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POLICY IMPLICATIONS FOR THE CITY OF CALGARY**

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# **ATTRACTION AND RETENTION OF IMMIGRANTS: POLICY IMPLICATIONS FOR THE CITY OF CALGARY**

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Immigration is becoming increasingly important to small and medium sized cities to ensure social and economic growth. This reality will force urban centres to become more competitive in attracting and retaining newcomers to our communities. This paper presents a model whereby future immigration trends and retention rates of immigrants over time can be estimated. In addition, a number of factors that influence locational decisions and some best practices in Calgary are presented.

## **Opportunities and Challenges**

Current research suggests that immigration will become an increasingly important contributor to population and economic growth over the next thirty years. Citizenship and Immigration Canada projects that “immigration will likely account for all net labour force growth by 2011, and projections indicate it will account for total population growth by 2031” (Citizenship and Immigration Canada, 2001a). The Urban Futures Institute further suggests that “without immigration, Canada’s population will slowly decline over the next 50 years, from its current 30 million people to approximately 28 million in 2045; after 2045 the rate of decline would increase” (Urban Futures Institute, 2002). However, others contend that immigration has little effect on these numbers and that we need to be concerned with Canada’s and our local communities’ ability to absorb newcomers. The reality, as with most debates, may lie somewhere in the middle.

Immigration also brings challenges and opportunities. Municipalities, small and large are leveraging the opportunities this diversity brings in terms of addressing issues of

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social inclusion, and using our language and cultural diversity to enhance international trade opportunities. As with other ecosystems, bio-diversity in human communities leads to innovation and growth. In a recent report, it was noted that large immigrant populations and social diversity correlate strongly with technology-based economic growth because they “possess the underlying social and cultural assets on which to build successful local economies” (Florida, 2002). These types of communities should drive competitiveness and innovation underscoring the importance of immigration and settlement to municipalities. Florida argues that openness to immigration is particularly important for smaller cities and regions (See also, Gertler et.al., 2002).

### **Attracting Immigration**

Using Calgary as an example, we will demonstrate how municipalities, especially small to mid-size communities, can leverage immigration to their advantage with the right tools , practices and policies.

Historically, Calgary’s population growth has been driven by high levels of net migration. This has largely been the result of disparate economic growth, as migrants tend to move due to the comparative economic advantage of Calgary relative to other regions. Over the next 25 years, it is projected that important labour shortages will emerge in the Canadian labour market due to the aging of the workforce. As labour shortages are expected to impact all regions of Canada, unemployment rates will remain relatively low in those communities which have traditionally been sources of migration for Calgary. In this context, Calgary may lose its competitive economic advantage, potentially resulting in long term labour shortages. To the extent that labour force growth depends on immigration, the ability of the city to attract and retain immigrant labour will be critical for economic growth. As Calgary will be competing with more established immigration centres such as Toronto, Vancouver, and Montreal, the ability to attract and retain immigrants will be a pressing challenge.

While the advantages of immigration are huge for a receiving community, the reality is that the integration<sup>1</sup> of and public receptivity to newcomers is far from perfect in our communities. When people do not feel valued, they are likely to leave taking their talent, experience and expertise with them. In a highly and increasingly competitive labour market, communities and businesses need to find ways to ensure that they are seen as attractive places to live and work.

Bradford (2002) points out that cities are the drivers of the new economy as they attract economic activity from a mobile workforce. He argues that successful cities of the future are characterized by their inclusiveness, which appeals to skilled workers and fosters the ability of municipalities to be creative and innovative.

When urban areas provide an inhospitable social or physical environment, there is an incentive for out-migration to escape city life, leaving only those who can't afford to leave behind (Pradhan & Pradhan, 2001). Concerns about health and overall quality of life can drive people away from cities. Thus, the economic base of the city is weakened.

