

# *Economic Outlook*



THE RIGHT DECISIONS FOR CHALLENGING TIMES

# Table of Contents

Economic Outlook .....	67
------------------------	----

## **LIST OF TABLES AND CHARTS**

Key Energy and Economic Assumptions .....	67
Sensitivities to Fiscal Year Assumptions, 2002-03 .....	70
Global Slowdown in 2001 .....	71
More Moderate Oil Prices .....	71
Natural Gas Prices Moderate .....	72
Canadian Inflation Coming Down .....	72
Lowest Interest Rates in Decades .....	73
Alberta Outperforms .....	73
Business Investment to Fall in 2002 .....	74
Oil Sands up Strongly in 2001 .....	74
Non-Conventional Oil Still Growing .....	75
Alberta Exports Driving Growth .....	75
Farm Cash Receipts Up .....	76
Lowest Unemployment Rate among Provinces in 2001 .....	76
Job Growth Continues .....	77
Strong Wage Gains .....	77
Highest Interprovincial Migration .....	78
Alberta Leads Retail Sales in 2001 .....	78
Real Consumer Spending Remains Strong .....	79
Strong Housing Starts .....	79
Alberta Has Highest Nominal GDP Per Capita among Provinces .....	80
Oil Price Forecast Benchmark .....	81
Natural Gas Price Forecast Benchmark .....	81
Canadian Short-Term Interest Rate Forecast Benchmark .....	82
Canadian Long-Term Interest Rate Forecast Benchmark .....	82
Canada/United States Exchange Rate Forecast Benchmark .....	83
Alberta Real Gross Domestic Product Forecast Benchmark .....	83
Tracking the Forecasts of Oil Prices .....	84
Tracking the Forecasts of Natural Gas Prices .....	84
Announced Major Projects over \$100 Million .....	85

# Economic Outlook

Alberta turned in another strong economic performance in 2001, growing by an estimated 4.5%. Strong growth in household spending, spurred on by tax cuts and a healthy labour market, helped insulate the Alberta economy from declining energy prices and the U.S. recession.

Lower energy prices are expected to reduce business investment in 2002 and limit Alberta's economic growth to 2.5%. Economic growth is expected to rebound to 3.9% in 2003 as the recovery strengthens in the United States and Canada. Alberta's economic growth is expected to average a healthy 3.6% per year over the medium term.

## Key Energy and Economic Assumptions

	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05
<b>Fiscal Year Assumptions</b>	<b>Actual</b>	<b>Actual</b>				
<b>Prices</b>						
Oil price						
WTI (US\$/bbl)	23.16	30.20	23.75	20.00	20.00	20.00
Alberta wellhead (Cdn\$/bbl)	30.25	39.14	30.63	25.83	24.16	22.93
Natural gas price						
Alberta wellhead (Cdn\$/mcf)	2.66	6.08	3.76	3.00	3.15	3.05
Alberta wellhead (Cdn\$/GJ)	2.52	5.76	3.56	2.85	2.99	2.89
Exchange rate (US¢/Cdn\$)	68.0	66.5	64.0	64.3	66.3	68.3
<b>Production</b>						
Crude oil and equivalent (000's barrels/day)	1,467	1,490	1,491	1,599	1,732	1,800
Natural gas (billions of cubic feet)	5,370	5,342	5,367	5,423	5,438	5,408
<b>Interest rates</b>						
3-month Canada treasury bills (per cent)	4.75	5.42	3.15	2.65	4.13	4.50
10-year Canada bonds (per cent)	5.84	5.70	5.50	5.70	6.00	6.00

	2000	2001	2002	2003	2004	2005
<b>Calendar Year Assumptions</b>	<b>Actual</b>					
<b>Gross Domestic Product</b>						
Nominal (millions of dollars)	142,632	152,540	142,242	151,864	159,058	165,486
per cent change	22.9	6.9	-6.8	6.8	4.7	4.0
Real (millions of 1997 dollars)	118,920	124,231	127,368	132,330	137,246	141,861
per cent change	5.4	4.5	2.5	3.9	3.7	3.4
<b>Other Indicators</b>						
Employment (thousands)	1,588.2	1,632.1 <sup>a</sup>	1,667.2	1,706.6	1,740.5	1,776.2
per cent change	2.2	2.8	2.2	2.4	2.0	2.1
Unemployment rate (per cent)	5.0	4.6 <sup>a</sup>	5.1	4.7	4.6	4.4
Housing starts (number of units)	26,266	29,174 <sup>a</sup>	29,700	28,100	26,600	26,300
Alberta Consumer Price Index	1.174	1.201 <sup>a</sup>	1.224	1.246	1.270	1.293
per cent change	3.5	2.3	1.9	1.9	1.9	1.8
Population (thousands)	3,009.2	3,064.2 <sup>a</sup>	3,122.2	3,175.8	3,227.2	3,276.2
per cent change	1.7	1.8	1.9	1.7	1.6	1.5

<sup>a</sup> actual

## 2001 IN REVIEW

Despite the North American slowdown and weakening energy prices, the Alberta economy grew by an estimated 4.5% in 2001. Although overall activity in the conventional energy sector slackened as prices weakened through the year, a 43% increase in oil sands investment helped boost energy investment by 23%. Household spending remained strong throughout the year due to a healthy labour market and large personal income tax cuts.

