



## Recent Migration Trends in Census Divisions: Fort McMurray, Calgary and Edmonton

### INTRODUCTION

Between 2004 and 2006, Alberta's economy expanded at an exceptionally rapid pace. The investment boom in Alberta's energy sector (natural gas as well as the oil sands in Fort McMurray) helped drive average real GDP growth to an unsustainable pace of 5.2% per year between 2004 and 2006. Alberta's unemployment rate dropped from an average of 5% between 2000 and 2004 to 3.4% by 2006. Labour shortages remained widespread until the effects of the global recession hit Alberta in early 2009. Not surprisingly, Alberta's hot labour market attracted a record number of migrants from across Canada and around the world, including record numbers of temporary foreign workers. Between 2005 and 2008, total migration to Alberta averaged almost 60,000 people per year, and then dropped to less than half in 2009-10 when the recession hit.

The surge in oil sands investment and rapid growth in the Wood Buffalo (Fort McMurray) area attracted thousands of workers to the region and helped create a perception that Fort McMurray was the main destination for migrants to Alberta. A detailed examination of migration trends over the past decade reveals a more complex picture, however. This report looks at migration flows over the past decade for three key Alberta Census Divisions (CDs): Wood Buffalo (CD16) and the two traditional destinations for migrants to the province, Calgary (CD6) and Edmonton (CD11). It looks at trends in migration from other parts of Canada, from international countries (including non-permanent residents) as well as movements within the province of current Alberta residents. Note that this report only focuses on the population whose primary residence was located within the census division. Hence, shadow population is not included.

Table 1 shows the municipal districts and main cities or towns in the three census divisions examined in this report. Table 2 on the following page shows that the total permanent population in the Wood Buffalo CD grew at an annual compound rate of 4.8% between mid-2000 and mid-2010 compared to 2.7% for the Calgary CD and 2.1% for the Edmonton CD. Migration was a key component of population growth in all three census divisions. Almost 200,000 people moved to the Calgary

CD, nearly 140,000 to the Edmonton CD, and just under 17,000 to Wood Buffalo. Although the total number of migrants to Wood Buffalo was lower, migration had a larger impact on total population growth, accounting for about three-quarters of the total change in population between 2001 and 2010, compared to about two-thirds for Edmonton and Calgary. The types of migration patterns, however, were quite different for the three CDs.

**Table 1: Alberta Census Divisions and Corresponding Municipal Districts, Cities and Towns**

Census Division	Municipal District	City/Town
6	Mountain View County M.D. No. 31 - Foothills M.D. No. 44 - Rocky View	Airdrie Calgary
11	M.D. No. 77 - Brazeau Sturgeon County County No. 10 - Wetaskiwin County No. 25 - Leduc County of Parkland Strathcona County	Edmonton Fort Saskatchewan Leduc Spruce Grove St. Albert Wetaskiwin
16	I.D. No. 24 Regional Municipality of Wood Buffalo	Fort McMurray

Source: Prepared by Alberta Finance and Enterprise.

### INTERPROVINCIAL MIGRATION

Wood Buffalo (CD16) gained migrants from other parts of Canada throughout the past ten years (2000-10), increasing from a net inflow of 1,216 people in 2000-01 to a peak of 4,070 people in 2006-07 as oil sands capital investment increased. Both Calgary (CD6) and Edmonton (CD11) gained interprovincial migrants in nine out of ten years; the key exception was in 2009-10 when Alberta's labour market weakened. However, total interprovincial migration to Wood Buffalo (23,020) was less than half of that experienced by either Calgary (74,748) or Edmonton (52,601). Calgary accounted for 36% of total net interprovincial migration to Alberta, Edmonton 25% and Wood Buffalo 11%.

Like the province overall, net interprovincial migration to Calgary and Edmonton peaked in 2005-06. The peak in Wood Buffalo occurred a year later as oil sands investment continued to increase. Despite on-going labour shortages within the province, net interprovincial migration dropped sharply in 2007-08 as the Saskatchewan and BC economies picked up and Alberta housing prices sky-rocketed. Fort McMurray had the dubious distinction of having the highest average house price in Alberta.

