Edmonton Socio-Economic Outlook 2009-2014

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1. INTRODUCTION

Background

The Edmonton Socio-Economic Outlook provides an overview of the social and economic forces that are likely to affect Edmonton and the Capital region between 2009 and 2014. It also interprets what the social and economic developments mean for the people of the region and the City of Edmonton as a municipal corporation.

This document is an input into planning and budget initiatives of the City of Edmonton. In addition, public sector agencies, private businesses and individuals use it as an input for their longer-term planning.

The Context

The current economic recession has made it clear that the Alberta and Edmonton economies are inextricably linked to global economic and financial systems. What will happen over the next five years will depend largely on how and when the global economy recovers. This 2009 edition of the Edmonton Socio-Economic Outlook will try to clarify these linkages and explore their implications.

Similarly, many of the social trends affecting Edmonton mirror those in many developed nations. This Outlook will draw out these linkages and explore the implications. It will also explore the linkages between the recession and its aftermath and selected social trends. The impact of the 2008/09 recession on work and retirement is one such linkage.

The Limitations of the Edmonton Socio-Economic Outlook

This edition of the Edmonton Socio-Economic Outlook reflects a mid 2009 consensus view that modest economic growth will return in late 2009 or early 2010. However, the timing of the recovery is very uncertain and subject to events and initiatives around the globe. It may take longer.

Edmonton and the Edmonton region

This document will use the Edmonton region as the relevant unit and define it as the Edmonton Census Metropolitan Area (CMA). Where appropriate, this edition of the Outlook will identify Edmonton-specific issues or trends. The document uses the Capital region and Edmonton region interchangeably; both refer to the Edmonton CMA.

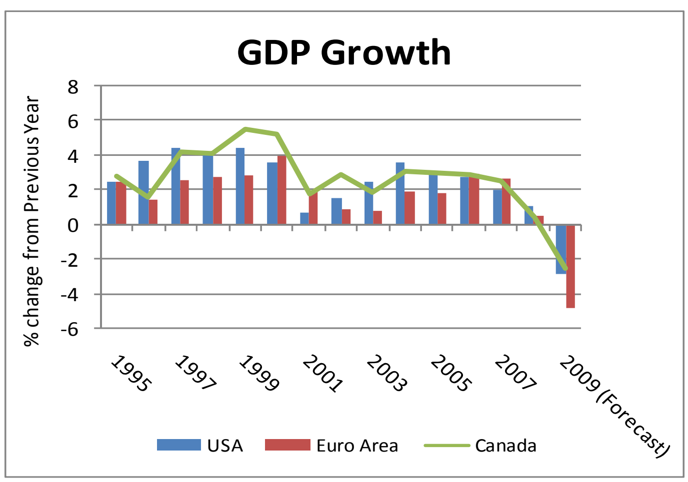
2. ECONOMIC SITUATION AND TRENDS

2.1 THE GLOBAL CONTEXT

Recession

The Alberta and Edmonton region economies are strongly linked to the global economy. The key linkage is energy, which Alberta produces and exports and the US and other advanced economies and increasingly China and other emerging economies consume. The energy sector has been a dominant factor in the development of the Alberta economy and the energy prices are a key in determining Alberta's and Edmonton's economic performance.[1] Alberta and Edmonton are also linked to the global economy through the financial and global manufacturing systems. Our banks are, by-and-large based in Toronto and New York, energy investment competes with projects around the world for internationally mobile capital, and the supply chain for large-scale industrial projects and many consumer goods are global.

In the fall of 2008, the combination of a downturn in the real estate market and dubious lending practices in the US turned into a loss of confidence in the US and then the global financial systems. This caused the credit market to cease and the global economy to shrink. The global economic turmoil was transmitted quickly to the Capital region's economy through plummeting energy prices and strongly curtailed credit availability.



Source: OECD 2009. OECD Outlook, June 2009.

The consensus in August 2009 is that a calamitous economic meltdown has been prevented by rapid and extraordinary government actions around the world. Governments intervened heavily

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1 R. Mansell and R. Schlenker. 2006.Energy and Alberta's Economy: Past and Future Impacts and Implications

to restore some measure of confidence in financial institutions and unlock frozen credit markets. Central banks lowered interest rates aggressively and employed other expansionary monetary measures. Many governments rolled out stimulus spending packages, all aimed at restoring economic growth. Canada's macro-economic actions reflect those taken around the world. Alberta did not formulate a specific economic stimulus. It did, however, maintain a high level of spending despite shrinking revenues.

Recovery

The jury is still out if the bottom of the recession has been reached in mid 2009. Some indicators remain bearish; others are more bullish. As for all advanced economies, economic indicators for Canada, Alberta and the Edmonton region give mixed signals:

- the economy started to shrink in the last quarter of 2008 and continued a downward trend in the first two quarters of 2009;
- unemployment levels are increasing as the economy shrinks;
- housing starts have declined but the market is showing signs of life with increased sales and steady or marginally firming prices; and
- oil prices have recovered from their lows.

There will be a recovery. Its timing, however, is uncertain.

Inflation

There is also an ongoing debate whether inflation or deflation is more likely in the near and medium term. There has been some deflation in Canada in May 2009, mostly due to falling gasoline prices. In addition, there continue to be some deflationary forces, including spare productive capacity in the economy and reduced global demand for commodities.

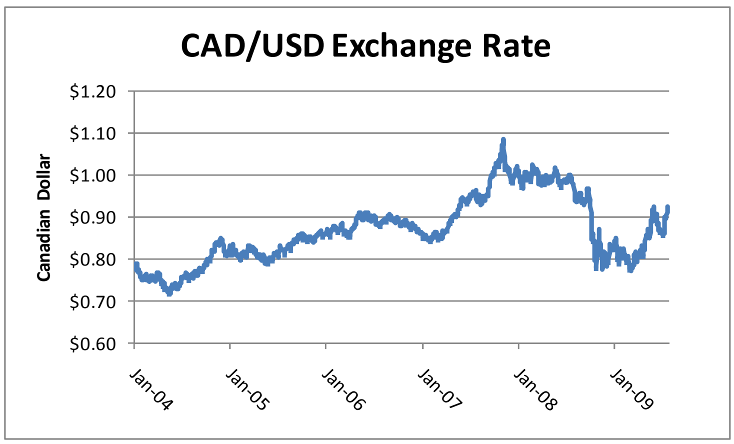
Deflation may be an issue in the near term, especially if the recession lasts into 2010. However, inflation is more likely once confidence and economic growth have been restored as:

- governments have been printing money (quantitative easing) which may debase currencies; and
- there has emerged a moral hazard for governments of using inflation to reduce their debt burden as this will allow them to pay back bond holders in reduced value dollars.

One thing is certain, policy makers are in uncharted waters and much will depend on how the transition from government stimulus spending to private sector investment and individual spending is managed.

Exchange Rate

The exchange rate between the US and Canadian dollar is a factor in the economic growth of the Canadian, Alberta and Edmonton region economy. A strong Canadian dollar mitigates energy price increases and makes Canadian goods and services more expensive in the US. For years, the Canadian economy was helped by a relatively cheap Canadian dollar. By the same token, the economy was negatively affected when the Canadian dollar rose to parity with the US dollar, essentially decreasing the effective price of most production by 15%.



Source: Bank of Canada

Over the past years, the Canadian dollar has become more influenced by high commodity prices.[2] In mid 2009, the Canadian dollar is valued at around $0.90 U.S. Exchange rates are notoriously difficult to predict, but there are structural reasons to anticipate a stronger rather than a weaker Canadian dollar. These reasons include:

- a precarious fiscal situation in the US before the downturn that has been exacerbated by, among others, bailout of financial firms and car manufacturers, stimulus spending, and reduced tax revenues as compared to a relatively robust state of the Canadian banking system and the expectation that Canada will see an earlier recovery than many advanced economies; and
- concerns about the US dollar due to:

[2] Bank of Canada 2008. *The Canadian Dollar and Commodity Prices: Has the Relationship Changed over Time?* Discussion Paper 2008-15. Ottawa.

– trade imbalances and high budgetary deficits and the possibility that inflation and a creeping currency devaluation will be in part the way in which these imbalances are addressed; and

– a movement away from the US dollar as a reserve currency towards the use of a basket of currencies, including the Euro, Yen and Yuan.

2.2 THE PROVINCIAL CONTEXT

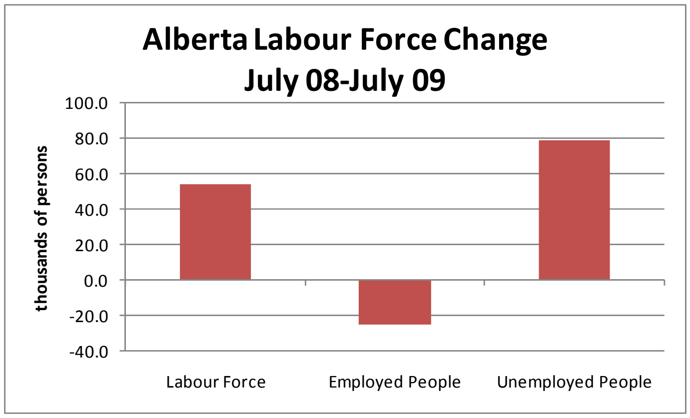
2.2.1 Current Spending

Consumer Spending

Consumer spending is more than half of all expenditures in the Alberta economy. That makes the outlook of ordinary Albertans a key economic indicator and, in mid 2009, Alberta consumers are hurting. Consumer spending has fallen as shown by falling retail trade sales. New house sales are also down.

