WESTERN
POLICYPOLICY
POLICYStateStateStateOurterly Report

GRADUATE SCHOOL OF ■ PUBLIC POLICY

- Aging Patterns in the West Populations in the West growing at both ends of the age spectrum.
- The Changing Face of Agriculture The farming industry is being fundamentally reshaped.
- Crime, Probation, and Incarceration Rates Prison populations in Manitoba and Saskatchewan are high.
- Labour Market Experiences of Immigrants Recent immigrants are filling many of the new jobs in the West.

Aging Patterns in the West



By Doug Elliot, Editor David Foote, the author of *Boom, Bust, and Echo* has famously stated that "age is 80% of everything". This is only a slight exaggeration

- the age distribution of a community, a neighbourhood, or a country affects the size of the labour force, spending patterns by the residents, health care utilization, public school enrolments, and the demand for housing to name just a few effects. The most recent release from the 2011 Statistics Canada census covers the age and sex of the population. These statistics are not new to demographers because there are other data sources describing the age distribution of the population. The census numbers are, however, more accurate and allow analysis at a more detailed level of geography.

There are several general trends evident in the statistics about the age of westerners. One is the aging of the "baby boom" generation. This bulge in the age distribution is concentrated

in the 50-59 age group in 2011 compared with the 45-54 age group five years ago¹. This is arguably the most important trend because it moves the average baby boomer much closer to retirement. Although the bulk of the baby boom generation is near age fifty, the oldest of the boomers will be turning 65 this year and will be considering retirement if they have not already done so. The bulge of older workers in the labour market has important implications for labour market supply in general and causes sleepless nights for human resource managers in some companies.



Figure 1: Age Distribution, Aggregate of Four Western Provinces, 2011

¹ There is no consensus on the exact dates and ages for the beginning and ending of each generation.

Analyst

VOL 3 ISSUE 2 JUNE 2012

The Western Policy Analyst is published bi-weekly and quarterly by the Johnson-Shoyama Graduate School of Public Policy. No reproduction of any material is allowed without express consent of the publishers.

EDITOR Doug Elliott

PUBLISHER Andrea Geisb<u>auer</u>

EDITORIAL BOARD Rose Olfert Lihui Zhang Jim Marshall

COPYRIGHT JSGS 2010

Johnson-Shoyama Graduate School of Public Policy

University of Saskatchewan Campus Diefenbaker Building 101 Diefenbaker Place Saskatoon, SK Canada S7N 5B8 Tel: 306 966-8525 Fax: 306 966-1967 Email: public.policy@usask.ca

University of Regina Campus 3737 Wascana Parkway Regina, SK Canada S4S 0A2 Tel: 306 585-5460 Fax: 306 585-5461 Email: gspp@uregina.ca

Outreach & Training

University of Regina College Avenue Campus Second Floor, Gallery Building Regina, SK Canada S4S 0A2 Tel: 306 585-5777 Fax: 306 585-5780 Email: js_outreach@uregina.ca

ISSN 1923-9963

SUBSCRIPTIONS Please visit our website at www.schoolofpublicpolicy.sk.ca and click on **Research & Publications** to subscribe to the *Western Policy Analyst*. Email: js_publications@uregina.ca





www.schoolofpublicpolicy.sk.ca

Another trend is a growing number of young adults. This trend is, in turn, the result of three factors. The main reason is that the children of the baby boomers (the "echo") are moving into their twenties just as surely as the baby boomers are moving into their sixties. The second reason is migration. Those who move to the West from other provinces or countries tend to be young adults because they are the most mobile. With the economic growth between 2006 and 2011, there have been a lot of young people moving to the West.

Figure 2: Change in Population, 2001 to 2011, Aggregate of the Four Western Provinces



Those who move to the West from other provinces or countries tend to be young adults because they are the most mobile.

The third reason, which is specific to Manitoba and Saskatchewan, is the large number of Aboriginal people in this age cohort.

A third trend is a growing number of young children (under 5 years of age) and this trend was also highly predictable because of the growth in the number of young adults. Even with no change in fertility rates, one would expect an increase in the number of children with an increase in the number of women in childbearing age groups. This growth will increase the demand for day care in the short term and increase elementary school enrolments in the medium term. Another trend is the increasing number of older seniors. Longer life expectancy has lead to an increase in the number of persons 85 years of age and older. The numbers are still relatively small but the percentage increases from 2006 to 2011 are still quite dramatic.