- In January 2001, tight energy supplies and cold weather in the United States brought high energy prices and fears of emerging shortages. Alberta's natural gas reference price peaked at Cdn\$11.82 per thousand cubic feet (mcf), while West Texas Intermediate oil prices averaged US\$28.68 per barrel. Activity in Alberta's energy sector surged in the first quarter – rigs drilling reached the highest level in more than 10 years and the value of natural gas exports to the United States was up 230% from the preceding year.
- In March 2001, the U.S. economic slowdown turned into a recession. The fall in demand resolved the U.S. energy problem, natural gas prices began to slide and OPEC cut production in an effort to maintain oil prices.
- OPEC's efforts were relatively successful until the fallout from the September 11 terrorist attacks exacerbated the existing economic weakness. By December 2001, the price of West Texas Intermediate had fallen to US\$19.36 per barrel and the Alberta natural gas reference price was Cdn\$3.37 per mcf.
- Drilling activity came down sharply in the fall of 2001, leaving the number of rigs drilling up only 0.7% for the year as a whole. A 43% increase in oil sands investment, however, boosted overall investment in the energy sector by 23%.
- The value of international goods exports also weakened in the latter part of 2001, but was up 3.0% for 2001 as a whole. Manufacturing shipments were down 0.3% in 2001.
- Alberta's livestock sector performed well in 2001. Livestock receipts rose 16.6% to a record \$5.2 billion due to record receipts for both hogs and cattle. Drought in much of the province, however, limited the increase in crop receipts to 0.7%. Direct program payments increased by 18% to \$836 million. Overall farm cash receipts hit a record \$8.3 billion.
- Although the pace of job growth moderated slightly towards the end of the year, the Alberta economy created 43,900 new jobs in 2001. The average unemployment rate fell to 4.6%, the lowest in Canada and the lowest annual level in Alberta since 1981. Job gains were led by mining, construction, and professional, scientific and technical services.

- Alberta's strong economy and low taxes attracted 21,154 net interprovincial migrants to the province in the first three quarters of 2001, mostly from British Columbia, Saskatchewan and Ontario. Alberta's population reached 3,064,249 on July 1, 2001, up 1.8% from 2000.
- With a \$1.1 billion cut to provincial personal income taxes, personal disposable income increased by an estimated 8.0% in 2001. Retail sales were up 9.1% in 2001, the fastest growth in Canada. Falling interest rates gave an extra boost to housing starts, which were up by 11.1%.
- Falling energy prices reduced the overall CPI inflation rate to 2.3% in 2001, down from 3.5% in 2000.

## **GLOBAL ECONOMIC OUTLOOK**

After 10 years of expansion, the U.S. economy officially entered a recession in March 2001, triggered by a sharp decline in business investment, particularly in high technology. Unlike past recessions, consumer spending remained healthy and helped moderate the decline. U.S. authorities reacted vigorously. The Federal Reserve cut U.S. interest rates by 4.75 percentage points, and the Bush administration cut taxes by over \$100 billion. Even so, U.S. economic growth fell from 4.1% in 2000 to 1.2% in 2001.

The U.S. slowdown dragged down global economic growth. Economic growth in Canada dropped from 4.4% in 2000 to an estimated 1.5% in 2001 despite major federal and provincial tax cuts and a 3.75 percentage point cut in interest rates. Growth in Europe slowed from 3.4% in 2000 to an estimated 1.4% in 2001 and Japan entered a deep recession.

Recent indicators suggest that the U.S. economy is beginning to stabilize. The economy managed to eke out a small gain at the end of 2001 and the pace of job losses has slowed. U.S. economic growth should strengthen over the course of this year, although growth for 2002 is expected to average only 2.0%. The U.S. economy is expected to pick up in 2003 with growth of 3.6%. The Canadian economy is expected to follow the U.S. recovery as growth is expected to average 2.0% in 2002, and then pick up strongly to 3.5% in 2003.

World oil prices are expected to fluctuate around US\$20 per barrel over the 2002-03 to 2004-05 period. Alberta natural gas prices are expected to average \$3.00 per mcf in 2002-03, \$3.15 per mcf in 2003-04 and \$3.05 per mcf in 2004-05.

## ALBERTA ECONOMIC OUTLOOK

Alberta's real economic growth is expected to slow to 2.5% in 2002. Although consumer spending should remain strong, investment is expected to fall. Activity in the conventional energy sector has already weakened in response to lower prices (especially for natural gas), and while investment in oil sands is expected to remain high, it is not expected to grow. Investment in the non-energy sector is expected to remain weak until the North American recovery takes hold and corporate profits improve. Exports are expected to post fairly healthy growth this year as production from oil sands expansions comes on stream. Despite the rise in real gross domestic product (GDP), Alberta's nominal GDP is expected to decline by 6.8% because of the sharp fall in oil and natural gas prices from their peak in the first quarter of 2001.

Alberta's real economic growth is expected to rebound to 3.9% in 2003 as the recovery takes hold in the rest of North America. Over the medium term, real economic growth is expected to moderate to a more sustainable average of 3.6%. Employment growth is forecast to average 2.2% over the 2002 to 2005 period, and the unemployment rate is expected to edge down to 4.4% by 2005.

### RISKS

Although the U.S. economy is showing encouraging signs of recovery, the possibility of a double-dip recession remains a key risk. The gain in the fourth quarter of 2001 was concentrated in government spending and incentive-induced auto sales. A sustained recovery is unlikely without a revival in corporate profitability and business investment. A renewed outbreak of terrorism could also weaken the economic outlook in the United States and the rest of the world.

Failure by OPEC and other key producing states like Russia to adhere to production cuts could lead to further weakness in oil prices. Natural gas prices are also dependent on the U.S. recovery, especially in view of increased supplies over the past few years.

## Sensitivities to Fiscal Year Assumptions, 2002-03<sup>a</sup>

(millions of dollars)