Source: Statistics Canada, CanSim table 080-0014

The rapidly rising unemployment rate is important in this context. In the past year, unemployment has increased in Alberta and Edmonton as the labour force has continued to grow while the economy shed some jobs.

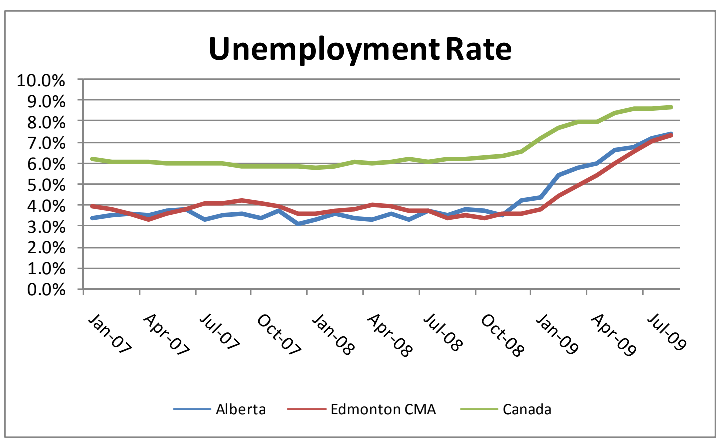


Source: Alberta Employment and Immigration Monthly Labour Force Statistics July 2008, July 2009

Although Alberta and the Edmonton region are faring better than most of Canada, the increasing unemployment reduces the spending power of those directly affected and undermines the confidence of others.

Other reasons for a depressed outlook among consumers include:

- wages and salaries are under pressure or at best flat;
- home owners have seen 10%-15% of their property values disappear; and
- savers, and especially people who invested part of their retirement and other savings in the stock market, have seen a substantial portion of their wealth vanish.



Source: Statistics Canada. CanSim table 282-0087

Consumer spending will recover as confidence grows that the worst of the economic downturn is over. Indeed, there are some early signs of consumer confidence in the housing market and retail sales. However, the unprecedented violence of the downturn suggests that growth in consumer spending will be lackluster in the early years of the forecasts. Confidence shaken takes some time to be restored.

Government Spending

Government current spending, much of it wages, is an important driver for the Edmonton region economy. The 2008/09 recession has forced the Alberta government into a deficit position for the 2008/09 fiscal year, with three more years of deficits anticipated.[3]

Generally, the cost of the recession is in part a government fiscal cost and will likely lead to higher levels of taxation in many countries.[4] In Alberta, cost containment and cutting are likely to be part of the government's actions to address the budget deficit situation at some time during the forecast period. This suggests flat or even somewhat reduced government employment in the later years of the forecast period, affecting Edmonton as the seat of government.

2.2.2 Investment

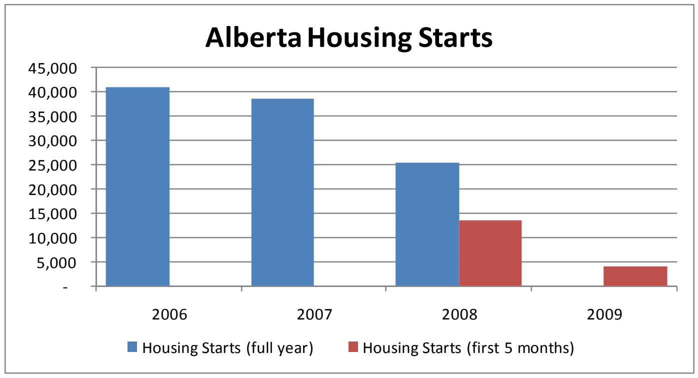
Investment is second to consumer spending as a driver of the Alberta economy. It accounts for more than one-third of all spending and most of it is done by individuals (housing) and firms (machinery and equipment and buildings). The dramatic collapse of private sector investment is one of the key reasons for the government stimulus packages around the world. Government stepped in when companies and individuals withdrew.

Private Investment

The biggest investment that most individuals make is in a house and both housing starts and sales volume of existing homes have fallen from their peak in 2007. Housing starts in Alberta fell from almost 38,500 in 2007 to 25,400 in 2008 and were lower in the first five months of 2009 than they were in the same period in 2008.

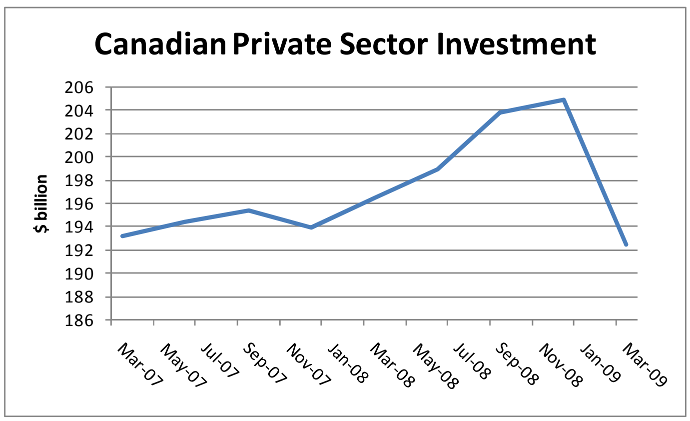
[3] Alberta Finance and Enterprise, Press Release June 30.

[4] International Monetary Fund, 2009. Sustaining A Global Recovery, August 19 2009.



Source: CMHC.

Private sector investment is also down substantially. Alberta's private sector mirrors Canada's. More than half (by value) of oil sands industry projects were put on hold and oil sands has accounted for 50% to 60% of all major projects in Alberta in the past couple of years.[5]



Note: Gross Capital Formation, Non-Residential Structures and Equipment

Source: Statistics Canada. CanSim Table 380-0002

For structural reasons, including continued tight credit and the need to rebuild company balance sheets, private sector investment is expected to remain constrained for the forecast period. Oil sands industry investment by well-capitalized energy companies may be an exception.

Government Investment

The Alberta government, in contrast to the Canadian and many other governments, has not formulated an explicit stimulus package in response to the economic downturn. Instead, it has maintained the investment levels already in place, refocusing from spending surpluses to running a deficit to maintain spending levels. Capital spending by the Alberta government increased in the 2008/09 fiscal year by $0.6 billion to $7.6 billion. The 2009/10 capital budget is set at $7.2

5 Alberta Finance and Enterprise, Major Projects List, various issues.

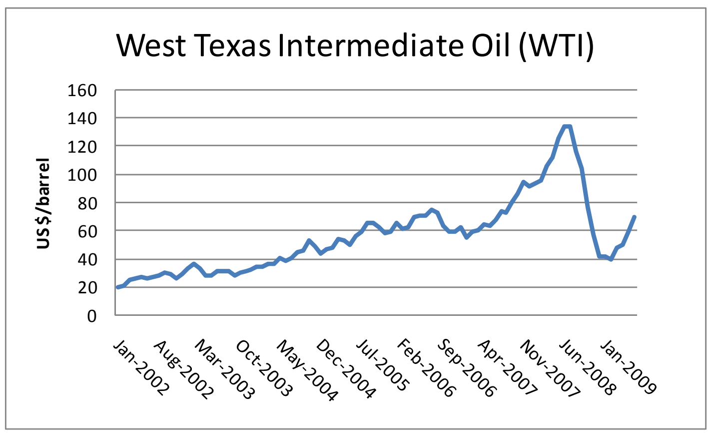
billion and the three-year capital spending plan for 2009/10 to 2011/12 is $23.1 billion. This spending may come under pressure if deficit reduction moves higher on the political agenda.

2.2.3 Energy Prices

Energy prices are and will remain a key indicator for private investment decisions in the Alberta/Edmonton economy for the foreseeable future. They also influence employment and possibly inflation levels, as well as government revenues.

Rebounding Oil Prices

Oil prices are often discussed in reference to West Texas Intermediate (WTI), a common benchmark for oil. It reached historic levels of $147 per barrel in July 2008. Since then the WTI price has plummeted to $34 in February 2009 and rebounded somewhat. In July 2009, WTI traded somewhere in the $60 to $70 range.



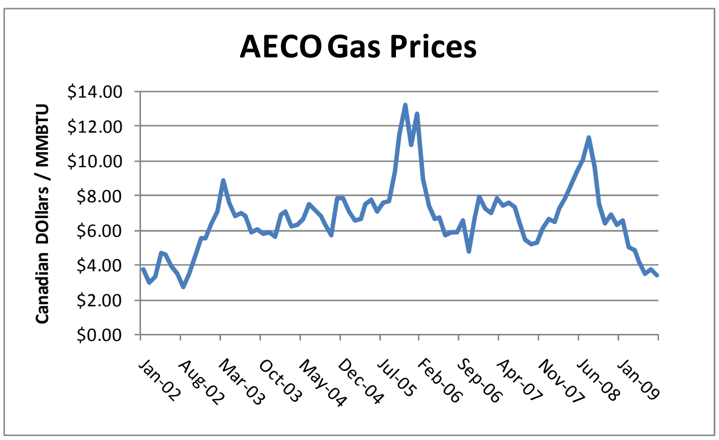
Source: Energy Information Organization.

