring the demographic impact of Canada's largest city-regions. In some respects, we have lost sight of the forest for the trees. This study represents one researcher's attempt to address the information gap in hopes of stimulating a more robust and dynamic policy response to our current urban challenges.

The Canada West Foundation launched its *Western Cities Project* by publishing *Cities@2000*, a useful sourcebook examining urban life in Canada. As the Foundation begins the last year of its *Western Cities Project*, we have returned full circle to underscore once again the tremendous importance of Canada's big cities to our future economic prospects, standard of living, and quality of life.

APPENDIX A: Census Results for Canadian CMAs (1961-2006) (Adjusted to Reflect the 2006 Census Boundaries)

Census Metropolitan Area (CMA)	2006	2001	1996	1991	1986	1981	1976	1971	1966	1961
ABBOTSFORD (British Columbia)	159,020	147,370	136,480	113,562	88,420	75,264	56,080	41,602	31,435	29,147
KELOWNA (British Columbia)	162,276	147,739	136,541	111,846	89,730	85,237	71,254	50,177	33,929	27,460
VANCOUVER (British Columbia)	2,116,581	1,986,965	1,831,665	1,602,590	1,380,805	1,268,253	1,166,412	1,082,411	933,142	826,719
VICTORIA (British Columbia)	330,088	311,902	304,287	287,897	255,225	240,993	222,754	197,841	175,996	156,442
CALGARY (Alberta)	1.079.310	949.512	820,205	752.438	671.523	625.088	489,945	417.762	341,905	289,517
EDMONTON (Alberta)	1,049,428	951,114	875,590	853,900	786,596	742,018	616,055	538,482	461,584	396,856
RECINA (Saskatchawan)	104 071	107 800	102 657	101 602	186 571	300 221	158 258	146 534	138 102	110 847
SASKATOON (Saskatchewan)	233 923	225 927	219 056	210 949	201 686	176 244	150,226	140,628	129 911	107.878
	77,07	11,611	000,017	(10,017	201,000	1,001	077,001	270,01	17,711	0/0,/01
WINNIPEG (Manitoba)	694,668	676,594	671,993	664,334	635,798	601,742	592,883	563,037	531,187	498,395
BARRIE (Ontario)	177,061	148,480	118,695	97,150	73,811	66,834	59,810	47,296	39,175	35,129
BRANTFORD (Ontario)	124,607	118,086	114,564	110,380	102,299	100,393	95,238	92,785	86,929	80,034
GUELPH (Ontario)	127,009	117,344	105,997	98,202	86,837	79,254	75,332	67,065	57,579	49,169
HAMILTON (Ontario)	692,911	662,401	624,360	599,760	557,029	542,095	529,371	503,122	461,505	404,844
KINGSTON (Ontario)	152,358	146,838	144,528	137,328	123,232	115,749	114,879	106,673	100,290	89,277
KITCHENER (Ontario)	451,235	414,284	382,940	356,421	311,195	287,801	272,158	238,574	202,893	164,136
LONDON (Ontario)	457,720	435,600	419,674	401,191	359,649	344,071	328,935	307,749	272,780	244,039
OSHAWA (Ontario)	330,594	296,298	268,773	240,104	203,543	186,446	167,124	147,516	132,060	108,345
OTTAWA (Ontario)	1,130,761	1,067,800	1,002,732	934,740	829,524	751,818	724,397	645,375	566,268	493,593
PETERBOROUGH (Ontario)	116,570	110,876	108,537	106,211	93,530	91,598	89,783	83,766	78,172	72,142
SAINT CATHARINES (Ontario)	390,317	377,009	372,406	364,552	343,258	342,645	340,412	323,162	303,760	273,989
SUDBURY (Ontario)	158,258	155,601	165,618	162,791	153,942	161,390	169,338	170,921	148,978	140,372
THUNDER BAY (Ontario)	122,907	121,986	126,643	126,001	123,769	123,463	121,153	116,378	112,066	106,350
TORONTO (Ontario)	5,113,149	4,682,897	4,263,759	3,898,935	3,436,345	3,139,290	2,927,220	2,699,592	2,345,211	1,969,160
WINDSOR (Ontario)	323,342	307,877	286,811	268,681	260,693	257,420	258,502	258,988	238,486	217,569
MONTREAL (Québec)	3.635.571	3.451.027	3.349.694	3.228.916	3.006.126	2.937.601	2,900,730	2.819.593	2.635.007	2.273.744
QUEBEC CITY (Québec)	715,515	685,014	675,780	649,441	606,186	586,772	551,249	509,595	463,693	404,258
SAGUENAY (Québec)	151,643	154,938	160,454	160,928	158,468	158,229	150,618	147,780	145,162	140,094
SHERBROOKE (Québec)	186,952	175,950	170,519	162,844	151,712	146,367	137,144	127,262	119,152	105,941
TROIS-RIVIERES (Québec)	141,529	137,507	139,956	136,303	128,888	125,343	118,321	115,067	111,517	104,421
HALIFAX (Nova Scotia)	372.858	359.183	342.966	330,846	306,418	288.126	278.531	261.461	244,948	225.723
MONCTON (New Brunswick)	126,424	118,678	114,475	108,453	104,092	100,297	97,428	87,049	81,823	77,337
SAINT JOHN (New Brunswick)	122,389	122,678	125,705	125,838	122,075	121,819	119,636	112,146	109,045	102,653
SAINT JOHN'S (Newfoundland)	181,113	172,918	174,051	171,848	161,891	154,825	145,405	133,695	119,797	109,773