Given the growing importance of immigration to local population and economic growth, understanding the dynamics of immigration at the local level is critical for long-range planning for human resources, services and the labour force. As a component of the City of Calgary's long-term social and economic forecast, a model was developed to estimate future immigration to Calgary. This model is described below.

### **A Model for Estimating Immigration**

The growth of the immigrant population in Calgary is a function of four factors: national immigration, local share of national immigration, secondary migration, and mortality. These four factors were used as variables in the immigration model.

#### *National Immigration*

Canada's national immigration policy has historically been established by determining target immigration levels based on a percentage of the annual population. Using Statistics Canada (2003) population projections to 2026, total national immigration can be estimated by applying an estimated immigration rate. It is projected that in order to maintain population growth, Canada will require immigration at a level of 1% of population. Applying a rate of 1% to projected population, therefore, provides an immigration target number for each year of the population projection.

$$P_{\text{nat}} = \text{TP} * \text{policy rate}$$

where  $P_{\text{nat}}$  = total national annual immigration  
 $\text{TP}$  = total population

### *Local Share*

Local immigration is a function of the share of national immigration that the local area can expect to receive. This can be expressed as:

$$P_{loc} = (P_{nat} * \text{share})$$

where  $P_{loc}$  = total local annual immigration

$P_{nat}$  = total national annual immigration

### *Secondary Migration (Retention)*

Secondary migration accounts for the net flow of immigrants into and out of the community. Inflow includes those destined to Calgary as well as those destined to other regions that subsequently move to Calgary. Inflow is related to immigrant *attraction*. Outflows account for those that were destined or moved to Calgary, but subsequently moved from Calgary to other regions. Outflow is related to immigrant *retention*. Therefore, net immigrant inflow is a function of local share plus net secondary migration expressed as follows:

$$P_{loc} = ((P_{nat} * \text{share}) + \text{secondary migration}) - \text{emigration}$$

This relationship between inflow and outflow expressed as a percentage of the immigrant population will be referred to as the local *retention rate*.

### *Mortality*

Estimating the total immigrant population must account for mortality within the population. Age specific mortality rates should be applied to account for the unique age structure of the immigrant population.

### Structure of the Model

The relationship between these four factors can be expressed as follows:

$$P_2 = ((P_1 + P_{new}) - \text{mortality}) * \text{retention rate}$$

Where  $P_2$  = total local immigrant population at year 2

$P_1$  = total local immigrant population at year 1

$P_{\text{new}}$  = total local new immigrants in year 2

#### Assumptions of the Model

This model is based on the following assumptions:

- Canada's national population growth follows projections
- National immigration policy and implementation remains between 0.6% and 1.0% of total national population
- The age distribution of new immigrants follows the age distribution pattern of the recent past

#### Limitations of the Model

This model applies age-specific mortality rates derived from the total population. Research shows that the health of immigrants exceeds that of native born Canadians, at least during the initial years. This would suggest that mortality rates among immigrants may vary somewhat from the population as a whole. This may result in a slight over-estimation of mortality in the model and therefore slightly under-estimate out-migration. More research to establish age-specific mortality rates for the immigrant population is required.

#### Performance of Model Variables Over Time

##### *National Immigration*

Over the past two decades, annual immigration to Canada has ranged from a low of 84,333 in 1985 to a high of 256,739 in 1993 (see Table 1). As a percentage of the total population, annual immigration levels have ranged from 0.3% in 1985 to 0.9% in 1992. It is suggested that an immigration level of 1.0% of the population will be required in order to maintain population growth given population aging patterns in Canada. As a percentage of the population, the average immigration rate over the past 20 years has been only 0.6% of population. However, the average over the past ten years has shown a marginal increase of 0.8% of population.

*Local Share*

Over the past two decades (1980– 2002), immigration levels in Calgary have ranged from a low of 3,687 in 1985 to a high of 10,033 in 2001. During this time period, Calgary's share of national immigration has decreased from 6.5% in 1981 to 3.1% in 1996, increasing marginally to 4.1% in 2001. Averaged over the total twenty-two year period, Calgary's share was 3.7% of national immigration.