The differential between heavy oil, which is what Alberta increasingly produces, and the light oil price captured by the WTI, is another important variable. Historically, heavy oil prices were priced at a discount of about 40%. Recently, the discount has been much less and for a short time, heavy oil prices achieved parity with WTI. Smaller differentials may well persist as more refining capacity in the US is converted to take heavy oil and Mexico and Venezuela, two other heavy oil producers, face production constraints.

Oil pricing is influenced by its supply and demand, with much attention paid to cutbacks in supply by the Organization of Petroleum Exporting Countries (OPEC), flagging demand in advanced economies and (re)surging demand in some emerging economies. Oil is also a very political commodity and its price is also influenced by considerations other than supply and demand forces. For example, the first oil shock was the result of an export embargo by OPEC in response to the political situation around the 1973 Yom Kippur war. Other examples include energy security considerations and the operation of a large strategic reserve by, among others, the US and Japanese governments. In mid 2009, the OPEC target price appears to be somewhere between US$65 and $75 per barrel.

Falling Natural Gas Prices

Natural gas is a less widely traded commodity than oil. Except for an emerging liquefied natural gas (LNG) system, natural gas moves mostly through pipelines in continental markets. Natural gas prices in North America reached their peak in June/July 2008 and have been declining since then. Natural gas prices have continued to decline in recent months and are now at a historical low. Several major producers have curtailed production awaiting improved prices.



Source: Sproule and Associates

The current low price for natural gas is not in sync with the oil price. There is about six times as much energy in a barrel of oil as in a thousand cubic feet (mcf) of natural gas. Not surprisingly a barrel of oil has been roughly six or seven times as expensive as a mcf of gas. Since 2006, however, this relationship has not held. Over the past two years a barrel of oil has been on average 18 times as expensive as a mcf of gas. There are some structural reasons for strength in the oil price that do not hold for natural gas, including:

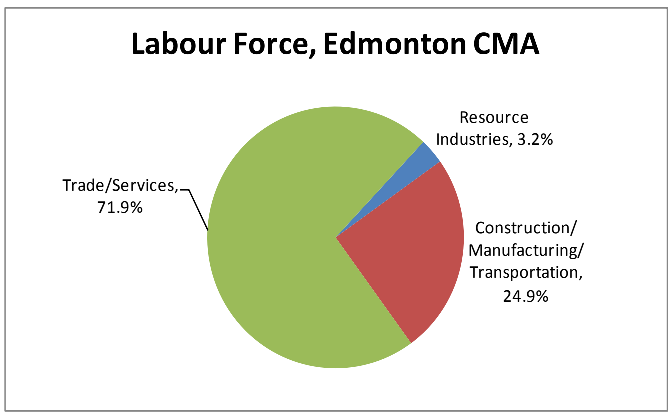
- most of the growth in energy demand comes from India and China;

- oil production in North America is decreasing; natural gas production is increasing marginally, in part due to recent technological advances in unconventional gas extraction.

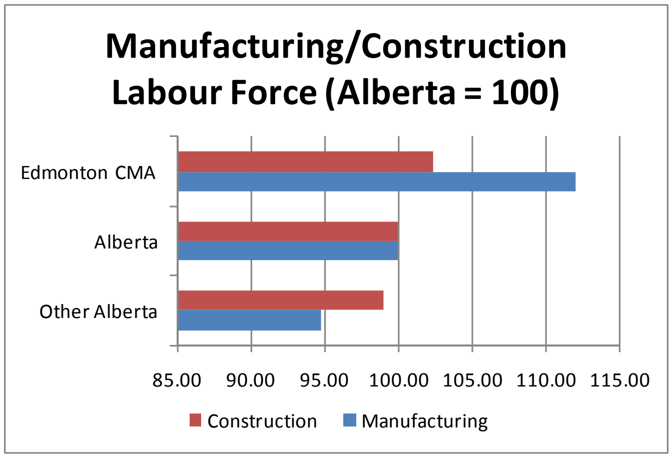
Over the longer term, the natural gas price is likely to regain a more balanced relationship with oil as these commodities are close substitutes. Market forces already have caused a reduction in supply and demand is likely to pick up in the winter. More generally environmental considerations will favour natural gas over oil or coal in many uses.

2.3 THE ECONOMY OF THE EDMONTON REGION

The economy of Alberta and the Edmonton region is a services-based economy. Service sector jobs account for roughly three-quarters of all jobs in the Edmonton region. As the seat of the provincial government and home to the University of Alberta, Edmonton has a relatively high proportion of public sector workers.

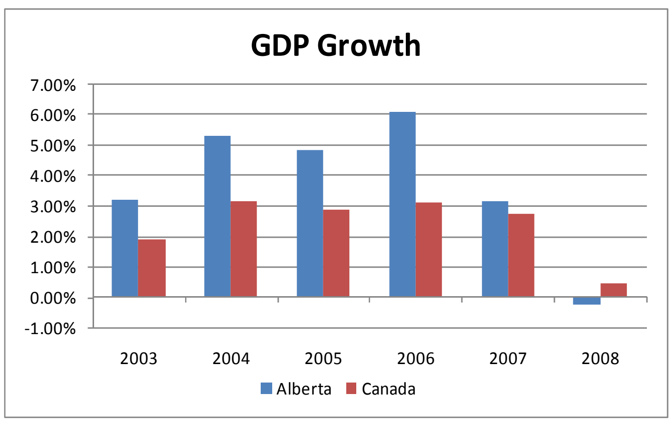


Edmonton's service economy orientation is in line with other developed economies. What sets Edmonton apart is its function as the construction, manufacturing, and transportation base for the oil and gas industry and, more generally, resource extraction activities in northern Alberta, north-eastern BC, and the Northwest Territories. The region has extensive upgrading, refining and petro-chemical facilities and is connected to the rest of North America by a network of oil and gas pipelines.



Source: Statistics Canada 2009. Historical Labour Force Statistics 2008.

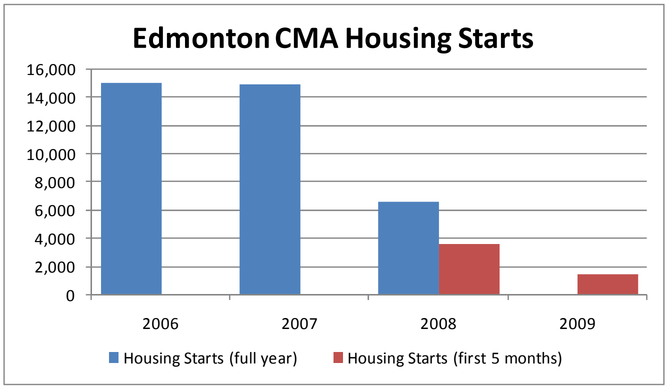
Alberta has grown faster than the rest of Canada in recent years. In the recent recession, it has fallen more quickly. Unemployment is up in Alberta, but less so than for Canada as a whole. Within Alberta, the Edmonton region has fared marginally better than the rest of the province in terms of unemployment.



Edmonton's large public sector is behind its relative performance in unemployment terms. Public sector employment has been stable or grown marginally throughout the downturn. The main reason behind the province's strong economic performance in recent years is oil and gas. The Alberta economy is powered by oil and gas investment and production and the Edmonton region is a key supply centre for that industry. In recent years, the oil and gas industry, and especially the oil sands industry, was leading the charge. It was hit hard by the sudden decline in oil and gas prices.

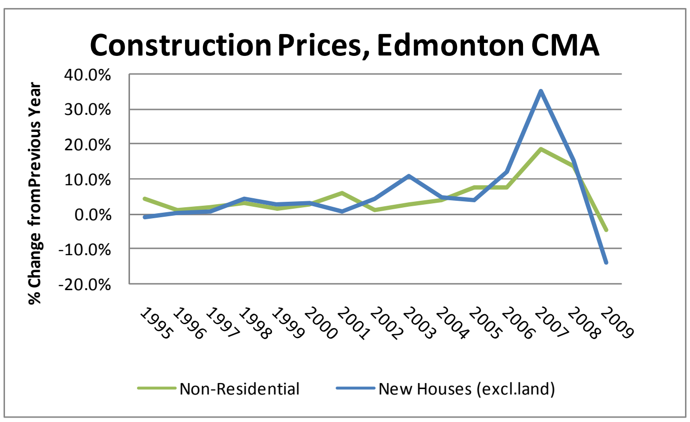
Private Investment

The biggest investment that most individuals make is in a house and both housing starts and sales volume of existing homes have fallen from their peak in 2007. Housing starts in the Edmonton CMA fell from almost 15,000 in 2007 to 6,600 in 2008 and were lower in the first five months of 2009 than they were in the same period in 2008.



Source: CMHC.

The cost of residential and non-residential buildings is also coming down after a period of high inflation. The costs of building a house peaked in September 2007 at almost twice the level incurred five years earlier. Costs have decreased by 18% between September 2007 and June 2009. Non-residential building costs peaked in early 2008 and have declined by about five percent since then.