SOURCE: Developed by CWF based on Statistics Canada census reports, 1961-2006.

APPENDIX B: Example of Methodology Employed to Arrive at Consistent CMA Population Data (Brantford, Ontario)

BRANTFORD (Ontario)	2006 CENSUS REPORT	S REPORT	2001 CENSUS REPORT	JS REPORT	1996 CENSUS REPORT	JS REPORT	1991 CENSUS REPORT	JS REPORT	1986 CENSUS REPORT	JS REPORT
	2006	2001	2001	1996	1996	1991	1991	1986	1986	1981
TOTAL CMA (As Reported) TOTAL CMA (As Adjusted)	124,607	118,086	86,417	84,764 114,564	100,238	97,106	97,106 110,380	80,521 102,299	90,521 102,299	88,350
Brantford (City) Brant (City) Add: Brantford Township Add: Burford Township Add: Onondoga Township Add: Onondoga Township Add: Paris (Town) Add: South Dumfries Township Adjusted CMA Total Statistical Adjustment FINAL CMA COUNT	90,192 34,415	86,417 31,669 ———————————————————————————————————	86,417 6,535 5,975 1,337 1,758 9,881 6,183	84,764 6,487 5,858 1,377 1,650 8,987 5,441 114,564	84,764 6,487 5,858 1,377 1,650 8,987 5,441 114,564	81,997 6,509 5,733 1,398 1,519 8,600 4,624 110,380	81,997 6,509 5,733 1,398 1,519 8,600 4,624 110,380	76,146 6,287 5,227 1,239 8,088 4,019 102,299	76,146 6,477 5,227 1,239 7,898 4,019 102,299	74,336 6,509 5,516 1,262 1,344 7,505 3,921 100,393