*Secondary Migration (Retention)*

In order to estimate net immigration (retention), the total immigrant population in Census years was compared to what would have been expected given the total number of arrivals less an estimated mortality rate. Over the period from 1981 to 1996, a total of 98,601 immigrants arrived in Calgary. When adjusted for mortality, the total immigrant population of Calgary would have been projected to increase to 199,799 by 1996. However, in 1996, the total immigrant population was only 165,295, a difference of 34,504 persons. It is assumed that this represents a net loss due to out-migration, producing a retention rate of 98.3% (see Table 2).

*Mortality Rates*

Age projections for the new immigrant population were derived by applying the age distribution of immigrants for the 1986 – 1996 period to new immigrants. Age projections for the total immigrant population were derived by applying the current age distribution for the 1996 immigrant population to the total projected immigrant population over the forecast period. Based on these age projections, age specific mortality rates were applied to the existing and projected immigrant population.

Application of the Model

Based on the historical performance of the variables in the model, assumed values of the model variables were applied. This produced the following equation:

$$P_2 = ((P_1 + (TP_{nat} * \text{immigration rate}) * \text{local share})) - \text{mortality}) * \text{retention}$$

$$P_2 = ((P_1 + (TP_{nat} * .08) * .037) - \text{mortality}) * .983$$

where  $TP_{nat}$  = total projected national population

Application of differential rates allows for analysis of the impact of alternative policy scenarios. National immigration rates, for example, can be factored at 0.6, 0.8 and 1.0 (see Table 3). Similarly, differing rates for local share and retention can be applied to determine their impact.

#### Forecast Results

In estimating future immigration levels in Calgary, three immigration scenarios were developed based on differing assumptions concerning national immigration rates (see Table 4). These scenarios provide a high, low and medium estimate of the number of immigrants likely to settle in Calgary over the period 2002-2026. The high scenario assumed that Canada met its immigration rate target of 1.0% of population. The low scenario applied the twenty year average rate of 0.6%. The medium scenario applied the ten year average rate of 0.8%. For the initial analysis, the local share and retention rates were held constant.

Under the high scenario, Calgary would receive an average of 12,081 new immigrants per year over the forecast period, ranging from 11,652 in 2003, to 13,391 in 2026, for a total of 302,026 new immigrants between 2003 and 2026<sup>1</sup>. Accounting for deaths and out-migration, this would result in a total immigrant population in 2026 of 318,235, a 66% increase from 2003. According to this scenario, immigrants would account for 26.8% of the population of Calgary by 2026.

Under the low scenario, Calgary could expect to receive an average of only 7,248 new immigrants per year over the forecast period, ranging from 6,991 in 2003 to 8,034 in 2026, for a total of 181,215 new immigrants between 2003 and 2026. When adjusted for mortality and out-migration, the total immigrant population in 2026 would be 221,824, an increase of 21.3%. This would result in immigrants accounting for 18.7% of the total population in 2026.

Under the medium scenario, Calgary would receive an average of 10,067 new immigrants per year over the forecast period, ranging from 9,322 in 2003 to 10,712 in 2026, for a total of 241,621 new immigrants. When adjusted for mortality and out-migration, the total immigrant population in 2026 would be 270,030, an increase of 44.2% from 2003. This would result in immigrants accounting for 22.7% of the total population in 2026.

### Development of Alternative Scenarios

Given the presumed importance of immigration to future population and labour force growth, the impact of changes in immigration flows for local communities may be substantial. For example, the difference between the high and low scenario over a 25 year period based on differential national immigration rates is 96,411 people. Despite the potentially significant impact that this variation may have on local communities, at the present time, local communities have no influence over such rates. Local communities can, however, influence immigrant attraction and retention rates.