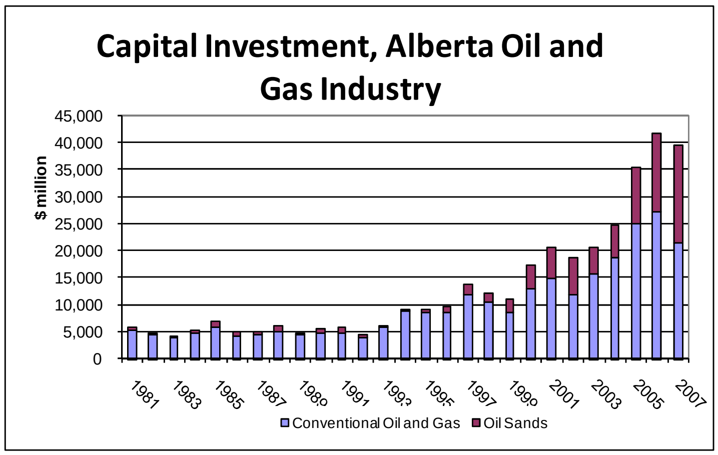


Source: Statistics Canada Cansim tables 327-005 and 327-0043.

Reduced affordability had already put downward pressure on in-migration, housing starts, and house prices in late 2007 and early 2008. The additional weight of the global recession in the fall of 2008 and the associated decline in energy prices reinforced the already weakened housing market and ushered in the recession locally.

Oil Sands Industry Investment

The current expansion phase of the oil sands industry started in 1995, driven by technological advances, a new fiscal regime, and a positive long-term price outlook for oil. Oil and gas industry investment expanded quickly after 1995 and by 2007 oil sands industry investment accounted for roughly half of all oil and gas investment. In late 2008 and early 2009, much of this investment was put on hold, caught between rising capital and operating costs and falling product prices.



Source: CAPP Statistical Handbook.

The global economic downturn and reduced investment around the world have contributed to a reduction in capital costs for oil and gas projects. Oil prices have also recovered from the low, although much uncertainty remains about their long-term level. The reduced costs and partly recovered product prices have brightened the outlook for the bitumen production part of the industry.

Oil sands industry investment has continued throughout the downturn, but at a much reduced scale and may pick up again, lead by well-capitalized multinational energy companies. Construction of two large Shell projects remained on track, as did a Devon project. Imperial Oil sanctioned the first phase of its Kearl Mine project in early 2009 and Suncor is preparing to restart construction on its Firebag project in the fall or early winter of 2009.

There is less reason to be optimistic about a resurgence of investment in upgrader capacity. Upgraders are capital intensive plants that convert bitumen and heavy oil into lighter oil that can be refined into gasoline, diesel, and aviation fuel. More upgrader projects were put on hold or abandoned in late 2008 and early 2009 than bitumen production facilities. And it is less likely that upgrader projects will come back on stream in Alberta, especially if the differential price between heavy and light oil remains small and if there remains a cost advantage to building upgrading capacity in the US. One countervailing force is the Government of Alberta's Bitumen-Royalty-in-Kind (BRIK) program. Under this program a portion of the bitumen produced may be allocated to

Alberta-based upgraders. The volume of bitumen upgraded in Alberta under the BRIK program is expected to remain relatively small.

2.4 IMPLICATIONS

Economists and economic forecasts are receiving much attention as individuals, businesses and governments try to assess their situation and possible courses of action. Having been caught flat-footed by the recession, this renewed interest in forecasts comes at a time of humility for the profession.[6] Noting the uncertainty about the timing and vigour of the recovery, this edition of the Socio-Economic Outlook presents its *Most Likely* scenario, outlining the main drivers and key implications on selected economic indicators. It also discusses a *Downside Risk* scenario that addresses the uncertainty that surrounds these forecasts that cover years in which the world economy is in uncharted waters.

Overview of Forecasts

The general consensus is that growth in the world economy, Canada, and Alberta will be negative in 2009 and will regain a positive momentum in 2010. A number of organizations, including the Bank of Canada, have upped their forecasts marginally in mid 2009 as compared to ones made earlier in the year. Economic growth in the forecast period will be lower than in the period before the recession.

Forecasts place the Alberta GDP growth at between 1.8% and 4.0% for 2010 and between 3.0% and 4.9% for the following years. This compared with an average growth rate of 4.5% per year in the five years up to 2008.

GDP Growth Forecasts					
	2009	**2010**	**2011**	**2012**	**2013**
	Percentage Change Over Previous Year				
World GDP					
Conference Board of Canada	-1.6	2.1			
OECD	-2.2	2.3			
IMF	-1.4	2.5			
TD Bank	-1.9	2.7			
CIBC	-1.5	2			
Canadian GDP					
Conference Board of Canada	-1.9	2.7			
Bank of Canada	-2.3	3	3.5		
OECD	-2.6	0.7			

6 See for example, *The Observer,* July 26, 2009, “This is how we let the credit crunch happen” and *The Economist*, July 16, 2009, “What went wrong with Economics?”

IMF	-2.3	1.6			
TD Bank	-2.4	1.4	3.3	3.9	2.8
Royal Bank of Canada	-2.4	2.5			
Bank of Montreal	-2.3	2.2			
CIBC	-2.2	1.6			
Alberta GDP					
Conference Board of Canada	-0.5	4.0	4.9	4.8	3.6
Government of Alberta	-2	1.8	3	3.3	3.1
TD Bank	-2.3	1.9			
Royal Bank of Canada	-2.5	2.9			
Bank of Montreal	-2.3	2.5			
CIBC	-2.5	1.8			
Edmonton GDP					
Conference Board of Canada	-0.2	3.1	4.1	3.9	3.5

Sources:
Conference Board of Canada "Canadian Outlook Executive Summary Summer 2009" and Metropolitan Outlook, Spring 2009.
Alberta Finance and Enterprise. Budget 2009. April 2009.
Bank of Canada Monetary Policy Report July 2009.
Organization for Economic Cooperation and Development (OECD): Country Outlook Canada, June 2009.
International Monetary Fund (IMF) Economic Outlook July 2009.
TD Economics Quarterly Economic Forecast June 16, 2009, Long Term Forecast June 16, 2009, Provincial Economic Forecast July 16, 2009.
Royal Bank of Canada (RBC): Provincial Outlook June 2009.
Bank of Montreal (BMO): Provincial Outlook July 23, 2009.
CIBC "Not There Yet" April 28, 2009, Economic Insight July 23. 2009, Provincial Forecast June 22, 2009.

General Implications

The events of the past year will have far reaching implications for the functioning of the global, Canadian, Albertan, and the Edmonton region’s economy. Some of these implications for the forecast period are that:

- government debts, increased by stimulus spending, will be an ongoing focus of concern and will require sustained policy attention;
- private and corporate spending is likely to be lower and savings higher as households and companies recover from the losses suffered in the recession;
- availability of money for commercial and consumptive uses is likely to remain tight as:
  - financial firms rebuild their capital base and lend more conservatively, using more stringent risk management systems; and

– abundantly available and relatively safe government debt crowds out more risky private sector debt or equity.

Most Likely Scenario

Alberta and the Edmonton region will not escape the structural fall-out of the recession. For the same structural reasons as of increased government debt, reduced availability of credit and the need for households and businesses to rebuild their financial situation after the 2008/09 recession, this edition of the Socio-Economic Outlook expects the Alberta and Edmonton region average GDP growth over the next five years to be lower than the respective 2.5% and 2.9% experienced in recent years. In lock-step with the recovery in the world economy, Edmonton's economic growth is expected to recover in 2010 as idled resources are brought back on in production. GDP growth is expected to improve from 2.1% in 2010 to 3.85% in 2014, noting that forecasting beyond the short to medium term is always challenging and especially in these uncertain economic times. In the *Most Likely* scenario Alberta and Edmonton are expected to lead, but not by much, the growth in Canada and other advanced economies. Alberta benefits from the expected relatively strong energy prices; the recovery of most advanced economies will be hampered by them.

The key underpinnings of this forecast are shown in Appendix A and B and include:

- an average oil price of WTI US$62 per barrel in 2010 strengthening to US$77.5 in 2014, driven by advanced economies emerging from the recession and returning to historical level of energy consumption and emerging countries, especially China, becoming once again the key driver of energy demand growth;

- a recovery in oil sands industry investment but not to levels experienced in 2006 and 2007;

- natural gas prices at AECO recovering slowly from $4.50 per million British Thermal Units (btu) in 2010 to $6.75 in 2014, but remaining below its historical relationship with oil as relatively low growth in the US will constrain demand and supply expands from non-conventional sources;[7]

- a CAD/USD exchange rate of $0.90 in 2010, marginally strengthening to $0.95 over the forecast period, reflecting both the positive fiscal position of Canada relative to the US and the upward pressure of relatively robust oil prices; and

[7] See, for example, Energy Information Administration, 2009. Short Term Energy Outlook, August 2009.

- a ramp-up in oil sands industry investment, but not to the level seen between 2006 and 2008, in response to relatively robust oil prices, availability of workers and fabrication facilities, and reduced costs of selected inputs.

For Alberta and Edmonton, the implications of this forecast are:

- increasing employment that marginally lags GDP growth situation, resulting in a falling annual average unemployment rate from 5.7% in 2010 to 4.1% in 2014 as oil sands investment stimulates the oil and gas manufacturing sector and buoys consumer confidence;

- job creation in 2010 that makes up most of the losses of 2009 and that ranges from 14,500 in 2010 to 20,900 in 2014; job creation is expected to remain below levels seen in 2006 and 2008 reflecting lower economic growth expectations;

- in-migration averages 11,000 persons per year, ranging from 4,000 in 2010 to 14,700 in 2010, below levels seen in 2006 and 2008 reflecting both lower growth and positive economic performance relative to other provinces;

- housing starts ranging from 7,500 in 2010 to 12,600 in 2011, below levels seen in 2006 and 2008 reflecting the need to absorb unsold inventory in 2010 and 2011 and lower in-migration.