BRANTFORD (Ontario)	1981 CENSUS REPORT	S REPORT	1976 CENSUS REPORT	JS REPORT	1971 CENSUS REPORT	US REPORT	1966 CENSUS REPORT	JS REPORT	In any given census, Statistics Canada produces data for each
	1981	1976	1976	1971	1971	1966	1966	1961	CMA based on the current
TOTAL CMA (As Reported) TOTAL CMA (As Adjusted)	88,330 100,393	82,811 95,238	82,800 95,238	80,292 92,785	80,284 92,785	75,187 86,929	62,036 86,929	56,301 80,034	immediately preceding census year. These two data points are usually comparable, being based
Brantford (City) Brant (City)	74,315	69,306	056,99	64,527	64,421	59,854	59,854	55,201	on the same census subdivisions and CMA boundaries. However, difficulties arise when working
Add: Brantford Township	6,530	6,781	9,137	9,274	9,380	9,062	9,062	7,764	back through historical census
Add: Burford Township	5,524	5,749	5,749	5,799	5,799	5,628	5,628	5,492	reports that use different CMA
Add: Oakland Township	1,262	1,336	1,336	1,399	1,399	1,336	1,336	1,323	boundaries and include or exclude
Add: Onondoga Township	1,344	1,345	1,345	1,349	1,349	1,239	1,239	1,199	various census subdivisions from
Add: Paris (Town)	7,485	6,724	6,713	6,491	6,483	6,271	6,271	5,820	the CIVIA's total population. The
Add: South Dumfries Township	3,941	4,005	4,016	3,953	3,961	3,546	3,546	3,241	a set of consistent data is that the
Adiusted CMA Total	100.401	95.246	95.246	92.792	92.792	86.936	86.936	80.040	CMA population total for each
Statistical Adjustment	(8)	(8)	(8)	(5)	(2)	(5)	(2)	(9)	same regardless of the specific
FINAL CMA COUNT	100,393	95,238	95,238	92,785	92,785	86,929	86,929	80,034	census report being used to
									construct the data.

subdivisions. Complicating matters further is the fact that the City of Brant was established from other census subdivisions sometime between 2001 and 2006. To build a set of consistent data for the Brantford CMA, researchers started with the 2006 census report, which includes data for 2006 and 2001 based on similar boundaries and the same census subdivisions. Moving to the 2001 census report, various census subdivisions were added (or subtracted) in order to yield a CMA total for the years 2001 and 1998. If two similar totals could be found for 2001 (using the 2006 census report and the 2001 census report and the 2001) then the consistency of the CMA data for 1996 would be established. This process was repeated all the way back to the 1966 census report, from which CMA totals could be calculated for 1966 and 1961. For some years, the exact CMA totals were not always possible. In those cases, a statistical adjustment was made to link the two years together. An example here for Brantford is the 1981 census year. The 1986 census report yielded a total of 100,393 while the 1981 census report yielded a total of 100,491. The totals for each preceding year (1981, 1976, 1971, 1966, and 1961) were thus reduced by Brantford, Ontario serves as an excellent example on how a consistent dataset was built. In the 2006 census report, the Brantford CMA comprised the two cities of Brantford and Brant. However, the CMA total in the 2001 census report included the City of Brantford only. Things changed again in the 1996 census report, where the Brantford CMA included the City of Brantford as well as some other census 0.0079%, which is the difference between the two 1981 results. (For most CMAs, such adjustments were seldom more than 1/10th of one percent.)

SOURCE: Developed by CWF based on Statistics Canada census reports, 1961-2006.

About the Canada West Foundation

Our Vision

A dynamic and prosperous West in a strong Canada.

Our Mission

A leading source of strategic insight, conducting and communicating nonpartisan economic and public policy research of importance to the four western provinces and all Canadians.

Canada West Foundation is a registered Canadian charitable organization incorporated under federal charter (#11882 8698 RR 0001).

In 1970, the One Prairie Province Conference was held in Lethbridge, Alberta. Sponsored by the University of Lethbridge and the Lethbridge Herald, the conference received considerable attention from concerned citizens and community leaders. The consensus at the time was that research on the West (including BC and the Canadian North) should be expanded by a new organization. To fill this need, the Canada West Foundation was created under letters patent on December 31, 1970. Since that time, the Canada West Foundation has established itself as one of Canada's premier research institutes. Non-partisan, accessible research and active citizen engagement are hallmarks of the Foundation's past, present and future endeavours. These efforts are rooted in the belief that a strong West makes for a strong Canada.

More information can be found at **WWW.CWf.Ca**.