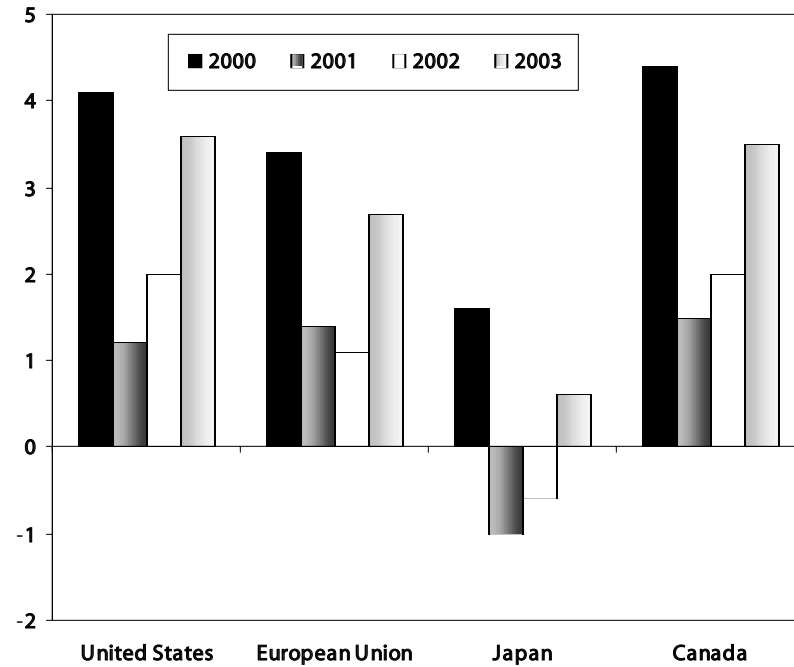
	Annual Change	Revenue	Spending	Net Change
Oil Price (WTI US\$/bbl)	-\$1.00	-108	--	-108
Natural Gas Price (Cdn\$/mcf)	-10¢	-163	--	-163
Exchange Rate (US¢/Cdn\$)	+1¢	-132	-36	-96
Interest Rates	-1%	-65	-27	-38

<sup>a</sup> Sensitivities are based on current assumptions of prices and rates and show the effect for a full 12 month period. Sensitivities can vary significantly at different price and rate levels. The interest rate sensitivity does not include the potential effect of realized capital gains or losses.

## GLOBAL SLOWDOWN IN 2001

Real Gross Domestic Product (per cent change)

- The U.S. economy entered a recession in March 2001. Economic growth slowed from 4.1% in 2000 to 1.2% in 2001, triggering a synchronized global slowdown. In Canada, economic growth slowed from 4.4% in 2000 to 1.5% in 2001.
- Recent indicators suggest that the U.S. economy is beginning to respond to the aggressive cuts in interest rates and taxes over the last year. In 2002, growth is expected to average 2.0%, increasing to 3.6% in 2003.
- Canada is expected to follow the United States, posting growth of 2.0% in 2002 and 3.5% in 2003.

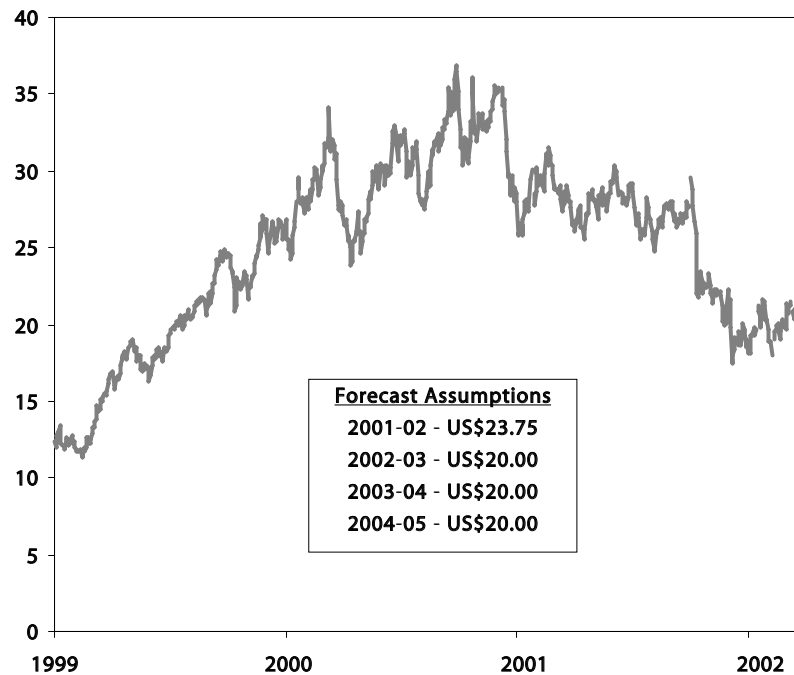


Source: IMF, Bureau of Economic Analysis and Alberta Finance

## MORE MODERATE OIL PRICES

WTI Price (US\$/bbl, daily)

- The global slowdown in 2001 weakened the demand for oil. Oil prices remained relatively high for most of the year due to a coordinated effort by OPEC.
- World oil prices dropped from around US\$27 per barrel to around US\$23 per barrel in late September. Since then, they have averaged just over US\$20 per barrel. OPEC succeeded in convincing other major producers like Russia and Norway to cut production in concert with OPEC members, averting a steeper decline in prices.
- Oil prices for 2001-02 are now expected to average US\$23.75. Over the 2002-03 to 2004-05 period, oil prices are expected to average US\$20 per barrel.



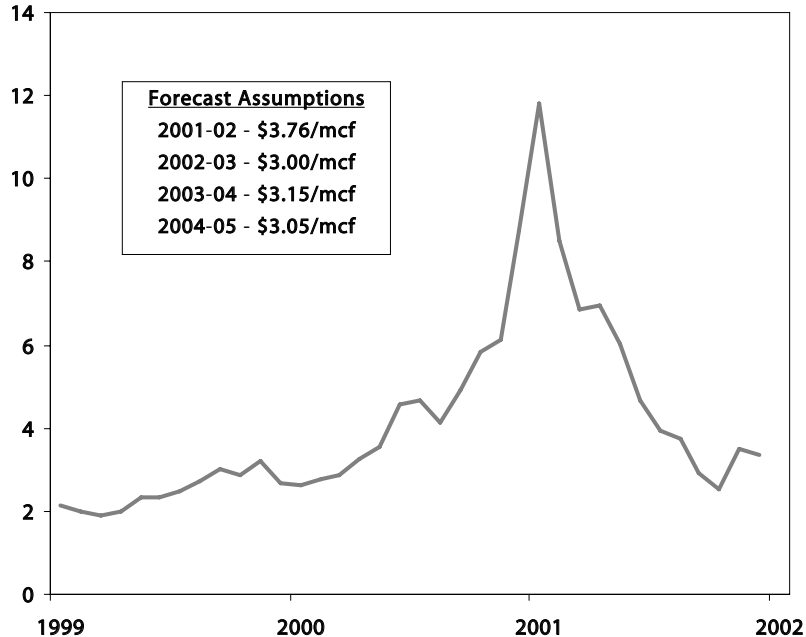
Source: Alberta Energy

---

## NATURAL GAS PRICES MODERATE

Alberta Reference Price (Cdn\$/mcf, monthly)

- Natural gas demand has been hard hit by the U.S. recession. Output in the U.S. industrial sector, which accounts for almost half of the natural gas consumed in the United States, has been declining since June 2000. Increased supplies of natural gas and warm weather this winter have further weakened natural gas prices.
- Natural gas prices are now expected to average \$3.76 per thousand cubic feet (mcf) in 2001-02, \$3.00 per mcf in 2002-03, \$3.15 per mcf in 2003-04 and \$3.05 per mcf in 2004-05.