Unlike the other two census divisions, Wood Buffalo continued to experience strong gains in interprovincial migration in 2009-10. The upswing in oil prices in the summer of 2009 led to a recovery in oil sands investment. As a result, the unemployment rate (3-month moving average) in Wood Buffalo dropped from its peak of 6.8% in April 2009 to 4.0% by November 2009. Unemployment rates in Calgary and Edmonton did not begin to drop significantly from their recession highs until late 2010.

**Table 2: Migration by Component, Alberta Census Divisions 6, 11, and 16, July 2000 - June 2010**

Calgary CD 6	July 1st Population	Growth (%)	Net		Net		Net		Total Net Migration
			July -June	Interprovincial	International	Intraprovincial	Net NPRs *		
2001	1,048,966	2.6	2000-2001	8,037	5,577	2,291	1,423	17,328	
2002	1,081,396	3.1	2001-2002	9,688	9,020	1,354	923	20,985	
2003	1,105,995	2.3	2002-2003	4,736	6,281	479	874	12,370	
2004	1,132,119	2.4	2003-2004	3,626	8,199	1,158	536	13,519	
2005	1,169,561	3.3	2004-2005	13,047	8,180	2,133	1,186	24,546	
2006	1,208,916	3.4	2005-2006	14,796	9,080	-185	2,559	26,250	
2007	1,243,376	2.9	2006-2007	10,162	8,745	-1,468	6,372	23,811	
2008	1,278,071	2.8	2007-2008	6,363	8,211	555	8,416	23,545	
2009	1,313,771	2.8	2008-2009	4,881	9,056	1,547	8,665	24,149	
2010	1,338,241	1.9	2009-2010	-588	11,698	1,547	-37	12,620	
<b>Total</b>				<b>74,748</b>	<b>84,047</b>	<b>9,411</b>	<b>30,917</b>	<b>199,123</b>	
Edmonton CD 11	July 1st Population	Growth (%)	Net		Net		Net		Total Net Migration
			July -June	Interprovincial	International	Intraprovincial	Net NPRs *		
2001	1,002,436	1.5	2000-2001	3,995	2,048	919	1,322	8,284	
2002	1,025,164	2.3	2001-2002	6,722	3,007	2,670	700	13,099	
2003	1,041,710	1.6	2002-2003	2,064	2,981	797	666	6,508	
2004	1,058,240	1.6	2003-2004	1,503	3,773	710	424	6,410	
2005	1,083,628	2.4	2004-2005	7,789	4,176	2,130	895	14,990	
2006	1,116,504	3.0	2005-2006	13,409	4,921	2,599	1,919	22,848	
2007	1,145,296	2.6	2006-2007	9,756	4,865	1,388	4,644	20,653	
2008	1,170,869	2.2	2007-2008	3,608	5,286	1,977	6,135	17,006	
2009	1,199,234	2.4	2008-2009	4,137	5,771	3,272	6,313	19,493	
2010	1,218,447	1.6	2009-2010	-382	7,255	3,272	-23	10,122	
<b>Total</b>				<b>52,601</b>	<b>44,083</b>	<b>19,734</b>	<b>22,995</b>	<b>139,413</b>	
Wood Buffalo CD 16	July 1st Population	Growth (%)	Net		Net		Net		Total Net Migration
			July -June	Interprovincial	International	Intraprovincial	Net NPRs *		
2001	44,244	5.5	2000-2001	1,216	315	-199	6	1,338	
2002	47,145	6.6	2001-2002	2,190	79	-129	40	2,180	
2003	49,730	5.5	2002-2003	1,435	141	220	38	1,834	
2004	51,819	4.2	2003-2004	1,236	54	-31	25	1,284	
2005	53,347	2.9	2004-2005	1,762	205	-1,232	52	787	
2006	55,523	4.1	2005-2006	3,070	290	-1,993	112	1,479	
2007	59,416	7.0	2006-2007	4,070	322	-1,722	380	3,050	
2008	62,134	4.6	2007-2008	3,022	434	-2,120	503	1,839	
2009	65,158	4.9	2008-2009	2,948	351	-1,701	516	2,114	
2010	66,898	2.7	2009-2010	2,071	434	-1,701	-1	803	
<b>Total</b>				<b>23,020</b>	<b>2,625</b>	<b>-10,608</b>	<b>1,671</b>	<b>16,708</b>	

Source: Statistics Canada, February 2011

\* Note: Net NPRs refer to the net inflow/outflow of Non-Permanent Residents.