For example, assuming that the national immigration rate falls below optimum at 0.6%, local communities could obtain the same immigrant population by increasing their share of national immigration and/or increasing their retention rate (for an example see Table 5). In this scenario, Calgary would need to either increase its share of national immigration from 3.7% to 4.95% or increase its retention rate from 98.3% to 99.4%, or a combination of both.

An alternative scenario would be that national immigration remains stable at 0.08%, but Calgary's share of national immigration declines due to increased competition and attractiveness of other major centres such as Toronto, Vancouver, and Montreal. Assuming that Calgary's share of national immigration would return to its lowest value of the past twenty years of 3.1%, this would represent a loss of 31,138 people over the next twenty-five years as compared to the current medium growth scenario. In this scenario, the only policy option available is to increase retention rates. In order to maintain the level of immigration estimated under the medium growth scenario, Calgary would need to generate a retention rate of 99%.

A final scenario involves a declining retention rate, with national immigration and local share remaining stable. If we assume a one-percentage point decrease in retention to 97.3%, this results in a loss of 40,910 people over the 25 year period. In order to obtain the same immigrant population, Calgary's share of national immigration would need to increase from 3.7% to 4.6%.

### **Strategies to Attract and Retain Newcomers**

Policies and practices designed to influence immigrant attraction and retention will be important to municipalities in the future. In order to

understand what strategies are required, it is necessary to understand the factors that influence secondary migration. These factors can be categorized as those pertaining to the individual and those pertaining to the community.

#### *Individual Factors*

Recent research (for example see Abu-Laban, et al., 1999) has identified certain individual factors that are associated with an increased tendency to move. First, age is an important influence, as those in the prime working ages of 25-44 years tend to have a greater propensity to secondary migration than do others. Education is a second factor, with the highest rates of secondary migration being among those with the highest education. A third individual factor is immigrant class, as skilled workers and refugees exhibit greater mobility than family class or business class immigrants. Finally, the presence or lack of social supports and resulting feelings of isolation are factors influencing individual mobility decisions (Citizenship and Immigration Canada, 2000, 2001b).

#### *Community Factors*

Research has also identified several important community factors influencing secondary migration patterns. First, the presence of an established ethnic/cultural community is of great importance (Citizenship and Immigration Canada, 2000, 2001b). Second, the existence of economic/education/employment opportunities is critical (Rao, 2001). This includes meaningful jobs, adequate earnings, adequate income support levels and recognition of international qualifications. In the Abu-Laban (1999) study, the principal concern of the refugees was finding and keeping a job. More than half left their original community of destination due to insufficient or inadequate employment and/or education opportunities (p. 104).

A third factor is access to services, including both public services, such as health and transportation, as well as immigrant settlement services (for a discussion see Harry Cummings and Associates, 2001; Omidvar and Richmond, 2003; Papillon, 2002). Community receptivity is a fourth factor, with negative experiences, systemic discrimination or perceptions of negative public attitudes affecting individual decisions to remain in or leave a community. People look for a safe community in which to raise their children and which provides them with a sense of community and belonging. Finally, general quality of life factors such as climate, housing market, size

and/or the presence of recreational, arts and cultural opportunities are considerations in locational decisions (Citizenship and Immigration Canada, 2000, 2001b).

### **Policy Implications**

As we have seen, immigrant attraction and retention are functions of multiple individual and personal factors. While local communities are largely unable to influence personal factors, they may be able to influence the community factors that make communities attractive or unattractive to new and existing immigrant populations. As described above, the community factors influencing locational decisions of immigrants include the presence of established ethnic communities, adequate economic opportunities, access to services, community safety, and quality of life attributes.

Traditionally, local governments have focussed almost exclusively on the provision of economic opportunity, without consideration of the specific needs of immigrants necessary to access those opportunities, nor for the other locational attributes. In an environment that is becoming increasingly competitive for labour, particularly skilled immigrant labour, communities will need to focus their attention on such attributes in order to avoid the social and economic consequences of a loss of competitiveness.