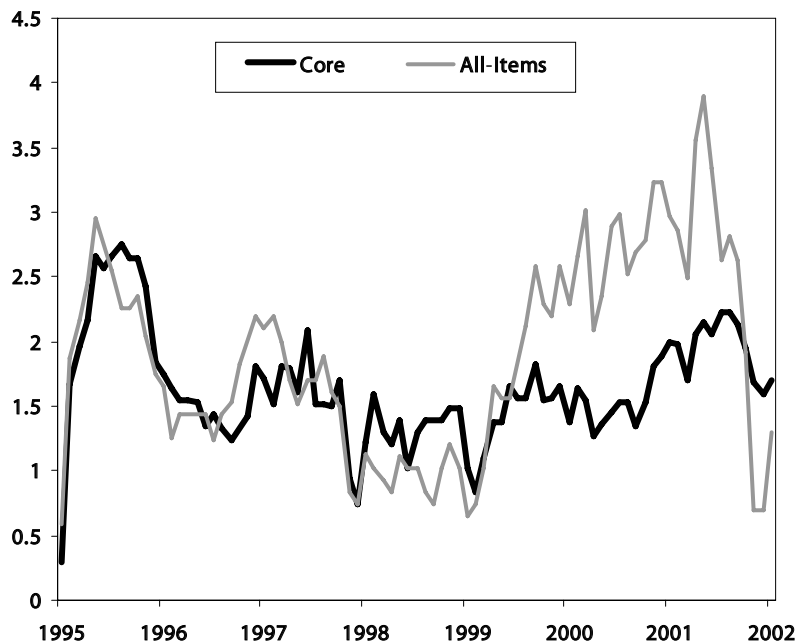
Source: Alberta Energy

---

## CANADIAN INFLATION COMING DOWN

Consumer Price Index (12-month per cent change)

- Over the past two years, rising energy prices pushed up the overall Consumer Price Index (CPI) inflation rate, although underlying inflation pressures remained subdued in both Canada and Alberta. For Canada, the all-items inflation rate was 2.5% in 2001, while core inflation was 2.0%.
- Overall inflation in Alberta was 3.5% in 2000, retreating to 2.3% in 2001 even though the core CPI inflation rate, which excludes food and energy, remained stable at around 2% for both years.
- Over the medium term, the overall inflation rate for both Alberta and Canada is expected to be around 2%, the mid-point of the Bank of Canada's 1% to 3% inflation target zone.



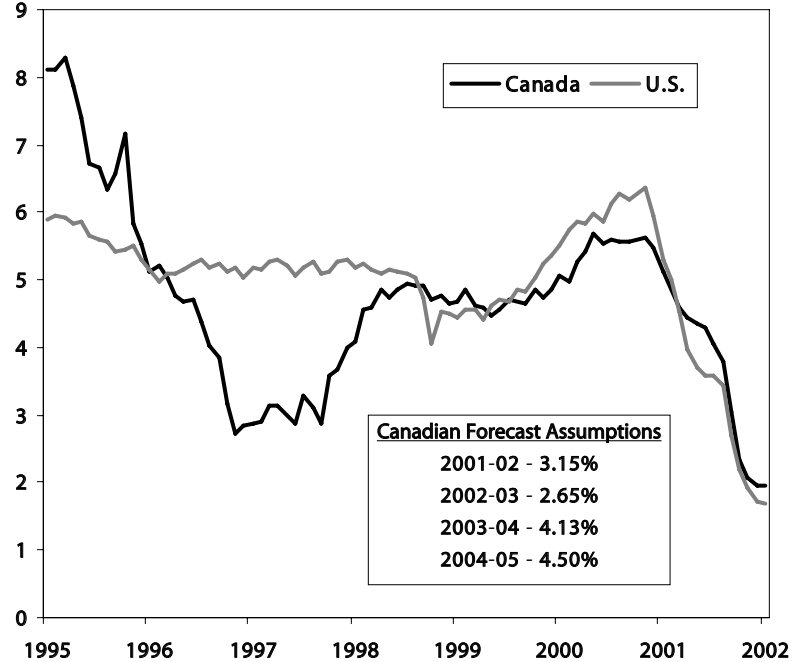
Source: Statistics Canada



## LOWEST INTEREST RATES IN DECADES

3-month Treasury Bills (per cent)

- The U.S. Federal Reserve reacted strongly to the weakness in the U.S. economy, cutting interest rates by 4.75 percentage points in 2001, and bringing short-term rates to their lowest levels in 40 years.
- The Bank of Canada has cut interest rates by 3.75 percentage points since January 2001. The cuts were smaller than in the United States since federal and provincial tax cuts at the beginning of 2001 helped to maintain economic growth early in the year. As well, the Canadian dollar weakened, falling from US66.8 cents at the beginning of 2001 to an all-time low of US62.0 cents in January 2002.
- Over the medium term, interest rates are expected to increase as the Canadian and U.S. economies strengthen.