## INTERNATIONAL MIGRATION

Net international migration was on the rise throughout the past decade and hit record highs in Alberta and Canada. Alberta as a whole gained about 145,000 permanent international migrants and close to 70,000 non-permanent residents. The Calgary, Edmonton and Wood Buffalo census divisions were no exception (Table 2 in page 2). Net migration of international permanent residents to Edmonton (CD11) more than trebled to 7,255 in 2009-10, while net inflows to Calgary (CD6) doubled to 11,698 in 2009-10. Net inflows of permanent international migrants to Wood Buffalo (CD16), on the other hand, averaged about 260 per year. As a result, 58% of the province's net permanent international migrants went to Calgary, 30% to Edmonton and less than 2% to Wood Buffalo over the last decade. Calgary had more permanent international than interprovincial migrants, Edmonton had somewhat more interprovincial than international. In Wood Buffalo, however, there were almost nine times as many interprovincial migrants as permanent international migrants.

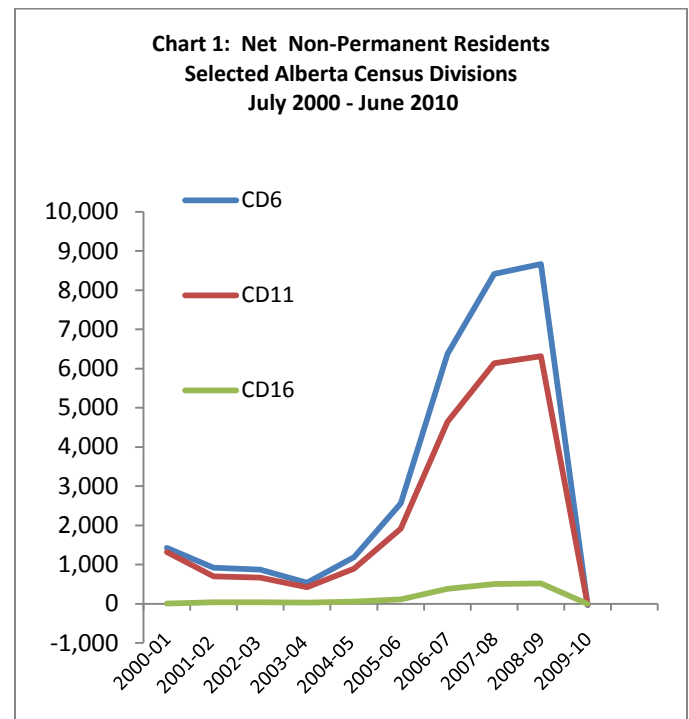
To sum up, even though Wood Buffalo (CD16) had positive inflows of permanent immigrants throughout the past decade, the majority of the international migrants still chose the two major Alberta urban centers.

## NON-PERMANENT RESIDENTS

Non-permanent residents (NPRs) are people residing in Canada claiming refugee status, holding study permits, work permits or Minister's permits, plus all their non-Canadian born dependants. Net inflows of NPRs increased from an average of just around 2,000 per year prior to 2005 to a record high of 19,162 in 2008-09, largely because of the influx of temporary foreign workers responding to Alberta's labour shortages. As Alberta's unemployment rose in 2009, there was a small outflow of NPRs in 2009-10.

As shown in Chart 1 and Table 2, net inflows of NPRs increased sharply for all three census divisions for most of the decade, but turned negative in 2009-10. Net NPRs jumped more than 85 times for Wood Buffalo (CD16) from 6 in 2000-01 to 516 in 2008-09, before turning negative in 2009-10 (Table 2). Between July 2000 and June 2009, Calgary (CD6) gained 30,954 NPRs and then lost 37 in 2009-10, while Edmonton (CD11) gained 23,018 NPRs through 2000-09 and lost 23 in 2009-10.