Figure 2 summarizes these trends by looking at the growth rate from 2001 to 2011, in percentage terms, for each ten-year age cohort. The largest increases have been the result of the aging of the boomers with a 62% increase in the population 55 to 64 years of age. The second highest has been among those 85 years of age and older. The figure also shows the increase in the number of young adults (25 to 34 years) and their children (under 5 years).

Rural and Urban Patterns

The age trends described above encompass the entire population in western Canada but there are some interesting and important differences according to the type of community. Figure 3 shows that young families are more likely to live in the larger metropolitan areas such as, Vancouver, Winnipeg, and Calgary. In these metropolitan areas, 29.0% of the population is 25 to 44 years of age compared with 22.8% in rural and small urban centres. One of the consequences is that there are relatively more children in smaller communities and rural areas - 19.8% of the population compared with 16.6% in metropolitan areas. In effect, the relative lack of rural residents in the 25 to 44 age group means there are proportionately more at either end of the age spectrum.

Younger seniors and the older baby boomers, that is, those who are in the 55 to 79 age group are more likely to live in rural and small urban areas than in larger urban centres.

Notwithstanding these differences in distribution, more than one half of western seniors live in a large metropolitan area.

Provincial Patterns

Figure 4 compares the age distributions for the four western provinces. With two exceptions, they are similar.

• Alberta has, compared with other western provinces, a much higher proportion in the 25 to 44 age group and relatively few 55 year of age and older.

 British Columbia has, compared with other western provinces, more persons 55 and older (could it be the climate?) and fewer under 15.

Next Release

The next release from the 2011 census will be in September. It will cover dwelling characteristics (e.g. age, condition, type), marital status, and living arrangements (e.g. lone parents, age of children).

Figure 3: Age Distribution by Community Size, 2011, Aggregate of the Four Western Provinces



Figure 4: Age Distribution by Province, 2011



The Changing Face of Agriculture



By Murray Fulton, Johnson-Shoyama Graduate School of Public Policy and Sara Olfert, Research Associate

New technologies, changing economic conditions and alterations in social relationships are fundamentally reshaping the economy of western Canada. Nowhere is this more the case than in agriculture. As recent data released by Statistics Canada indicates, the nature of agriculture continues to change. These changes are being reflected in most aspects of farming including farm size and farm numbers, land tenure, tillage practices, and the mix of crops and livestock that are produced.

The data presented in this article covers the period from 2006 to 2011. Given the high agricultural prices during this period, we would expect to see significant changes occur over this time frame. Historically at least, farm structure, while always changing, tends to shift more during good economic times than poor economic times. The higher prices provide the funds to purchase new equipment and create an incentive for new and existing farmers to buy or rent land; these same higher prices also provide an opportunity to those wishing to retire from the industry to do so profitably.

For the last 80-90 years, the number of farms on the prairies has been declining. As Figure 1 illustrates, this trend has continued over the 2006-2011 period. This overall decline masks some important differences among farms. Across all three prairie provinces, the number of small and medium-sized farms (those less than 2,880 acres or 4½ sections) has declined, while the number of large farms (those that are 2,880 acres and larger) has increased.

The decrease in the small and medium farms is a result both of farmers leaving farming (the land thus goes to larger operations) and of farmers expanding their operations. The economic pressures for the expansion of farm size are the same as what has historically driven up farm size – new technology in the form or larger equipment and labour-saving devices have created economies of scale that favour the larger farms over the smaller farms.

As Figure 2 illustrates, the increase in farm size has been accompanied by a change in the tenure relationships governing land. While there have been changes in all the categories, the most important changes are those in the "owned" and "rented or leased from others" categories, with the area in the first of these groups falling and the area in the second of these groups rising. This pattern holds across all the provinces.

Figure 1: Total Number of Farms by Size, Prairie Provinces, 2006 and 2011



Figure 2: Land Tenure, Prairie Provinces, 2006 and 2011



As agriculture becomes more business-oriented, the idea that the size of the farm has to be more or less constrained to what the farmer can own is being replaced with the idea that land is just one of the factors that has to be managed to create an efficient farming operation.

Although the data does not break down land tenure relationships by farm size category, it would appear to be the case that the larger farms are increasingly being made up land that is rented rather than land that is owned.

The tenure data thus suggests a movement away from the traditional view of a farm that is both owned and operated by a farm family to one that in which ownership is increasingly separated from operations. Part of the reason for this shift is a change in social norms. As agriculture becomes more business-oriented, the idea that the size of the farm has to be more or less constrained to what the farmer can own is being replaced with the idea that land is just one of the factors that has to be managed to create an efficient farming operation. This changing role and conceptualization of farming is perhaps best seen in the language that is used to describe those involved in the industry. Over the last few decades, the term "farmer" has increasingly been replaced with the term "producer".