The lower growth relative to recent years will spill over into other parts of the economy. Construction costs faced by people, businesses, and municipalities have already been reduced after a period of high inflation. Construction cost increases are likely to remain muted and the labour market less tight over the early years of the forecast period. The recent increases in unemployment, which have been felt more in the private than in the public sector, are likely to temper wage demands and make public sector employment relatively more attractive.

The lower growth than in 2006 and 2007 will also spill over into the fiscal position of Alberta and Edmonton. Relatively low natural gas prices will put pressure on the provincial budget. Provincial income tax levels will also be effected by lower growth in employment and less wage inflation than in recent years. Edmonton’s fiscal position will be affected by investment income that is likely to be lower than in recent years as companies rebuild their balance sheets. Provincial grant income is expected to be under pressure as is already evident by a reduction in the Municipal Sustainability Initiative funding in the 2009 Provincial Budget. Further increases in the education tax requisition will affect the City’s tax room.

Several of these implications of the current economic situation and trends are reinforced by social trends. Economic growth, for example, will also be affected by increased environmental regulation and the graying of the economy. A more detailed discussion of social trends follows in the next section.

Downside Risk Scenario

There is more risk on the downside than on the upside. Large-scale government intervention has avoided a catastrophic meltdown of the global financial system. But it is still unclear if all required write-downs of opaque financial assets have taken place and there remain concerns about residential, commercial mortgage and credit card defaults. Credit markets remain jittery in mid 2009 and consumer and business confidence shaky. Layered over this remaining uncertainty about the robustness of the financial sector is the challenge facing governments of how to reduce their central role in recession management. Once non-government spending has returned to more normal levels, governments can and need to reign in their stimulus spending and reverse their loose monetary policy.

If not managed well, jittery credit markets, tightening monetary policy or premature reduction of government stimulus spending will have negative effects on growth. Another period of low or negative growth globally is likely to depress energy prices and that will weigh heavily on the Alberta and Edmonton economy. In general terms, the *Downside Risk* scenario will mean that the Alberta's and Edmonton's economy performance will lag other advanced economies. The implications for the Edmonton economy of the *Downside Risk* scenario include:

- one or more quarters of negative GDP growth, likely in early to mid 2010;
- reduced government income from resource royalties and an increased need for initiatives to address budget deficits;
- job losses, including public sector job losses, and rising unemployment, likely above levels seen in the recession to mid 2009.

Migration into the Edmonton region is likely to slow under the Downside Risk Scenario, mirroring the historical experience of the early 1990s.

3. SOCIAL SITUATION AND TRENDS

3.1 GLOBAL TRENDS

Edmonton mirrors a set of fundamental social trends that will have an effect over the forecast period and beyond. The key ones are discussed here.

3.1.1 Aging Population

The population of all advanced economies is aging and the population of many developing nations are only a few decades behind. Over time, the inexorable rise in number of elderly, both in absolute numbers and as a percentage of the overall population, will have profound consequences. Many of these are social in nature and pertain to, for example, the type of housing required and the way we organize and finance health care. Many will feed back into the economy through, for example, changes in the labour force and changes in savings/spending behaviour.

Low Birth Rates

One key reason for our aging population is that families have fewer children. On average, Alberta women will have 1.7 children, well below the replacement rate of 2.1. There has been a small increase in birth rate in the Edmonton region from 11.6 live births per 1,000 population in 2000 to 12.3 in 2006.[8] This trend is reflected across Alberta and Canada and is linked to the children of baby boomers entering their child-bearing years.[9]

Longer Lives

Another reason for the aging population is an increased life expectancy. In Canada, life expectancy at birth has increased from 69 in the late 1950s to almost 81 in 2009. It may increase to 85 by 2050.[10] In part this is due to falling mortality rates among children. In advanced economies, we also actually live longer. The difference matters as falling infant mortality increases the labour force and longer lives increase dependency ratios. Much of the social implications of an aging population are linked to more people living longer. It is directly related to health care costs.

[8] City of Edmonton, 2008, Report on Edmonton's Children and Youth.
[9] Statistics Canada 2008. Birth 2006. Catalogue 84F0210X.
[10] United Nations, 2009. The World Population Prospects, 2008 Revision (median variant).

3.1.2 The Environment

The “Environment” is very much on the agenda, showing up under many guises. Some regulatory examples include:

- international agreements on emissions (e.g. the soon-to-be-renewed Kyoto Protocol limiting greenhouse gas, the Montreal protocol that addresses CFCs and others);

- emerging regulation of emissions, such as the EU and US carbon trading schemes and Alberta’s *Climate Change and Emissions Management Amendment Act* and its accompanying Specified Gas Emitters Regulation; and

- the new Land Use Framework, which aims to balance environmental, social, and economic claims on Alberta’s land base.

Consumers are also moving in a green direction. Edmontonians have embraced curbside recycling and farmers’ markets. Some use green power or drive hybrid vehicles. Most green consumer activities to date are small and symbolic. The car and truck are still firmly entrenched and the single family home in the suburb remains the dominant urban development idea. But change has started and it will continue over the forecast period.

3.1.3 Changing Face of Work

Reflecting trends throughout advanced economies, the labour force and the work place are changing. The key elements include:[11]

- the increasing need for post secondary education for most jobs, something that holds equally true in new industries, such as telecommunications and for traditional ones, such as the oil and gas industry;

- current unemployment notwithstanding, skills shortages as the jobs of retiring baby boomers need to be filled by the numerically smaller generations; and

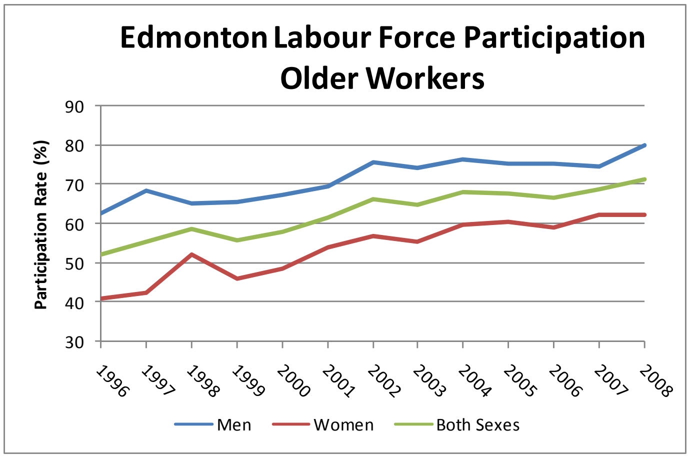
- more diversity in the work place as traditionally under-represented groups (aboriginal people, recent immigrants, people with disabilities) are brought into the workforce to fill positions.

Edmonton faces substantial challenges in meeting the demands of the changing labour force.

[11] Alberta Human Resources and Employment, 2005. *Understanding Alberta’s Labour Force: Looking to the Future.*

Older Workers

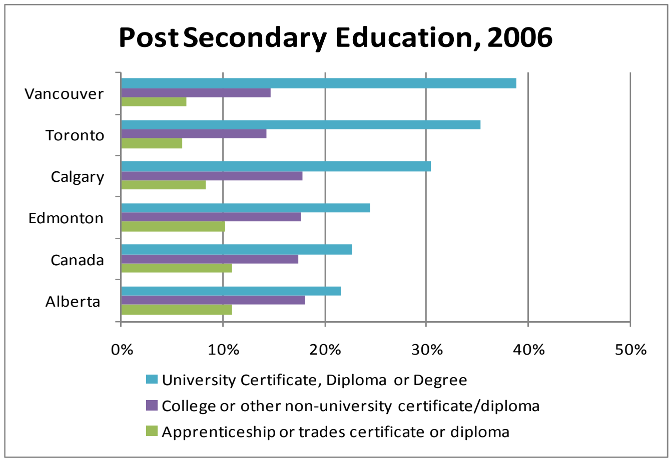
The current recession's impact on (private) sector pensions and private savings is likely to increase the number of older workers who remain in the workforce. This phenomenon is already evident and will likely be an aspect of the labour force in the forecast period. However, the baby boomer generation will retire eventually, necessitating increased in-migration and engagement with traditionally under-represented groups. In the end, productivity gains – working smarter – will need to be the larger part of the answer to the aging labour force.



Note: Older workers are defined as workers 55 to 64 years of age.
Source: Statistics Canada, Labour Force Historical Review 2008.

Educational Attainment

The percentage of Edmonton's population that is university educated has grown marginally between 2001 and 2006 from 22.9% to 24.4% of the total population 15 years and older. Edmonton is trailing key other cities in Canada in the number of university educated people, suggesting that the region is not ideally situated for a more knowledge-intensive economy. Edmonton fares better relative to other cities in the percentage of the population that has college-level degrees and apprenticeship training.