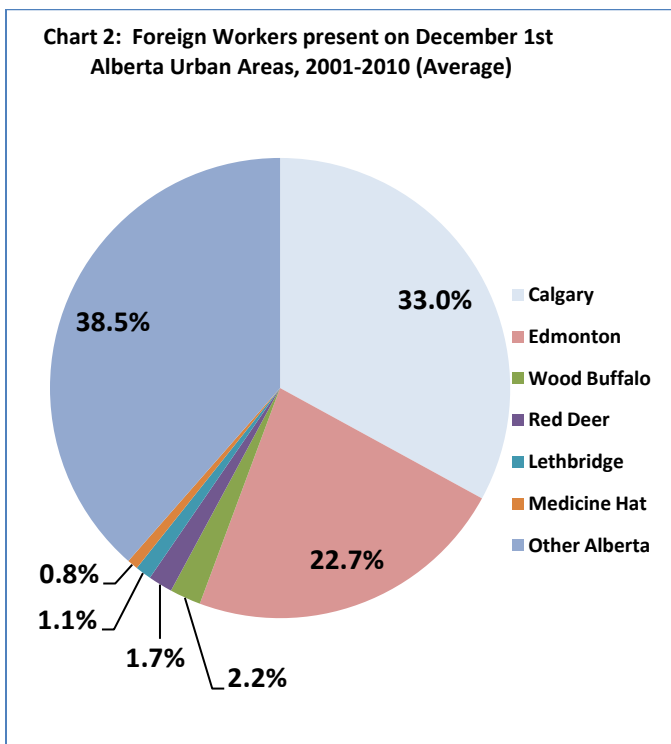
Overall, Calgary gained 45% of the total inflows of non-permanent residents over the course of the decade, Edmonton 34% and Wood Buffalo 2%.



Source: Statistics Canada, February 2011

## Foreign Workers

Although detailed statistics for non-permanent residents by category are very limited at the sub-provincial level, Chart 2 sheds some light on the distribution of foreign workers in Alberta. On average, Calgary accounted for 33% and Edmonton 22.7% of the total foreign workers in Alberta estimated on December 1<sup>st</sup> between 2001 and 2010. Meanwhile, Wood Buffalo accounted for only 2.2% of the average ten-year total of 30,152 foreign workers even though the oil sands had created a huge demand of workers in the region.



Source: Citizenship and Immigration Canada, February 2011

## INTRA-PROVINCIAL MIGRATION

Intra-provincial or internal migrants are people who had lived in a different census division in the previous year from the one in which they currently reside within the same province. Table 3 presents the intra-provincial migration gain or loss for every census division in Alberta for the ten-year period, July 2000 to June 2010. As shown in this table, the three central urban divisions had over 90% of the total intra-provincial migration gain in this province during the past decade. Edmonton (CD11) took the lead with 46% (19,734 people) of the net intra-provincial movers within Alberta, followed by Red Deer (CD8) and Calgary (CD6) with gains of 23% and 22% respectively.

The majority of intra-provincial net outflows for the past ten years (2000-10) came from Alberta's northern and mountain regions. Table 3 shows a trend of rural to urban migration in Alberta during the past decade. The total combined net outflow of the four most northern census divisions (CDs 16, 17, 18 and 19), during the ten years was more than 55% of the provincial total. In particular, Wood Buffalo (CD16) was the leader among the four northern divisions with a total net outflow of 10,608 movers or 25% of the total 42,670 intra-provincial

out-migrants in 2000-10. That means one of every four outflows of internal migrants within Alberta came from the Wood Buffalo census division.

The adjacent northern division (CD17 Slave Lake) ranked second with a loss of 21% (or 8,929 migrants) of the total net internal migration outflows within Alberta.

To conclude, during the past decade (2000-10), over half of Alberta's total internal out-migrants came from the northern region, with Fort McMurray leading the way. The total net loss of 10,608 intra-provincial movers from Wood Buffalo wiped out more than 45% of the total 23,020 interprovincial migrants gained over the ten years. In contrast, Edmonton was the biggest winner in intra-provincial migration in Alberta.

**Table 3: Net Intra-Provincial Migration  
Alberta Census Divisions, July 2000 - June 2010**

Alberta CD	Major City/Town	Intra-Provincial Migration, 2000-2010			
		Gain	Percent	Loss	Percent
1	Medicine Hat	724	1.7%		
2	Lethbridge			-4,204	9.9%
3	Pincher Creek			-1,302	3.1%
4	Hanna			-1,384	3.2%
5	Strathmore	2,432	5.7%		
6	Calgary	9,411	22.1%		
7	Stettler			-3,320	7.8%
8	Red Deer	9,684	22.7%		
9	Clearwater	19	0.1%		
10	Lloydminster	666	1.6%		
11	Edmonton	19,734	46.2%		
12	Cold Lake			-2,986	7.0%
13	Whitecourt			-70	0.2%
14	Hinton			-2,534	5.9%
15	Canmore			-2,830	6.6%
16	Fort McMurray			-10,608	24.9%
17	Slave Lake			-8,929	20.9%
18	Grande Cache			-2,203	5.2%
19	Grande Prairie			-2,300	5.4%
Total		42,670	100%	-42,670	100%