While the number of farms has fallen, Figure 3 illustrates that the land used for crop production has remained more or less constant over the period 2006 to 2011, with a moderate increase in Alberta and very small decreases in Saskatchewan and Manitoba. Figure 3 also shows how tillage practices have changed.

In Alberta and Saskatchewan, there has been a relatively large increase in no-till/zerotill seeding and a corresponding decline in tillage that incorporates crop residue into the soil. The tillage practices in Manitoba have not shifted to any large extent although the nature of the change is the same as in Alberta and Saskatchewan. As Figure 4 shows, there have been some important shifts in the crops that are grown on the land that is under cultivation. The acreage seeded to cereal crops – wheat, durum, oats, barley and rye – has declined in all the provinces. At the same time, the area planted to canola has increased substantially in all three provinces.

There has also been a modest increases in the acreage seeded to pulses. This shift from cereals to oilseeds (and most importantly, canola) and pulse crops is in part a result of the need for more diverse crop rotations as farmers adopt no-till, zero-tillage and other minimum tillage systems. Farmers have found that when the land is in production year after year, altering the crops grown year to year increases soil quality and yields substantially.

This shift is also a result of the fact that yield increases in canola have been greater than that in cereals, thus making canola a more profitable crop. The area planted to alfalfa and hay has declined. As will be seen below this decline mirrors the changes occurring in cattle numbers.

~continued on page 10

Figure 3: Tillage Practises, Prairie Provinces, 2006 and 2011



Figure 4: Types of Crop Seeded, Prairie Provinces, 2006 and 2011



Crime, Probation, and Incarceration Rates



By Jim Marshall, Senior Policy Fellow, Johnson-Shoyama Graduate School of Public Policy

Recently released data on prison counts reveals

that the West continues in its tradition. Prison populations exceed the national average and are increasing in spite of falling crime rates.

Adult Incarcerations and Probation

Figure 1 examines adult counts in provincial correctional facilities in the four western provinces as compared to the national average over the ten years from 2001 to 2010.

The data show provincial correctional institution populations in the west have been higher than the national average (about 90 persons per 100,000 population), with the exception of British Columbia. In particular, rates have now exceeded twice the national average in Manitoba and Saskatchewan, near 200 inmates per 100,000 population. And, notably, population counts seem to be rising in Saskatchewan and (especially) Manitoba while they have been stable nationally and in Alberta and British Columbia.

Not all penitents are incarcerated, however, and Figure 2 illustrates the number of persons on probation from the provincial systems, expressed on a per-capita basis. In Figure 2 we see that there are also many more people on probation in Manitoba and Saskatchewan than in Canada as a whole. Although here the two provinces are only about 50% above the national average. British Columbia and Alberta are slightly below the national average in their probation counts.

The ratio of incarcerated to probations also reveal a stronger propensity to keep inmates in facilities in the West as seen in Figure 3. Whereas nationally, those in the provincial systems tend to be about one to four split between incarcerated and on probation (that is the incarceration rates are about 25% of the probation rates), the ratios are higher in the West. In Saskatchewan, for example, there are only about 2.5 people on probation for every one incarcerated.

Youth Populations

Similar patterns emerge in the west in examining persons in the youth criminal justice system, although the rates tend to be much lower.

Figure 4 shows the rate of incarceration among youth per 10,000 population of 12 to 17 year olds by province from 2001 to 2010.

These figures include persons incarcerated in provincial facilities either on sentence or on remand (awaiting trial). Generally, those sentenced will be those convicted of crimes for which the sentence is less than two years but those on remand may be awaiting trial for any offence including more serious crimes which might lead to sentences in federal penitentiaries. Data for federal prisons are excluded because the location of penitentiary sentences may be independent of the location of the crimes or the province of residence of the sentenced person. Nationally, the federal prison population in custody represents about a third of the total, so the provincial data reflects the majority of the population in custody.

The remand population represents over one half of the total population in provincial institutions although there is substantial variation among provinces in this ratio.

Figure 1: Adult Incarceration Rates in Provincial Corrections Facilities



Figure 2: Adult Probation Rates



Figure 3: Adult Incarceration Rates as a Proportion of Adult Probation Rates





Again we see incarceration rates in Manitoba and Saskatchewan which are very high by national standards, as their rates are more than three times the national average of approximately seven persons incarcerated per 10,000 youth.