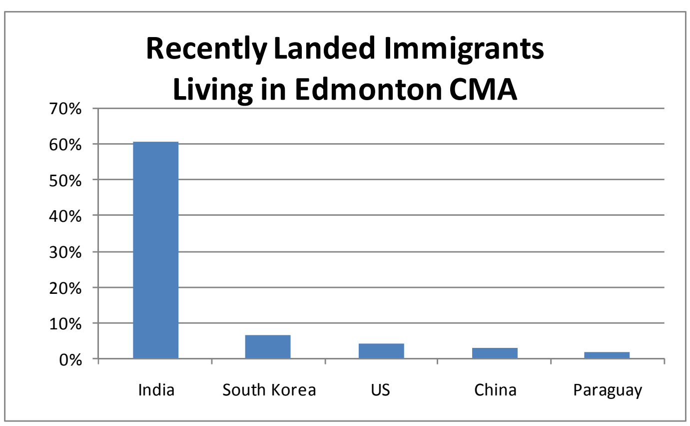


Source: Statistics Canada 2006 Census..

Diversity

Edmonton's population and labour force is still overwhelmingly of European descent. But diversity will increase as more persons from under-represented groups, especially Aboriginal persons and new immigrants are drawn into the labour force. Aboriginal people are the largest visible minority. There are an estimated 49,910 people (or about 7 percent of the population) of First Nation or Inuit status or Métis heritage.

India is the country of origin of the majority of recent immigrants in the Edmonton region and fully 85% of recent landed immigrants living in Edmonton hail from non-European countries. Many of the non-permanent residents are part of visible minorities as well.



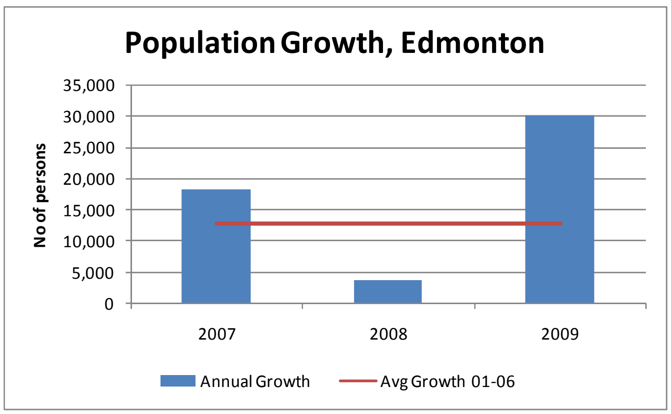
Note: Immigrants landed in Canada between 1996 and 2006
Source: Statistics Canada, Census 2006

Increased diversity implies challenges in integrating currently under-represented groups into the labour force. The Aboriginal community is younger than the population as a whole and, as a group, has lower levels of education. Employment-related challenges of recent immigrants include limited language skills, issues with foreign credentials, and lack of "Alberta" experience.

3.2 EDMONTON-SPECIFIC TRENDS

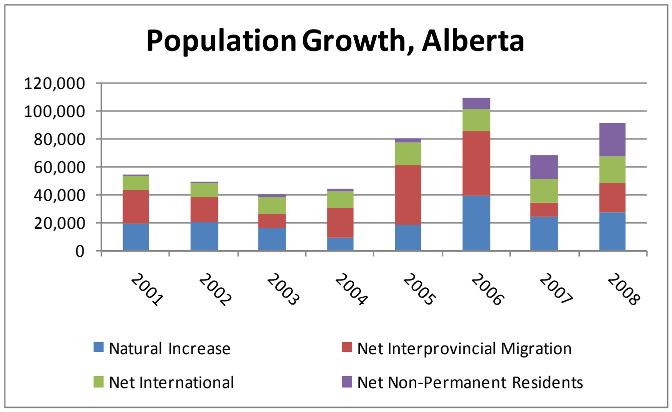
3.2.1 Population and Migration

By and large, people come to Alberta and the Edmonton region for work. Strong economic performance in 2004 through 2007 is mirrored in an increase in population. The population growth has continued through the recent downturn. The City's population grew by some 30,000 people (or 4.0%) from May 2008 to May 2009 to 782,439. Population growth in 2008 exceeded the average growth in the five years prior; lower unemployment than elsewhere is likely a contributing factor.



Source: City of Edmonton, Municipal Census

Although an uptick in the number of births helps, the real source of population growth for Alberta and the Edmonton region has been in-migration. Immigration has, of course, long been the key driver of population growth for the province and the region. Most people, except the First Nations, are relatively new arrivals either from other parts of Canada or from other countries. The sources of international in-migrants for Alberta and Edmonton have shifted. Whereas the original settlers were mostly from the British Isles, subsequent waves of immigrants have been from Eastern Europe and more recently from Asia and Africa.



Source: Alberta Finance and Enterprise, Alberta Population Report, various issues.

In-migration is linked to housing affordability relative to other jurisdictions. Although the Edmonton region has become less affordable, it remains on par with major population centres in Canada. Toronto and Vancouver are more expensive and Montreal and Halifax a little less. As most metropolitan centres it is more expensive than rural areas from which some in-migrants come.

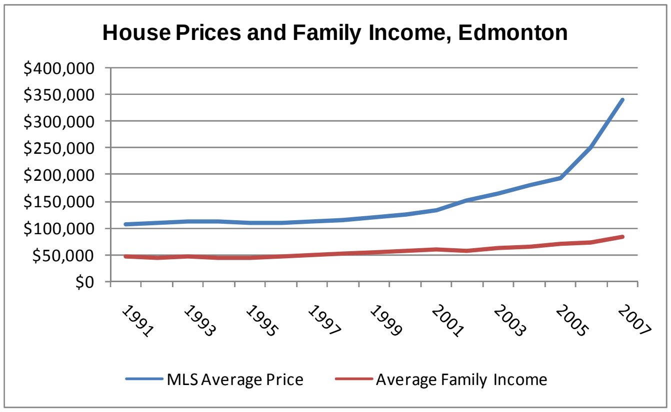
3.2.2 Social Aspects of Growth

The Edmonton region has gone through a period of rapid economic growth, which only stopped in 2008. Growth is expected to resume in 2010, although at a slower pace than before. The experience of the recent period of growth has been that economic growth had outpaced social investment in the region and the province. Indeed, a focus on debt reduction in the 1990s involved substantial cuts to social housing, reduced income support benefit rates, and a focus on moving people off assistance into jobs. Despite increases in social spending in recent years, the province's social infrastructure remains under pressure. The demand for social housing still outstrips the supply. And people with lower skill levels may be off income support, but many have only been able to find lower-paying jobs. This situation holds during the recession and is likely to exacerbate as growth restarts.

Economic expansion leads to employment opportunities and increases in income and wealth. Experience shows that it also leads to reduced access to affordable housing, health care, education and training, child care, transportation, and human services for people on the lower end of the income scale. The recession has reduced job opportunities, but the population growth and the associated pressures on the social sphere have not abated.

Housing Affordability

Housing affordability is the central concern that emerged in recent years. For years, both rental and owned housing in the Edmonton region was cheap relative to many jurisdictions and to incomes. Average house prices were about 2.2 times the average family income in the 1990s. They were four times the average family income in 2007. Edmonton had the dubious distinction of being the metropolitan centre in Canada where house prices rose the fastest relative to income between 2005 and 2007. Rents increased sharply as well. Rising housing costs may be one of the contributing factors to the relatively low in-migration numbers in 2007.



Source: MLS Listings and Statistics Canada CanSim Table 202-0403

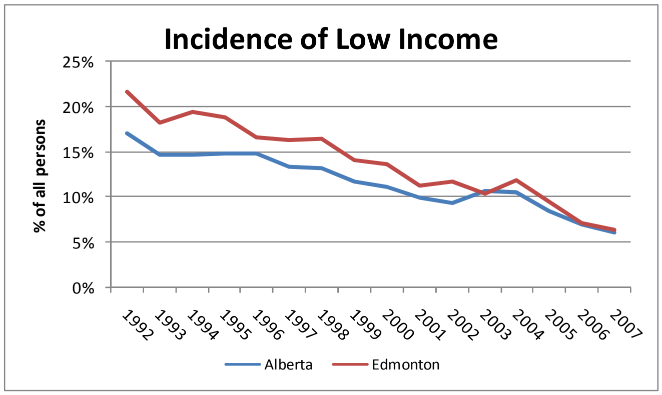
Because most people finance their home purchase, interest rates play a role in the question of housing affordability.[12] Marginally reduced house prices (though not rents) and low interest costs have increased affordability somewhat in recent months. Low interest rates are, however, not sufficient to counter the increase in house prices relative to incomes. More importantly, the world economy is in uncharted waters and its future may well include higher interest rates.

Low Income

Strong economic growth has reduced the percentage of people in Alberta and Edmonton living on low incomes and at risk of poverty. Edmonton has also essentially closed the gap with the province that existed since the early 1970s. Although not yet reflected in the data, the incidence of low income has increased in the recent downturn as unemployment has increased and wages have stagnated.

The incidence of low income is not uniform among groups in the community. Single parent families, overwhelmingly headed by women, have a higher incidence of low income, as have single persons and selected groups, such as aboriginal persons and recent immigrants.

[12] See for example, RBC Economics, 2009. Housing Trends and Affordability.



Note: Percentage of all persons with incomes below the Low-Income Cut-Off (LICo).[13] Based upon adult equivalent adjusted family after-tax income for unattached individuals and persons in families combined.

Source Statistics Canada, CanSim Table 202-0802.