Source: Statistics Canada, February 2011

**AGE AND SEX COMPOSITION OF MIGRANTS**

**Age Distribution of Migrants, 2000-2010**

Table 4 presents the age and sex composition of migrants for Calgary, Edmonton and Wood Buffalo census divisions for the 10-year period from July 2000 to June 2010. As shown in this table, both urban areas had more child migrants than Wood Buffalo, with people under 15 accounting for around 15% of total migrants compared to Wood Buffalo where people under 15 accounted for less than 8% of total migrants. The smaller proportion of child migrants to Wood Buffalo implies fewer migrant families than in the urban centers. Young migrants aged 15-19 accounted for 14.8% of total migrants to Wood Buffalo, similar to Edmonton (15.4%) and much higher than Calgary (10.7%).

Most migrants to Wood Buffalo (80%) were in the prime working-age group (aged 20-64), noticeably higher than Calgary (72%) and Edmonton (69%). This suggests that migrants to Wood Buffalo were predominantly working age people, while the relatively smaller share of child migrants may indicate that families were less likely to move to Wood Buffalo than to the two large urban areas.

Wood Buffalo was less popular for senior migrants aged 65+. While both Calgary and Edmonton gained migrants in the senior age group, Wood Buffalo lost senior-age migrants over the past decade.

**More Male than Female Migrants**

As revealed in Table 4, all three census divisions had more male than female migrants overall. For all age groups within the three census divisions, Wood Buffalo had the highest proportion of male migrants (64%), followed by Edmonton (54.7%) and Calgary (51.9%). The almost 2 to 1 male to female ratio in Wood Buffalo implies relatively fewer families moving to the area, and may explain why this CD had the lowest proportion of child migrants among the three census divisions. For the child migrants aged 0-14, both Edmonton and Calgary had slightly more boys than girls, although the differences were not huge. In Wood Buffalo, however, girls outnumbered boys by about 2 to 1.

For the working age groups, males accounted for a higher proportion of total migrants than females for all three census divisions, although the gap was particularly large for Wood Buffalo. In the young working-age group 15-24, Wood Buffalo showed the biggest gender gap (27.2% males versus 17.7% females); Calgary had the smallest gap (18.4% males and 16.7% females), and Edmonton's gap was somewhat larger (22.9% versus 18.6%). The male-female gap in Wood Buffalo was even

more pronounced for the 25 to 64 age group, the prime working age group. For Wood Buffalo, male migrants in the 25-64 age group outnumbered female migrants by more than 2 to 1. This suggests that migration to Wood Buffalo has been dominated by single men, and has been less family oriented.

As life expectancy is longer for women than men, this may be one of the reasons that both Calgary and Edmonton had more female migrants aged 65+ than male migrants. Wood Buffalo, however, experienced higher net out-flows of male than female senior migrants. Further research is required in this area.

**Table 4: Total Net Migration by Age and Sex  
Alberta Census Divisions 6, 11 and 16  
July 2000 – June 2010**

Calgary Census Division 6						
Age	Male	%	Female	%	Total	%
0-14	15,896	8.0	15,450	7.8	31,346	15.7
15-19	11,259	5.7	10,114	5.1	21,373	10.7
20-24	25,381	12.7	23,059	11.6	48,440	24.3
25-64	50,554	25.4	44,662	22.4	95,216	47.8
65 & over	229	0.1	2,519	1.3	2,748	1.4
<b>Total</b>	<b>103,319</b>	<b>51.9</b>	<b>95,804</b>	<b>48.1</b>	<b>199,123</b>	<b>100</b>
Edmonton Census Division 11						
Age	Male	%	Female	%	Total	%
0-14	10,782	7.7	9,991	7.2	20,773	14.9
15-19	10,781	7.7	10,685	7.7	21,466	15.4
20-24	21,141	15.2	15,181	10.9	36,322	26.1
25-64	33,757	24.2	25,722	18.5	59,479	42.7
65 & over	-201	-0.1	1,574	1.1	1,373	1.0
<b>Total</b>	<b>76,260</b>	<b>54.7</b>	<b>63,153</b>	<b>45.3</b>	<b>139,413</b>	<b>100</b>
Wood Buffalo Census Division 16						
Age	Male	%	Female	%	Total	%
0-14	490	2.9	802	4.8	1,292	7.7
15-19	1,397	8.4	1,073	6.4	2,470	14.8
20-24	3,134	18.8	1,887	11.3	5,021	30.1
25-64	5,954	35.6	2,412	14.4	8,366	50.1
65 & over	-278	-1.7	-163	-1.0	-441	-2.6
<b>Total</b>	<b>10,697</b>	<b>64.0</b>	<b>6,011</b>	<b>36.0</b>	<b>16,708</b>	<b>100</b>