Areas within municipal influence that may serve to enhance labour competitiveness include the provision of funding and other supports to local ethnic communities to foster their development (Papillon, 2002). Ensuring adequate representation of immigrant communities within Community Associations, Parent Councils and other local advisory and political structures will be important. Similarly, adequate funding for immigrant services as well as strategies to address barriers to accessing established services will be critical. Although the provision of immigrant services falls largely outside of municipal jurisdiction, local governments can, as part of a service provision strategy, actively pursue opportunities for inter-governmental and community collaboration to promote coordinated service delivery and identify service gaps (Harry Cummings and Associates, 2001; Howard Research, 2001; Omidvar and Richmond, 2003).

The provision of economic opportunity is critical for attracting and retaining immigrants, and economic development is a function that falls with the mandate of many municipalities. One recent study notes that an effective practice to retaining immigrants is to ensure that there is a tight job market (Jackson & Smith, 2002). It was found that

systemic discrimination in hiring is lessened in a tight labour market suggesting that this can provide an impetus toward equity and inclusion in the economic system. However, although economic development alone may serve to promote expanding economic opportunities for immigrants, it is often not sufficient to ensure that immigrants are able to benefit from such opportunities. Effective integration of immigrants into the labour force often requires strategies that exceed the bounds of traditional economic development. Some of the key determinants of the successful integration of immigrants into the Canadian labour market include (Government of Canada, 2002, p.2):

- *Language fluency*: English levels should be appropriate for the labour market and employers should not overestimate proficiency required.
- *Education*: Higher levels of education mean better performance in the labour market, but jobs should not inflate credentials required.
- *Prior linkages to Canada*: Immigrants who have worked or studied in Canada integrate faster and perform better in the labour market. However, the request for “Canadian” experience often masks systemic discrimination.
- *Recognition of foreign qualifications*: There must be effective processes for assessment and recognition of qualifications that can improve access to employment. And employers need to honour assessment certificates.
- *Labour market information*: Information on Canada’s labour market needs to be available and relevant, timely, and tailored to the needs of immigrants to help them prepare for the Canadian labour market (before and after arrival).
- *Canadian work experience*: Obtaining work experience soon after arrival in Canada is critical; the sooner an immigrant acquires relevant work experience, the better his/her labour market outcomes (see above for caveat).
- *Public and employer attitudes*: Positive attitudes are key to promoting rapid integration into the labour market.

Economic development and labour management, especially for immigrants, are the purviews of the federal and provincial governments. However, immigration affects local governments, and local governments are where citizens look for services and provision of opportunities. As such, projects such as CITIES through the Metropolis Project and the Alberta Provincial Nominee Program (PNP), an employer-driven immigration program

operated by the Government of Alberta in conjunction with Citizenship and Immigration Canada, offer municipalities a voice in labour and economic policy development.

While local governments have limited ability to influence economic opportunity, they may take a leadership role in addressing the systemic and other barriers to full economic participation among immigrant workers. This may involve the funding or coordination of employment services for immigrants. Additionally, it may involve the establishment of community advisory groups involving immigrant communities, the business sector, the education sector and service providers to develop strategies for enhancing integration as well as engaging in public education (Omidvar and Richmond, 2003, Papillon, 2002). In addition, municipalities may need to review their own human resource practices and adopt strategies that foster diversity as an example within the local community. Municipalities are also in a position to enhance the economic circumstances of new immigrants through the provision of affordable housing (Papillon, 2002). Community safety is an area of direct municipal influence. For immigrants and visible minorities, perceptions of safety are related in part to the presence or absence of racism and discrimination. As part of an overall community safety strategy, municipalities will need to develop anti-racism and oppression policies and make them highly visible.

The provision of cultural and leisure opportunities is another area of direct municipal influence. As such, providing adequate opportunities while ensuring the appropriateness of existing cultural and leisure facilities for a culturally diverse population will be important. To support this strategy, municipalities may need to create guidelines for culturally sensitive planning and development policies and practices.