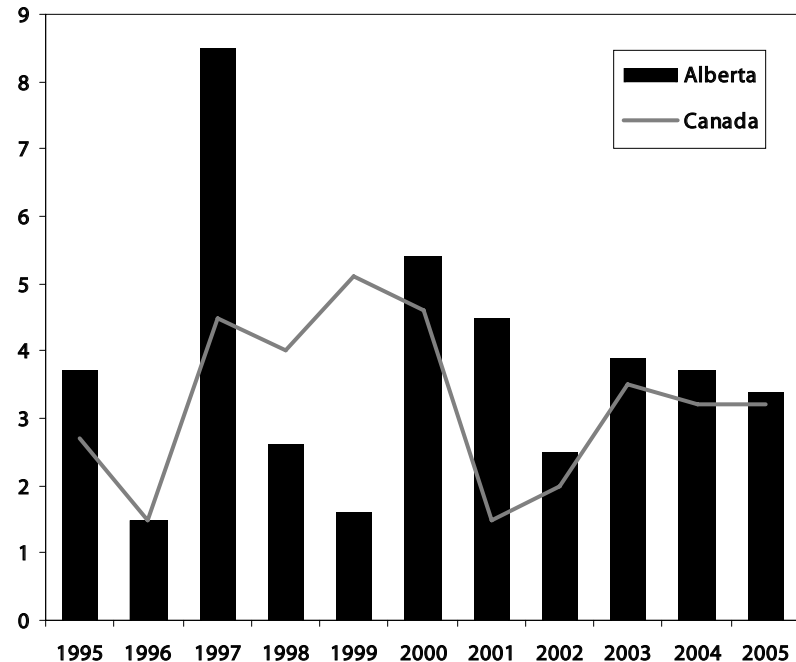


Source: Bank of Canada, Federal Reserve Bank of St. Louis and Alberta Finance

## ALBERTA OUTPERFORMS

Real GDP (per cent change)

- Alberta outperformed the Canadian economy in 2001, growing at an estimated 4.5%, compared to 1.5% nationally. Strong consumer spending and high energy sector investment helped shield Alberta from the downturn in the rest of North America.
- Although Alberta's economic growth is forecast to slow to 2.5% in 2002 as investment falls, Alberta is expected to continue outperforming the Canadian economy. The strong rebound in U.S. economic activity in 2003 is expected to provide a strong boost to economic activity in both Canada and Alberta.

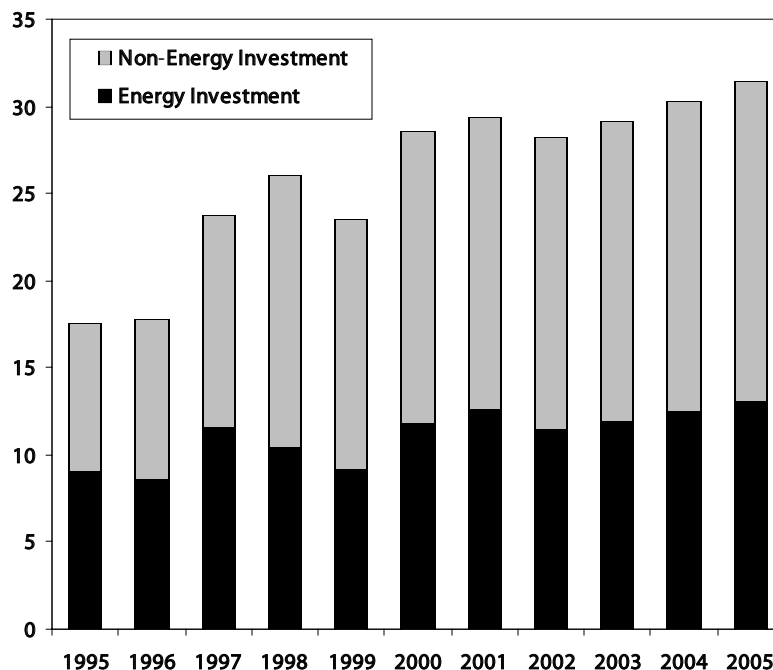


Source: Statistics Canada and Alberta Finance

## BUSINESS INVESTMENT TO FALL IN 2002

(billions of 1997 dollars)

- Conventional energy sector investment weakened over the course of 2001 as energy prices fell. Drilling activity was up 11.9% in the first 9 months of 2001, compared to the same period in 2000. It dropped in the autumn as prices weakened, leaving the number of rigs drilling up 0.7% for 2001 as a whole. In 2002, real energy investment is expected to fall 10%, reflecting lower oil and natural gas prices.
- Non-energy investment is also expected to weaken in 2002, due to a weaker external environment. It is expected to pick up as the North American economy rebounds and corporate profits recover.

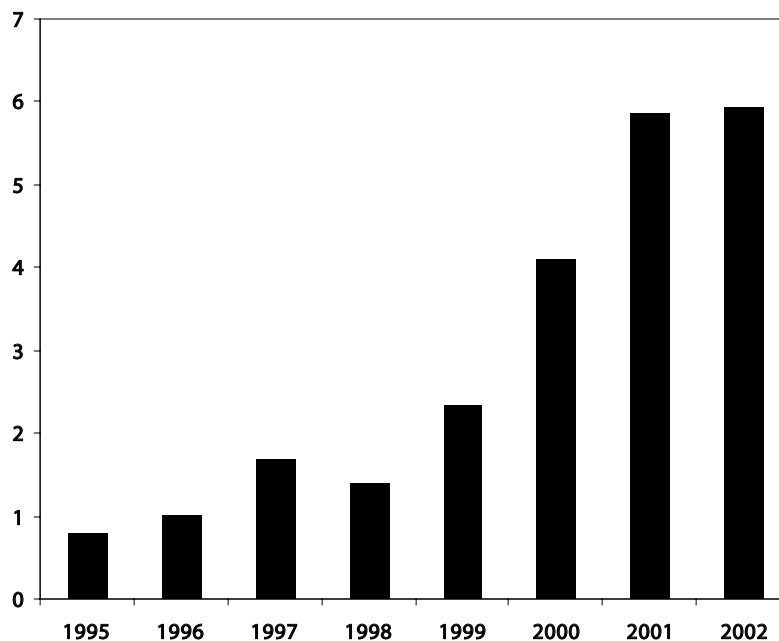


Source: Alberta Finance

## OIL SANDS UP STRONGLY IN 2001

Oil Sands Investment (\$billions)

- The main increase in business investment in 2001 was in oil sands, which represents approximately 30% of Alberta's total energy investment. Oil sands investment has increased dramatically over the last few years, rising from just under \$1 billion in 1995 to almost \$6 billion in 2001. Oil sands investment was up 43% in 2001.
- In 2002, oil sands investment is expected to increase 1.6% according to Statistics Canada's investment survey. It is thus expected to remain high, but not to show the same kind of growth as it has in recent years.