Source: Statistics Canada, February 2011

## MIGRATION COMPONENTS BY AGE, 2000-2010

### Interprovincial Migrants

Migration components (interprovincial, international and non-permanent residents) by selected age group for the three Alberta census divisions from July 2000 to June 2010 are provided in Table 5. As shown in this table, Wood Buffalo (CD16) had the lowest proportion (47%) of interprovincial migrants aged 0-24. Less than half the interprovincial migrants to Wood Buffalo belonged to the age group 0-24 compared to 64% in Edmonton (CD11) and 60% in Calgary (CD6). In fact, Wood Buffalo had the highest proportion of prime working age interprovincial migrants aged 25-64 -- 53% compared to 36% in Edmonton (CD11) and 38% in Calgary (CD6).

Both Wood Buffalo and Edmonton had small net outflows of interprovincial migrants aged 65-and-over during the past decade (2000-10), but the losses were insignificant. Table 5 shows that Calgary gained the most senior interprovincial migrants among the three divisions, but the proportion was relatively small (2%) as migrants in general tend to move at a younger age.

### International Migrants

According to Statistics Canada, all three census divisions had approximately one child (aged 0-14) for every four permanent international migrants during the past ten years, 2000-10 (Table 5). All three census divisions had comparable age distributions for the youth age group 15-19. However, for the young immigrants aged 20-24, Wood Buffalo (CD16) had the lowest proportion (7%) among the three census divisions.

In contrast, Wood Buffalo (CD16) had the highest proportion (63%) of international migrants aged 25-64 compared to the two major urban centers (57% for Calgary (CD6) and 55% for Edmonton (CD11)). While Wood Buffalo lost senior international migrants and Edmonton and Calgary gained, none of the three census divisions had much in the way of international migrants in the senior age group (65+) over the past ten years.

### Non-Permanent Residents

Table 5 reveals that between 2000 and 2010, all three census divisions had approximately one young person (aged 0-19) per five non-permanent residents (NPRs). For the age group 20-24, Calgary (CD6) and Edmonton (CD11) had one person in every four NPRs, while less than 2% of the NPRs moving to Wood Buffalo (CD16) were in this age category. Once again, Wood Buffalo (CD16) achieved the highest proportion of NPRs in the prime working age group (25-64) -- 77%.

All three census divisions lost non-permanent residents in the senior age group (65-and-over).

**Table 5: Migrants by Age and Component  
Alberta Census Divisions 6, 11 and 16  
July 2000 – June 2010**

Net Interprovincial Migrants						
Age	Calgary		Edmonton		Wood Buffalo	
	CD6	%	CD11	%	CD16	%
0-14	9,701	13.0	7,694	14.6	2,703	11.7
15-19	9,749	13.0	8,904	16.9	2,511	10.9
20-24	25,562	34.2	17,237	32.8	5,577	24.2
25-64	28,215	37.7	18,947	36.0	12,278	53.3
65 & over	1,521	2.0	-181	-0.3	-49	-0.2
<b>Total</b>	<b>74,748</b>	<b>100</b>	<b>52,601</b>	<b>100</b>	<b>23,020</b>	<b>100</b>
Net International Migrants						
Age	Calgary		Edmonton		Wood Buffalo	
	CD6	%	CD11	%	CD16	%
0-14	20,053	23.9	10,872	24.7	638	24.3
15-19	5,590	6.7	3,405	7.7	178	6.8
20-24	9,835	11.7	5,398	12.2	185	7.0
25-64	47,576	56.6	24,386	55.3	1,643	62.6
65 & over	993	1.2	22	0.1	-19	-0.7
<b>Total</b>	<b>84,047</b>	<b>100</b>	<b>44,083</b>	<b>100</b>	<b>2,625</b>	<b>100</b>
Net Non-Permanent Residents						
Age	Calgary		Edmonton		Wood Buffalo	
	CD6	%	CD11	%	CD16	%
0-14	2,092	6.8	1,741	7.6	82	4.9
15-19	4,203	13.6	3,408	14.8	287	17.2
20-24	7,666	24.8	6,099	26.5	28	1.7
25-64	16,996	55.0	11,847	51.5	1,291	77.3
65 & over	-40	-0.1	-100	-0.4	-17	-1.0
<b>Total</b>	<b>30,917</b>	<b>100</b>	<b>22,995</b>	<b>100</b>	<b>1,671</b>	<b>100</b>