Youth are far more likely to be placed on probation than to be incarcerated as revealed in Figure 5. Nationally there are about 10 times as many youth on probation as there are in secured custody. They are less likely to be on probation in the West and, while the number of youth on probation in Manitoba and Saskatchewan is twice the national average, there is a one in six chance of a youth in the system being in custody in those two provinces as compared to a one in eleven chance nationally.

Alberta and British Columbia are both near the national average for incarceration of youth but well below the national average for probation of youth. This suggests those two provinces have fewer than average youth in their systems but they are also more likely to have them in secure facilities than is the case in other provinces.

Crime

Of course, prison populations are driven by crime rates and the effectiveness of the court and justice systems and these populations may

What remains unexplained is the apparently growing inmate and probation populations in the face of falling crime rates.

just reflect the higher crime rates in the West. Figure 6 illustrates police-reported crimes for the western provinces albeit for all criminal code offences, including those that could lead to sentences in federal institutions and those that would not include time in institutions at all.

The data reveal that crime rates are indeed higher in western Canada, about twice as high in Saskatchewan, for example, as the national average but more like 30% to 40% above the national average in the other western provinces. That might explain the higher rates of persons in the criminal justice system in the western provinces.

What remains unexplained is the apparently growing inmate and probation populations in the face of falling crime rates. Given that the downward trend in crime data appears to be nation-wide, are higher prison populations in the west the cause of reduced crime or are we just locking more of them up than is the case elsewhere?

The reported crime rate has dropped 16% nationally in the ten-year period with drops of 12% in Manitoba; 8% in Saskatchewan; 10% in Alberta; and a whopping 23% in B.C., despite that province having one of the lower incarceration rates in the West throughout the period.

Why do Manitoba and Saskatchewan have adult incarceration rates more than twice the national average when Saskatchewan's crime rate is twice the national average and Manitoba's is only 46% above the national average?

Figure 5: Youth Probation Rates



Figure 6: Crime Rates (all Offences)



Labour Market Experience of Immigrants



Bruno Dupeyron, Assistant Professor, Johnson-Shoyama Graduate School of Public Policy and Assistant Professor of Law, University of Regina

In the last issue of the *Western Policy Analyst*, we examined the nature of immigration to Canada in general and to western Canada in particular. In this issue we focus on the recent labour market experience of immigrants¹. The statistics show several trends that deserve to be examined and discussed.

First, if we observe a five-year (2006-2011) pattern of employment growth in Canada and the western provinces, we see that employment has grown by 1.1% nationally compared with 1.4% in western Canada. Alberta has had the highest growth rate over this period (see Figure 1).

Secondly, we compare native-born Canadians with both i) all landed immigrants and ii) those who have been living in Canada for less than ten years². Here we see that employment among those born in Canada has been quite limited, growing by 0.8% over the last five years. This contrasts with higher employment growth rates among immigrants (1.9% for all immigrants and 1.8% for recent immigrants). This contrast is even sharper in the West, where the growth of all immigrants who are employed has been 3.5% and the growth among recent immigrants by 5.0% (see Figure 2).

Figure 3 shows that this effect is evident in each of the prairie provinces. That is, employment among immigrants is growing more quickly than among those born in Canada and even more quickly among recent immigrants. The trend is most pronounced in Saskatchewan where employment among recent immigrants has grown by a remarkable 23% per year on average from 2006 to 2011. Conversely, employment among recent immigrants to British Columbia has declined.

The contribution of immigrants to the employed population in western Canada can be interpreted in several ways. One way is to suggest that individuals born in Canada cannot entirely fulfill the country's needs, because the labour market needs more workers in general, and, in particular, more trained workers in definite areas (engineering, health, teaching, for example).

This may be explained by demographic reasons (low fertility rate among the Canadian population), a structural brain drain (attraction of the US market in specific professional fields), or the insufficient production of qualified workers in Canada. In this context, immigrants compensate quantitatively and qualitatively for the shortfall of Canadian-born workers.

One way to quantify this is to note that of the 375,000 jobs created in the West from 2006 to 2011, native-born Canadians filled fewer than one-half (150,000) and recent immigrants filled 78,000. Without immigration, those jobs may very well have gone unfilled.

The other way to examine labour market data is to look at employment and unemployment rates and how they differ. Immigrants have lower employment rates than those born in Canada (see Figure 4) but this is mainly because so many immigrants living in the West came to Canada decades ago and are now out of the labour force. Employment rates among recent immigrants are lower but close to those of those born in Canada, particularly in the West.