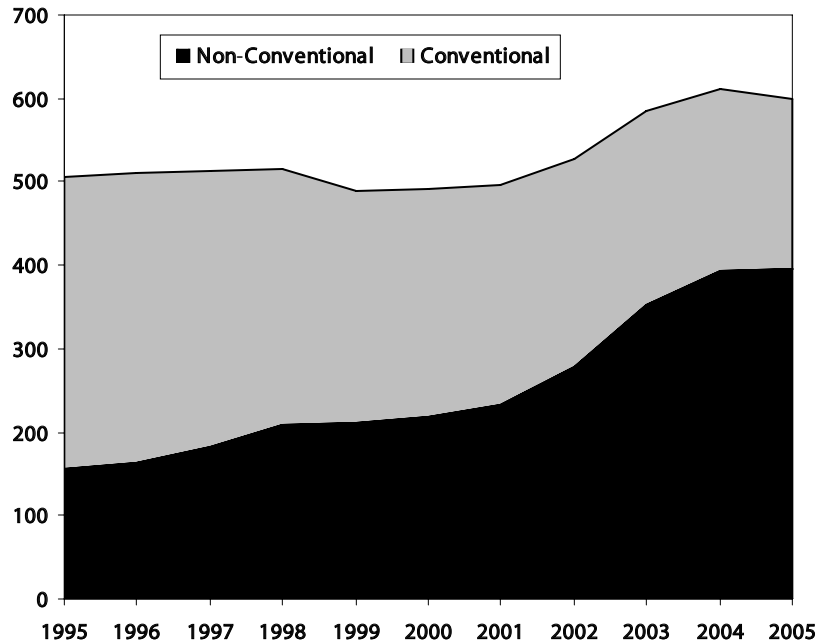


Source: Statistics Canada

## NON-CONVENTIONAL OIL STILL GROWING

(millions of barrels per year)

- Over the medium term, oil sands are expected to lead total oil production in Alberta.
- There are about \$17 billion worth of oil sands investment projects announced for the next 10 years, and an additional \$30 billion in the proposal stage. Consequently, non-conventional oil production is expected to increase by more than two-thirds by 2005. It should account for about two-thirds of Alberta's oil production in 2005, compared to 44% in 2000.

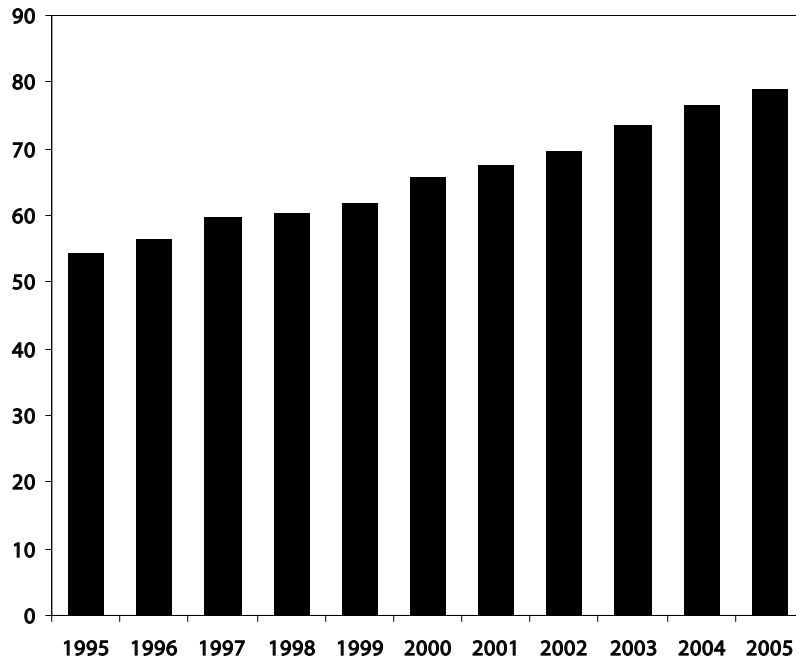


Source: Alberta Energy

## ALBERTA EXPORTS DRIVING GROWTH

Alberta Real Exports (1997 \$billions)

- Large increases in non-conventional oil production are expected to provide a boost to Alberta's energy exports over the forecast horizon.
- Non-energy exports are also expected to rebound as the North American economy strengthens in 2003.

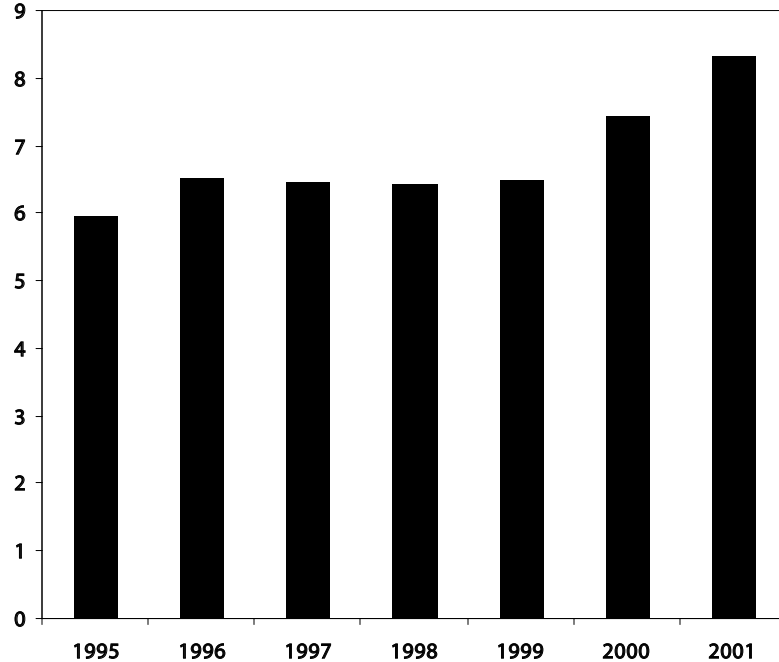


Source: Alberta Finance

## FARM CASH RECEIPTS UP

(billions of dollars)