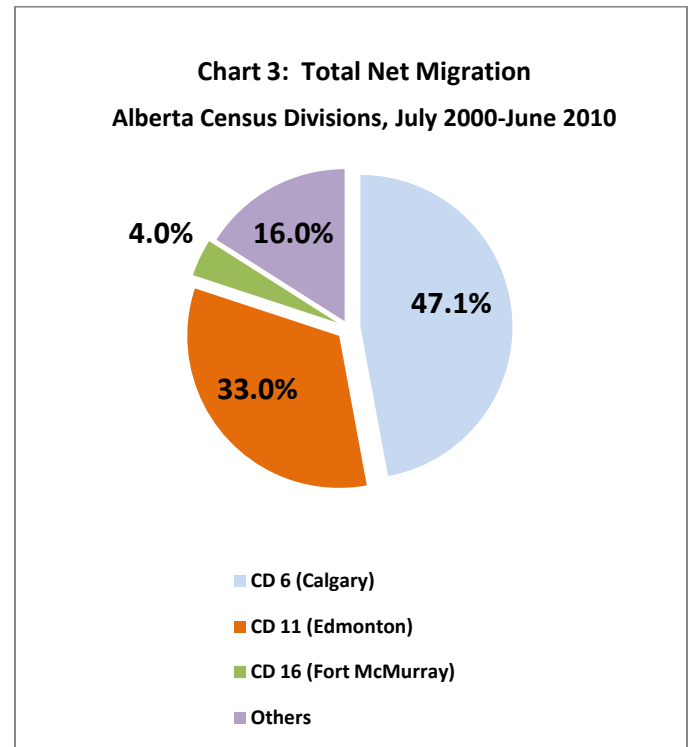
Source: Statistics Canada, February 2011

## CONCLUSION

Over the past decade (2000-10), 80% of the total 422,845 migrants gained by Alberta settled in the two largest urban centers, Calgary (CD6) and Edmonton (CD11). While Calgary took nearly half (47% or 199,123 persons) of total net migration to Alberta, Edmonton gained 33% (or 139,413 migrants). Wood Buffalo (CD16), on the other hand, gained only 4% (or 16,708 migrants) of the total net migration to the province. The 4% gain in the provincial total net migration, however, contributed to two thirds of Wood Buffalo's total population growth in the past ten years.

Although Wood Buffalo/Fort McMurray had a high influx of interprovincial migrants during the past decade, it received far fewer international migrants than Calgary and Edmonton even though international migration hit record high levels in both Alberta and Canada. In addition, Wood Buffalo had the highest net loss of intra-provincial migrants in Alberta over the past decade, enough to wipe out over 45% of the total 23,020 migrants gained from other provinces. Wood Buffalo also had a high proportion of single male migrants (2 to 1 male to female ratio), which tends to be less favorable to family formation and population growth.

To conclude, even though migration was hugely important to Wood Buffalo's rapid population growth over the last ten years, majority of the migrants to Alberta, particularly international migrants, still moved to Calgary and Edmonton.



Source: Statistics Canada, February 2011

**Table 6: Total Net Migration**  
Alberta Census Divisions, July 2000 – June 2010

Census Division	Total Net Migration, 2000-2010	
	No.	%
<b>CD 6 (Calgary)</b>	199,123	47.1%
<b>CD 11 (Edmonton)</b>	139,413	33.0%
<b>CD 16 (Fort McMurray)</b>	16,708	4.0%
<b>Others</b>	67,601	16.0%
<b>Alberta</b>	422,845	100.0%

Source: Statistics Canada, February 2011