Figure 1: Employment Growth, Average Annual Increase from 2006 to 2011



Figure 2: Employment Growth, Average Annual Increase from 2006 to 2011, by Immigration Status



Figure 3: Employment Growth, Average Annual Increase from 2006 to 2011, by Immigration Status



¹ This is possible because, starting in 2006, Statistics Canada began asking respondents to the monthly Labour

Force Survey about their immigration status.

² In both cases we are excluding temporary foreign workers; only landed immigrants are included.

In the short term, recent immigrants may face more obstacles in the labour market than their native-born counterparts. In the medium and long terms, those differences seem to decline but still persist.

In 2011, landed immigrants have a 57% employment rate in the West in comparison to 66% among those born in Canada. Recent immigrants have a comparable employment rate 65% compared with 66%. In fact, the employment rate among recent immigrants is higher than among those born in Canada in each of the prairie provinces so the overall average for the West is lower only because of the British Columbia labour market .

Figure 5 (see next page) shows that landed immigrants have a somewhat higher unemployment rate than those born in Canada and the unemployment rate for recent immigrants is higher still. This is true in Canada generally and also in the West.

The comparison of those statistics, along with numerous studies over the last twenty years, reveal that immigrants contribute positively to the Canadian workforce (approximately one fifth of the western workforce is made up of immigrants), but are challenged by several issues. In the short term, recent immigrants may face more obstacles in the labour market than their native-born counterparts. In the medium and long terms, those differences seem to decline but still persist.

Ongoing problems that are faced by immigrants are generally described as unequal opportunities. For instance, newcomers may hold university degrees that are not recognized in Canada, which may hamper their job search, oblige them to work temporarily in an under-gualified area, and lead them to permanently work in this sector, get a Canadian university equivalence or degree, or relocate to another province or country. This is especially problematic for visible minorities and/or women who may suffer from this "double penalty" through the devaluation of their educational credentials, and the subsequent earnings disparities. Those findings are valid, even after controlling for other factors, such as education, work experience, official language

command, years spent in Canada, size of immigrant population, and local unemployment rate. The reforms in the last three decades have continued to neglect those problems resulting in continuing isolation of those more vulnerable categories of immigrants.

Other studies have shown that landed and recent immigrants use the welfare state less than their native-born counterparts for several reasons. The conditions to access specific services have been more and more limited (not to say that the access to some of them have been made impossible for newcomers) or recent immigrants do not use them. Failure to access these services may be because new immigrants feel that they should work rather than use them, because they ignore the existence of those programs, or because they use alternative forms of support such as family and/or community. To conclude this brief overview of the labour market experience of immigrants, it should be stressed that the common perception of this topic (including the one adopted in this text) is generally limited to a utilitarian perspective. Nevertheless, we know that this subject includes many other facets that are embedded in laws and regulations, in concrete practices and in additional representations and discourses. This is the case if we consider the demographic, social and cultural benefits immigrants bring to Canada and share with Canadians, whose many ancestors have been immigrants themselves.

Figure 4: Employment Rates in 2011, by Immigration Status



Figure 5: Unemployment Rates in 2011, by Immigration Status



WESTERN POLICY ANALYST

"The Changing Face of Agricultre" continued from page 5

Across the Prairies livestock production has moved away from cattle and pigs and towards chicken production (see Figure 5). The decline in cattle and pigs is due to a number of factors, including:

• higher grain prices and thus higher feed costs;

health concerns such as "mad cow" disease and swine flu; and

• trade restrictions resulting from policy changes in other countries (most notably, the Mandatory Country of Origin labeling in the United States).

All of these have reduced the profitability of producing cattle and pigs.

The decline in cattle production is most noteworthy in Alberta, which has long had a very significant cattle sector. The increase in chicken production is most evident in Saskatchewan, although both Alberta and Manitoba have also seen an increase in the number of chickens produced. As the data presented above indicates, agriculture continues to change and adapt to a wide range of social, economic and political forces. As has long been the case, the structure of agriculture is influenced by crop and livestock prices, by new technology, by government policy and by social norms and ideas. With major changes occurring in the economic environment in which Prairie agriculture operates (e.g., the removal of the Canadian Wheat Board's single-desk marketing powers; slowing growth in demand from countries such as India, China and Brazil) and continued technological change driven by new developments in both information technology and plant breeding, Prairie agriculture will continue to evolve over the upcoming years.





STATISTICALLY SPEAKING...

CONSUMER PRICE INDEX (CPI)

(APRIL 2011 TO APRIL 2012)

The inflation rate in energy and food prices has slowed to keep the overall rate of inflation lower than in 2011.

EMPLOYMENT GROWTH

(MAY 2011 TO MAY 2012)

Employment is growing quickly in Alberta and the other western provinces.