Homelessness

Homelessness is one possible outcome of the squeeze between increasing housing costs and low income. There were about 3,000 homeless people in Edmonton in 2008, up from around 750 a decade earlier. Most of the homeless are single men, but some are single women and an estimated eight percent families.[14] In addition to a lack of affordable housing, homelessness is also affected, among other, by poverty, mental health issues, and addictions.

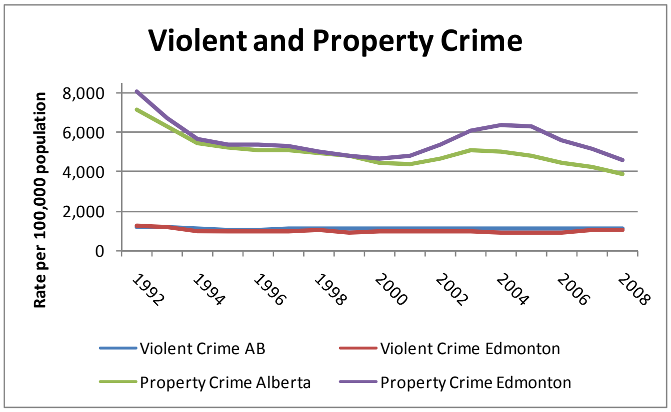
3.2.3 Safety

Concerns about safety are real for many people, especially the elderly. However, on a community level, Edmonton is increasingly safe. Both the volume and severity of crime is down in the Edmonton region and Canada. Edmonton has, however, an above average number of violent crimes relative to other metropolitan areas.[15]

[13] The Low Income Cut Off or LICO is the threshold income below which a family is likely to spend a larger share of its income than the average family on necessities (food, shelter and clothing. LICO is the income at which a family spends 20 percentage points more than the average family on food, shelter and clothing.

[14] Edmonton Committee to End Homelessness, 2009. A Place to Call Home.

[15] Statistics Canada 2009. Police Reported Crime Statistics in Canada. Catalogue 85-002-X.

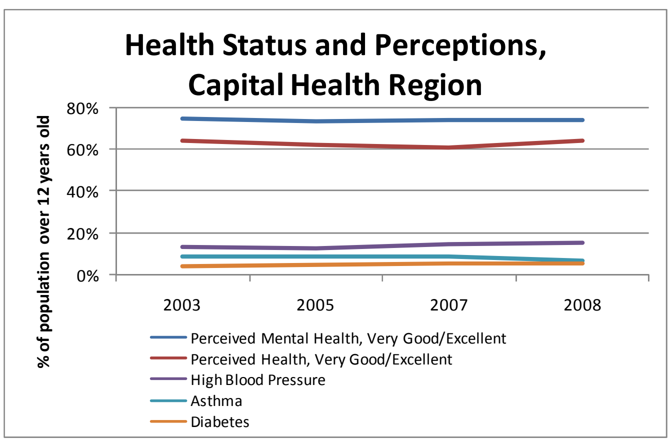


Source: Statistics Canada, CanSim Table 252-0013

Alberta's and Edmonton's rate of violent crime is relatively steady and has varied from year to year in a relatively narrow band. Property crimes have resumed a long-term downward trend after an uptick between 2000 and 2004.

3.2.4 Health and Recreation

Health care and recreation are expected to remain key considerations of people in the region. Indeed, one important aspect of the general aging of the population is the expected increased draw on the health system. The perception of their own (mental) health and self-reported diagnoses of selected illnesses varies little over recent years and is in line with perceptions of other Albertans and Canadians.

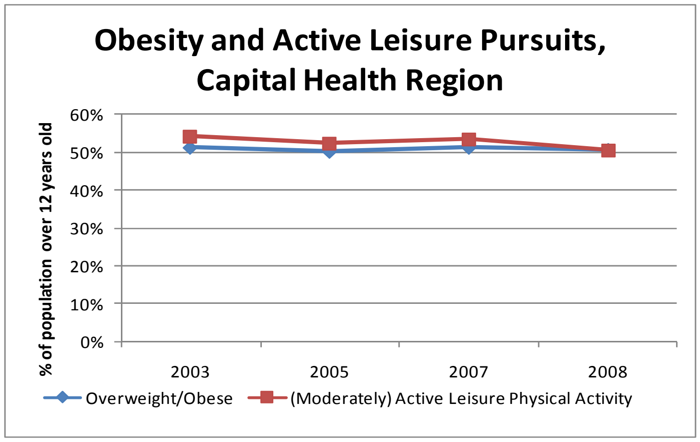


Source: Statistics Canada, Canadian Community Health Survey.

Obesity remains a concern with just over 50% of the population being overweight or obese.[16] The lack of physically active leisure activities contributes to people being overweight and the

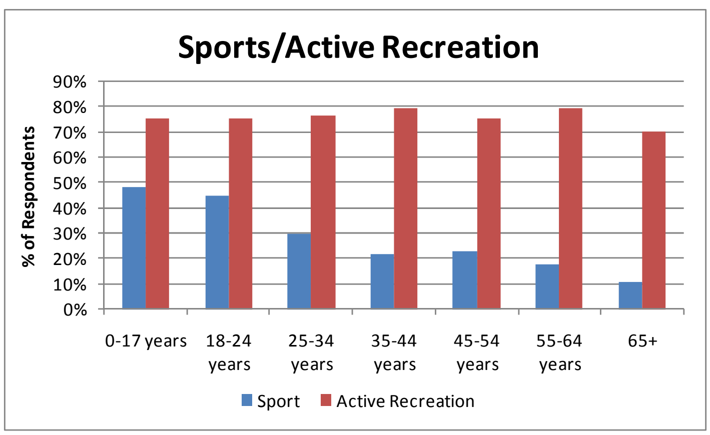
[16] As measured by a body mass index (BMI) of over 25. Source: Statistics Canada, Canadian Community Health Survey.

percentage of persons engaged in active leisure activities and percentage of overweight persons are relatively stable recent years.



Source: Statistics Canada, Canadian Community Health Survey.

Using a generous definition of being active at least once a week, 60% to 70% of Edmontonians see themselves as participating in active recreation regardless of age. Walking and gardening are the most frequent active leisure activities. Participation in sports declines with age.



Source: Malatest 2009. Current State of Assessment for Sport and Active Recreation Participation in Edmonton

3.3 IMPLICATIONS

Seniors

The aging of the population is a profound force. It will lead to smaller workforces, reduced saving, and increased health care costs. Indeed, aging may well overshadow the cost of the recent recession by a large factor.[17] Aging will also have non-economic effects. There is likely to

[17] The Economist, June 27, 2009. Special Report on Aging.

be a move towards smaller, more accessible, and more centrally-located housing. Access to health care will increase in importance and recreational pursuits will shift towards those that can be done when older.

The implications of aging will be starting to be felt in the Alberta and Edmonton region economy during the forecast period. However, relatively strong in-migration of mostly younger people and the retention of older workers who need to save more for retirement are likely to mute the economic effect for the private sector. The public sector, where defined benefits pension plans have shielded near-retirement baby boomers from some of the effect of the recession, may start to see the effects in the composition of its workforce.

Diversity

Maintaining economic growth in the context of an aging population means the need to attract persons from currently under-represented groups into the workforce and stimulate in-migrants. Increasingly that means more diversity and work places will need to become more inclusive and more accommodating of cultural differences.

Aboriginal People

Aboriginal people are one group that is currently under-represented in the workforce. It is also a growing group, reflecting a young population and a high birth rate. There are economic and social drivers to facilitate more involvement of Aboriginal people in the workforce. It also poses a number of challenges. Most jobs require at least some post secondary education and Aboriginal people as a group have lower education levels than Albertans.

Youth

Ultimately increased productivity will need to resolve the countervailing forces of economic growth and a shrinking work force. Education will, therefore, be a key element of labour force development. Continuing education notwithstanding, youths are the focus of most education initiatives. Edmonton has a strong track record with regards to technical and college-level education. However, it trails competing metropolitan areas in Canada with respect to a university-educated labour force. This will dampen the region’s ability to compete in an increasingly knowledge-based economy.

Environment

The emerging green shift among consumers is likely to influence how people in the region will interact with local and provincial governments. Increasingly, environmental considerations will need to be incorporated in decision making in such areas as land use, neighbourhood, and transportation planning. Over time and likely outside the forecast period, the green shift is likely to favour more intensive urban growth over extensive sub-urban growth.

However, the biggest impact of the increased emphasis on the environment will be on economic growth. In the near term, and including the forecast period, increased regulation and possible trade barriers are likely to increase the costs of doing business for all sectors of the economy, but especially for the oil and gas industry. That means less economic growth than otherwise would have been the case. Beyond the forecast period and assuming a structural adjustment of the economy, the focus on the environment may well create new economic opportunities.