- Despite some regional problems, Alberta's farm cash receipts were a record \$8.3 billion in 2001.
- Most of the increase was due to livestock receipts, which rose by 16.6% to a record \$5.2 billion. Hog receipts were up 12.8% to \$563 million, the highest on record, and cattle and calves receipts were up 18.5% to \$4 billion, also a new record. Poultry increased 12.8%, eggs were up 11.3%, and dairy increased by 9.4%.
- Crop receipts increased by 0.7% to just under \$2.3 billion - canola was up 11.4% to \$578 million, wheat increased just 0.3% to \$920 million, and barley fell 7.4% to \$204 million.
- Direct program payments increased by 18.2% to \$836 million.

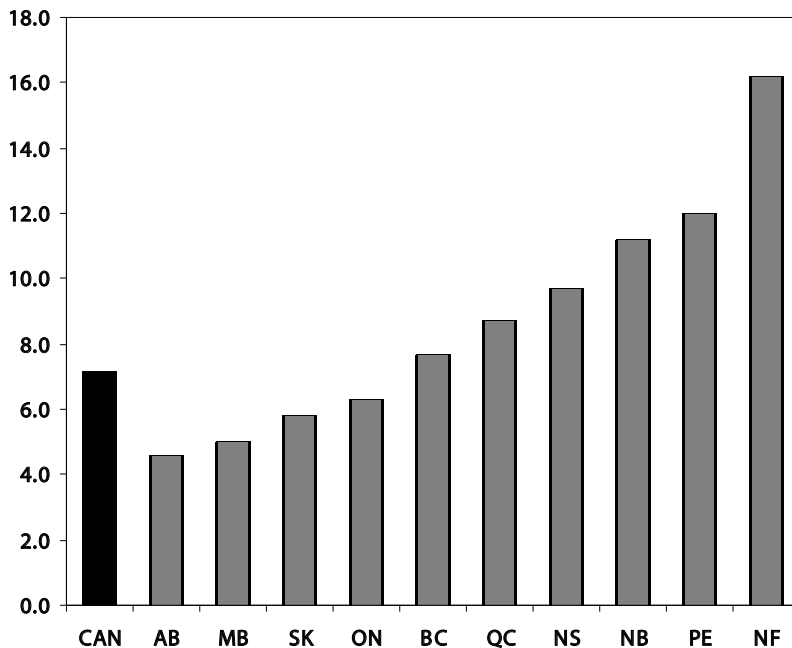


Source: Statistics Canada and Alberta Agriculture, Food and Rural Development

## LOWEST UNEMPLOYMENT RATE AMONG PROVINCES IN 2001

(per cent)

- As a result of strong economic growth in 2001, the Alberta economy created 43,900 new jobs. Job gains were led by mining, construction, and professional, scientific and technical services.
- As a result, Alberta's unemployment rate dropped from an average of 5.0% in 2000 to 4.6% in 2001, the lowest among the provinces. It is Alberta's lowest annual unemployment rate since 1981.
- In January 2002, the Alberta economy created 11,200 jobs. The unemployment rate was 4.7%, the lowest in Canada.

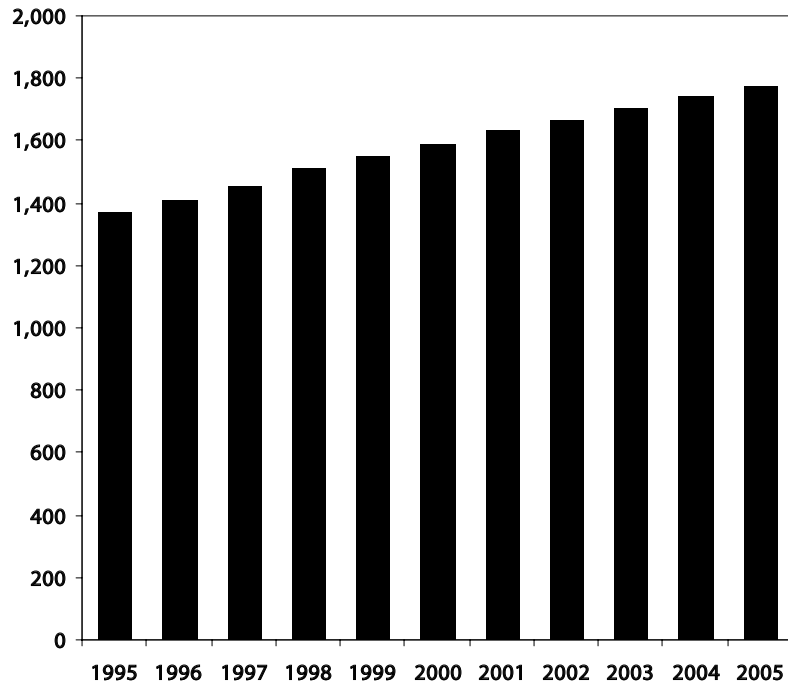


Source: Statistics Canada

## JOB GROWTH CONTINUES

Alberta's Employment (thousands)

- Although economic growth is expected to slow to 2.5% in 2002, the Alberta economy is forecast to create an additional 35,000 jobs this year. The unemployment rate, however, is expected to edge up to 5.1% as strong net interprovincial migration increases the labour force.
- Over the medium term, employment growth is expected to average 2.2% per year. Approximately 144,000 additional jobs are expected between 2001 and 2005.
- The unemployment rate is expected to gradually decline to 4.4% by 2005.