Finally, municipalities need to formally track in- and out-migration as well as other indicators of community receptiveness. This may form the basis for a municipal immigration policy and related strategies that address these factors in a systematic way, linked to appropriate performance measures.

## **Conclusion**

Immigration will continue to be an important economic and population driver in Canada. Small to medium sized urban centres wishing to remain competitive in attracting and retaining immigrants to their communities, will require a number of tools, policies and practices to ensure that they are attractive to newcomers.

The 'Model for Estimating Immigration' outlined in this paper provides a promising tool to local governments to determine their level of success in attracting and retaining critical immigrant labour to their communities. In Calgary, we are hoping to further fine-tune the model to look at demographic characteristics of immigrants leaving the city. Any emerging patterns, for example, age, ethnicity or religion, may indicate gaps in our community that need to be addressed to ensure that Calgary lives up to its civic slogan "the best place to live".

In addition, municipalities and local governments are urged to advocate for a place at the provincial and federal levels to help shape immigration policy and to ensure that a solid infrastructure is in place in our communities to leverage the economic and social advantages immigrants bring to Canada.

#### Notes

- 1 Integration in this context does not mean assimilation. It reflects an acknowledgement and respect for cultural differences and a goal of ensuring that people can maintain important aspects of their own culture heritage while participating equitably in the social, cultural, political and economic spheres of Canadian life.
- 2 Immigration as a percentage of population has been calculated using long term population projections for Calgary prepared by The City of Calgary, Corporate Strategy and Economics Unit.

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**Table 1**  
**Changes in Total Immigration to Calgary, 1980-2002**

During the period of 1980-2002, immigration to Calgary increased overall; while certain years experienced declining immigration, the trend overall was an increase in immigration, in particular for the periods of 1985-1990 and 1998-2001

<b>Total Immigration to Canada and Calgary, 1980 – 2002</b>						
<b>Year</b>	<b>Total Population Canada</b>	<b>Total</b>		<b>Total</b>	<b>Percentage Change From Previous Year</b>	<b>Calgary</b>
1980	24,346,200	143,136	0.59%	7,714	---	5.4%
1981	24,665,900	128,639	0.52%	8,402	9%	6.5%
1982	24,979,800	121,176	0.49%	7,703	-8%	6.4%
1983	25,243,400	89,188	0.35%	4,368	-43%	4.9%
1984	25,482,900	88,273	0.35%	4,574	5%	5.2%
1985	25,721,600	84,333	0.33%	3,687	-20%	4.4%
1986	25,963,100	99,326	0.38%	4,188	14%	4.2%
1987	26,260,100	152,001	0.58%	5,141	23%	3.4%
1988	26,609,700	161,500	0.61%	5,807	13%	3.6%
1989	27,041,900	191,497	0.71%	6,907	19%	3.6%
1990	27,475,200	216,398	0.79%	8,316	21%	3.8%
1991	27,863,600	232,751	0.84%	7,318	-12%	3.1%
1992	28,183,300	254,820	0.90%	8,061	10%	3.2%
1993	28,584,300	256,739	0.90%	8,580	7%	3.3%
1994	28,865,800	224,373	0.78%	8,361	-3%	3.7%
1995	29,191,100	212,860	0.73%	7,188	-16%	3.4%
1996	29,509,400	226,044	0.77%	6,977	0%	3.1%
1997	29,818,600	216,024	0.72%	6,806	-1%	3.2%
1998	30,248,200	174,162	0.58%	5,833	-14%	3.3%
1999	30,499,200	189,911	0.62%	6,685	13%	3.5%
2000	30,769,700	227,209	0.74%	8,331	25%	3.7%
2001	31,081,900	250,346	0.81%	10,033	20%	4.0%
2002	31,413,990	229,939	0.70%	9,021	-12%	3.9%