APPENDIX A

MONTHLY INDICATOR TABLE

Monthly Economic and Financial Indicators Report

Specific Summary Table

July 2009

Economic & Financial Indicators	Annual			2008												2009					
	2006	2007	2008	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
POPULATION																					
Canada	32,576,100	32,927,400	33,311,400		33,103,039			33,185,549			33,311,400			33,441,277			33,504,680			33,592,686	
Alberta	3,421,300	3,510,900	3,585,100		3,541,232			3,557,555			3,585,100			3,610,782			3,632,483			3,653,840	
City of Edmonton	730,372	748,631	752,412							752,412								782,439			
ECONOMIC GROWTH (GDP)																					
Canada	2.9%	2.5%	0.4%		-0.2%			0.1%			0.1%			-0.9%			-1.4%				
Alberta	6.1%	3.1%	-0.2%																		
Edmonton CMA	5.2%	5.4%	3.0%																		
Oil and Gas																					
West Texas Intermediate ($US/Barrel)	$66.05	$72.34	$99.67	$92.97	$95.39	$105.45	$112.58	$125.40	$133.88	$133.37	$116.67	$104.11	$76.61	$57.31	$41.12	$41.71	$39.09	$47.94	$49.65	$52.18	
Natural Gas (Cdn$/GJ)	$8.28	$6.18	$6.12	$6.19	$6.72	$7.52	$88.11	$8.92	$9.81	$9.84	$7.35	$6.28	$6.27	$6.25	$6.36	$5.77	$4.66	$4.01	$3.41		
LABOUR MARKET																					
Job Creation (Employment Growth)																					
Canada (month-over-month change)	300,500	407,200	79,600	39,200	36,000	-4,500	22,800	6,700	-600	-48,600	17,800	92,200	2,300	-63,300	-20,400	-129,000	-82,600	-61,300	35,900	-41,800	
Alberta (month-over-month change)	104,500	69,000	27,600	4,400	-4,700	6,600	6,100	400	8,100	-3,900	-5,000	14,800	13,500	-3,600	-9,100	3,300	-23,700	-14,900	5,700	600	
Edmonton CMA (month-over-month change	35,500	36,900	17,600	6,100	2,800	-500	-1,300	-1,800	-800	-1,000	400	300	6,700	4,500	2,200	-2,800	-2,600	-2,700	100	-600	
Unemployment Rate																					
Canada	6.3%	6.0%	6.1%	5.8%	5.9%	6.1%	6.0%	6.1%	6.2%	6.1%	6.2%	6.2%	6.3%	6.4%	6.6%	7.2%	7.7%	8.0%	8.0%	8.4%	
Alberta	3.4%	3.5%	3.6%	3.3%	3.6%	3.4%	3.3%	3.6%	3.3%	3.7%	3.5%	3.8%	3.7%	3.5%	4.2%	4.4%	5.4%	5.8%	6.0%	6.6%	
Edmonton CMA	3.9%	3.9%	3.7%	3.6%	3.7%	3.8%	3.9%	3.9%	3.7%	3.7%	3.4%	3.5%	3.4%	3.6%	3.6%	3.8%	4.4%	4.9%	5.4%	6.0%	
CONSTRUCTION (BUILDING PERMITS)	12,058	11,265	8,900	555	521	487	834	887	1028	913	742	882	870	647	488	405	367	518	653	688	
(City of Edmonton)																					
Residential	8,852	7,285	5,184	379	327	305	432	469	583	509	415	448	548	425	317	242	206	343	385	417	
Industrial	171	97	77	4	9	4	5	6	9	5	4	7	8	10	5	1	7	4	4	4	
Commercial	1,102	1,316	1,379	106	114	91	141	132	123	118	112	131	112	82	107	104	88	109	92	73	
Institutional	224	175	165	13	9	14	12	13	14	11	24	20	13	13	9	11	8	8	3	4	
Misc	1,709	2,392	2,095	53	62	73	244	254	299	270	187	276	189	117	50	47	58	54	169	186	
REAL ESTATE																					
Residential																					
Housing Starts																					
Alberta	40,882	38,479	25,395	2,320	1,988	4,224	2,260	2,762	1,649	2,184	1,712	1,881	1,885	1,431	1099	930	658	702	833	1,011	
Edmonton CMA	14,970	14,888	6,615	1,145	692	478	683	586	556	407	425	428	612	279	324	413	213	135	355	346	
City of Edmonton	9,816	8,894	3,979	586	560	325	484	299	282	256	284	209	359	145	190	258	118	72	171	177	
Edmonton CMA Apartment vacancy rates	1.2%	1.5%	3.4%								3.4%							4.7%			
Resale Market																					
Residential Sales	21,984	20,544	17,371	1,227	1,287	1,557	1,823	1,821	1,852	1,784	1,541	1,729	1,251	891	608	730	1,075	1,380	1,843	2,161	2,552
Residential Listings	25,393	41,030	40,173	3,417	3,569	4,236	4,471	4,294	3,985	3,582	3,008	3,140	3,116	2,036	1,319	2,443	2,667	2,891	3,019	3,180	3,179
Office Space (City of Edmonton)																					
Vacancy Rates	6.4%	4.5%	4.0%		4.1%			4.1%			4.1%			3.8%			7.1%				
PRICE AND WAGES																					
Inflation (Consumer Price Index)																					
Canada (year-over-year change)	2.0%	2.2%	2.3%	2.2%	1.8%	1.4%	1.7%	2.2%	3.1%	3.4%	3.5%	3.4%	2.6%	2.0%	1.2%	1.1%	1.4%	1.2%	0.4%	0.1%	
Alberta (year-over-year change)	3.9%	5.0%	3.1%	3.6%	3.5%	2.9%	3.2%	3.7%	4.4%	3.5%	4.0%	2.8%	2.4%	2.1%	1.9%	1.2%	2.1%	0.9%	-0.7%	-0.7%	
Edmonton CMA (year-over-year change)	3.1%	4.8%	3.4%	4.0%	3.9%	3.3%	3.6%	4.1%	4.3%	4.0%	3.8%	2.7%	2.5%	2.2%	2.0%	1.4%	2.4%	1.2%	-0.6%	-0.2%	
Contractors Price (Non-Residential Index)																					
Edmonton CMA	11.6%	17.0%	12.5%		3.5%			6.5%			2.6%			-5.3%			-7.9%				
Wages and Salaries (Avg Weekly Earnings)																					
Canada	$755	$788	$811	$798	$806	$806	$ 809	$808	$809	$811	$812	$815	$818	$820	$815	$817	$821	$820	$ 821		
Alberta	$823	$871	$923	$886	$924	$920	$ 917	$900	$923	$906	$923	$947	$931	$954	$948	$948	$965	$964	$ 947		
Edmonton CMA	$774	$824	$877	$849	$850	$859	$861	$863	$862	$867	$881	$899	$910	$916	$911	$910	$898				
FINANCIAL INDICATORS																					
Exchange Rate (USD/CAD)	$0.88	$0.94	$0.94	$1.00	$1.01	$0.98	$0.99	$1.01	$0.98	$0.98	$0.94	$0.94	$0.82	$0.81	$0.82	$0.81	$0.78	$0.79	$0.84	$0.92	

APPENDIX B

MOST LIKELY SCENARIO
FORECASTED VALUES, SELECTED INDICATORS

	--------- Historic Levels ---------				----------------- Forecast Period -----------------				
	2006	2007	2008	2009 (est.)	2010	2011	2012	2013	2014
World Oil Price (US$/bbl)	66.09	72.27	99.59	66.73	62.50	66.00	69.50	73.50	77.50
Alberta Natural Gas Price (CAD/MmBTU)	7.16	6.65	8.15	4.46	4.50	5.50	6.00	6.50	6.75
USD/CAD Exchange Rate	0.88	0.93	0.94	0.84	0.90	0.91	0.91	0.93	0.94
GDP Growth Rate (%)									
Alberta	6.10	3.10	-0.20	-2.30	1.8	2.1	2.5	2.9	3.5
Edmonton	6.20	3.70	1.50	-1.73	2.1	2.4	2.8	3.3	3.9
Unemployment Edmonton CMA (%)	3.90	3.80	3.70	6.00	5.7	5.0	4.6	4.4	4.1
In-Migration (persons)	NA	NA	NA	NA	4,000	10,900	12,100	13,300	14,700
Job Creation Edmonton CMA (jobs)	35,500	36,900	17,600	-24,929	14,500	18,800	19,300	19,900	20,900
Housing Starts Edmonton CMA (number)	14,970	14,888	6,615	3,509	7,500	11,500	11,800	12,100	12,600

Notes to the forecast table:

Forecasting beyond the near to medium term is very challenging given the current economic situation. All forecasts are subject to much uncertainty.

Oil price upward pressure due to demand from emerging economies, including China. In the early years of the forecast period, oil prices are kept in check by idle capacity, especially in OPEC producers.

Natural gas prices recover from current lows and come closer in line with historical relationship with oil. Prices are constrained by relatively low growth in the US and supply expansion from unconventional sources.

A CAD/USD exchange rate reflects both the positive fiscal position of Canada relative to the US and the upward pressure on the CAD from relatively robust oil prices.

Alberta and Edmonton GDP recover relatively quickly in 2010 as idled resources are put back in use; GDP growth beyond 2010 is reduced relative to recent experience. Edmonton outperforms the provincial economy reflecting a re-start of oil sands industry investment in response to relatively robust oil prices, availability of workers and fabrication facilities, and reduced costs of selected inputs. Oil sands industry investment stays below levels seen between 2006 and 2008.

Reduction in unemployment is expected to lag the recovery in GDP growth.

In-migration is linked to job creation net of resident workforce growth. It is expected to remain below levels seen in 2006 and 2008 reflecting lower growth. Near term in-migration may be higher if Alberta and Edmonton economic performance is high relative to other provinces.

Housing starts are linked to in-migration. Levels in 2010 are influenced by the need to absorb unsold inventory.