**Table 2**  
**Immigrant Population, Calgary**

<b>Immigrant Population, Estimated and Actual, Accounting for Mortality and Retention, Calgary, 1981 – 1996</b>				
	New Immigrants	Estimated Cumulative Total Adjusted for Mortality	Census Actual	Estimated Cumulative Total With Retention Rate Applied
<b>1981</b>	8,402	125,530	125,530	125,530
<b>1982</b>	7,703	132,621		130,364
<b>1983</b>	4,368	139,033		134,469
<b>1984</b>	4,574	142,064		135,202
<b>1985</b>	3,687	145,258		136,108
<b>1986</b>	4,188	147,527	134,040	136,111
<b>1987</b>	5,141	150,261		136,589
<b>1988</b>	5,807	153,910		137,978
<b>1989</b>	6,907	158,162		139,979
<b>1990</b>	8,316	163,415		143,005
<b>1991</b>	7,318	170,027	147,216	147,341
<b>1992</b>	8,061	175,555		150,575
<b>1993</b>	8,580	181,759		154,437
<b>1994</b>	8,361	188,390		158,698
<b>1995</b>	7,188	194,726		162,627
<b>1996</b>	6,977	199,799	165,295	165,295

**Table 3**  
**Effects of Various Policy Scenarios Nationally**

<b>Estimated National Immigration for Selected Policy Scenarios</b>				
<b>Year</b>	<b>Projected Total Population<sup>1</sup></b>	<b>Estimated Total Immigration</b>		
		<b>1.00%</b>	<b>0.8%</b>	<b>0.6%</b>
2001	31,081,900	250,346	250,346	250,346
2002	31,247,480	312,475	249,980	187,485
2003	31,492,760	314,928	251,942	188,957
2004	31,738,040	317,380	253,904	190,428
2005	31,983,320	319,833	255,867	191,900
2006	32,228,600	322,286	257,829	193,372
2007	32,455,220	324,552	259,642	194,731
2008	32,681,840	326,818	261,455	196,091
2009	32,908,460	329,085	263,268	197,451
2010	33,135,080	331,351	265,081	198,810
2011	33,361,700	333,617	266,894	200,170
2012	33,573,320	335,733	268,587	201,440
2013	33,784,940	337,849	270,280	202,710
2014	33,996,560	339,966	271,972	203,979
2015	34,208,180	342,082	273,665	205,249
2016	34,419,800	344,198	275,358	206,519
2017	34,612,180	346,122	276,897	207,673
2018	34,804,560	348,046	278,436	208,827
2019	34,996,940	349,969	279,976	209,982
2020	35,189,320	351,893	281,515	211,136
2021	35,381,700	353,817	283,054	212,290
2022	35,543,480	355,435	284,348	213,261
2023	35,705,260	357,053	285,642	214,232
2024	35,867,040	358,670	286,936	215,202
2025	36,028,820	360,288	288,231	216,173
2026	36,190,600	361,906	289,525	217,144
<b>TOTAL</b>		<b>8,725,698</b>	<b>7,030,628</b>	<b>5,335,557</b>

<sup>1</sup> Statistics Canada, 2003

**Table 4**  
**Effects of Various Policy Scenarios Locally**

<b>Estimated Immigration to Calgary for Various Policy Scenarios, at 3.7% Local Share</b>			
<b>Year</b>	<b>Total Immigration to Calgary</b>		
	<b>1.00%</b>	<b>0.8%</b>	<b>0.6%</b>
2001	10,033	10,033	10,033
2002	11,562	9,249	6,937
2003	11,652	9,322	6,991
2004	11,743	9,394	7,046
2005	11,834	9,467	7,100
2006	11,925	9,540	7,155
2007	12,008	9,607	7,205
2008	12,092	9,674	7,255
2009	12,176	9,741	7,306
2010	12,260	9,808	7,356
2011	12,344	9,875	7,406
2012	12,422	9,938	7,453
2013	12,500	10,000	7,500
2014	12,579	10,063	7,547
2015	12,657	10,126	7,594
2016	12,735	10,188	7,641
2017	12,807	10,245	7,684
2018	12,878	10,302	7,727
2019	12,949	10,359	7,769
2020	13,020	10,416	7,812
2021	13,091	10,473	7,855
2022	13,151	10,521	7,891
2023	13,211	10,569	7,927
2024	13,271	10,617	7,962
2025	13,331	10,665	7,998
2026	13,391	10,712	8,034
<b>TOTAL</b>	<b>323,621</b>	<b>260,903</b>	<b>198,186</b>

**Table 5**  
**Effects of Differing Share and Retention Rates<sup>1</sup>**

<b>Estimated Total Immigrant Population in Calgary Based on 0.8% National Immigration Rate and 3.7% Local Share at 97.3% Retention Rate (Mortality Adjusted)</b>					
<b>Total</b>		<b>Total Immigrant</b>		<b>Recent Immigrant</b>	
		<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
<b>2001</b>	876,519	170,911	19.5%	37,688	22.1%
<b>2006</b>	963,000	183,778	19.1%	46,972	25.6%
<b>2011</b>	1,027,000	198,434	19.3%	48,705	24.5%
<b>2016</b>	1,073,000	207,735	19.4%	50,315	24.2%
<b>2021</b>	1,134,000	218,819	19.3%	51,795	23.7%
<b>2026</b>	1,187,000	229,120	19.3%	53,083	23.2%
<b>% Change</b>	35.4%	34.1%		40.8%	
<b>Estimated Total Immigrant Population in Calgary Based on 0.8% National Immigration Rate and 3.7% Local Share at 98.3% Retention Rate (Mortality Adjusted)</b>					
<b>Total</b>		<b>Total Immigrant</b>		<b>Recent Immigrant</b>	
		<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
<b>2001</b>	876,519	179,034	20.4%	37,688	21.1%
<b>2006</b>	963,000	199,493	20.7%	46,972	23.5%
<b>2011</b>	1,027,000	222,609	21.7%	48,705	21.9%
<b>2016</b>	1,073,000	237,144	22.1%	50,315	21.2%
<b>2021</b>	1,134,000	254,314	22.4%	51,795	20.4%
<b>2026</b>	1,187,000	270,172	22.8%	53,083	19.6%
<b>% Change</b>	35.4%	50.9%		40.8%	
<b>Estimated Total Immigrant Population to Calgary Based on 0.8% National Immigration Rate and 3.7% Local Share at 99.4% Retention Rate (Mortality Adjusted)</b>					
<b>Total</b>		<b>Total Immigrant</b>		<b>Recent Immigrant</b>	
		<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
<b>2001</b>	876,519	188,342	21.5%	37,688	20.0%
<b>2006</b>	963,000	218,358	22.7%	46,972	21.5%
<b>2011</b>	1,027,000	253,124	24.6%	48,705	19.2%
<b>2016</b>	1,073,000	275,408	25.7%	50,315	18.3%
<b>2021</b>	1,134,000	302,113	26.6%	51,795	17.1%
<b>2026</b>	1,187,000	327,174	27.6%	53,083	16.2%
<b>% Change</b>	35.4%	73.7%		40.8%	

<sup>1</sup> Projected total population for Calgary provided by The City of Calgary, Corporate Strategy and Economics Unit.

## General Information

### • What are PCERII Working Papers?

PCERII's working paper series is related to the broad mandate of the Metropolis Project. This initiative is designed to: (1) speed up the dissemination of research results relevant to the interests and concerns of Metropolis researchers, policy-makers, NGOs; (2) fulfill a commitment made in the application to SSHRC/CIC for a renewal grant for the Prairie Centre; and (3) populate the Virtual Library on the PCERII web site.

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