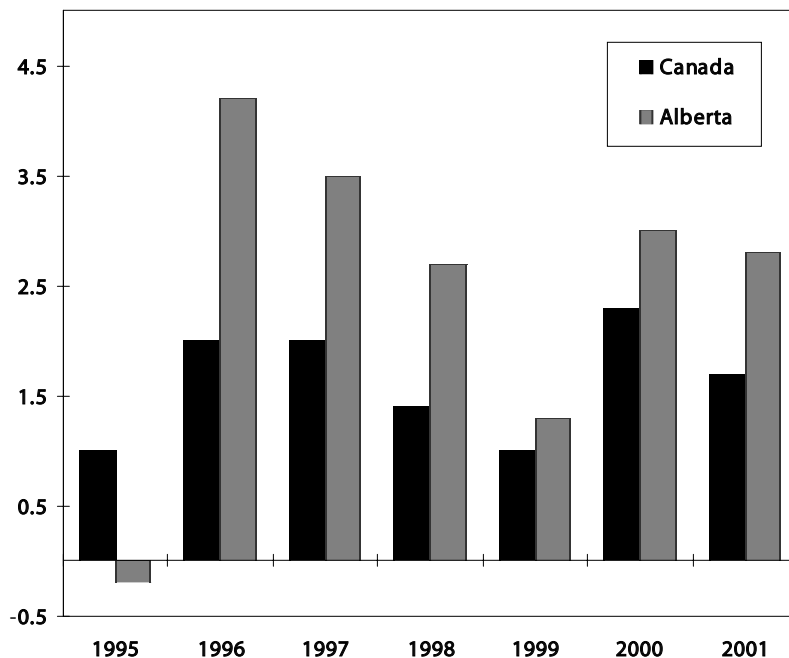


Source: Statistics Canada and Alberta Finance

## STRONG WAGE GAINS

(per cent change in average weekly earnings)

- Healthy employment growth, and skill shortages in some key sectors boosted wages in Alberta. Led by gains in health care and construction, unionized wage settlements averaged 5.9% in 2001.
- Overall, at 2.9%, Alberta had the highest increase in average weekly earnings among provinces in 2001. Wages are forecast to increase at an average rate of 3.2% per year over the forecast period, 1.3 percentage points higher than inflation.

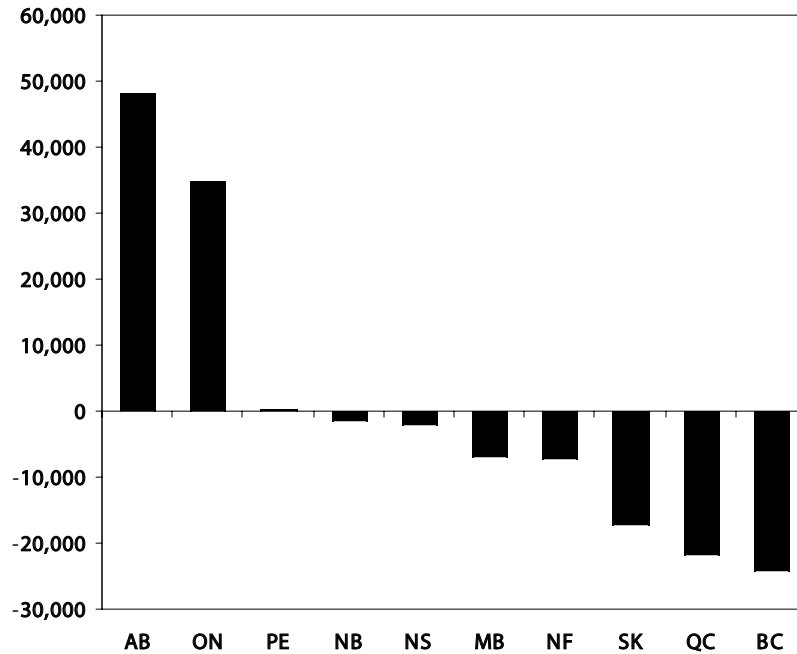


Source: Statistics Canada and Alberta Finance

## HIGHEST INTERPROVINCIAL MIGRATION

Net Interprovincial Migration between January 1, 2000 and October 1, 2001

- A strong labour market, healthy wage gains and low provincial tax rates have attracted a growing number of people to the province — 48,279 people have moved to Alberta since the beginning of 2000, more than any other province. Migrants have come mostly from British Columbia, Saskatchewan and Ontario.
- Over the 2003-2005 period interprovincial migration is expected to add about 19,000 people to Alberta's population per year.
- Alberta's population reached 3.064 million in 2001 and is expected to grow by 1.7% per year on average through 2005, among the fastest in Canada.

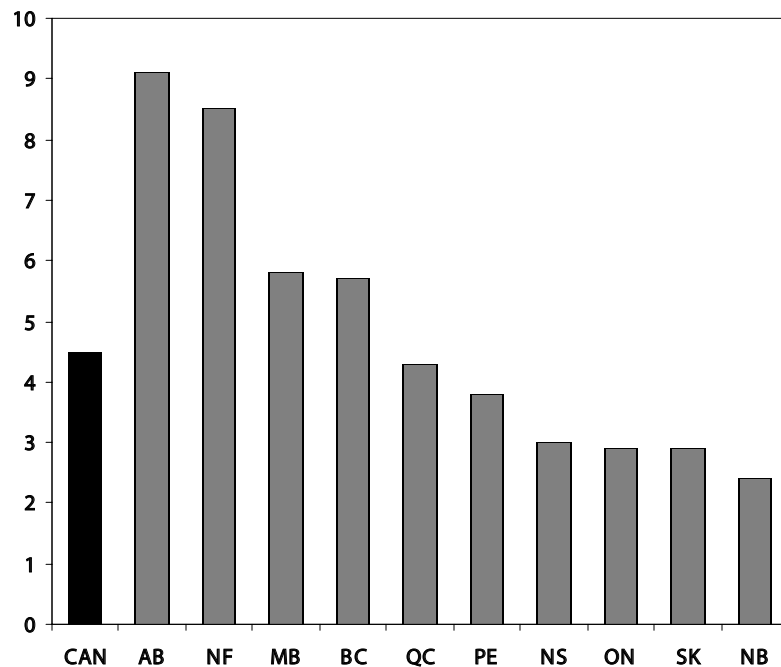


Source: Statistics Canada

## ALBERTA LEADS RETAIL SALES IN 2001

(annual per cent change)

- At 9.1%, Alberta led the country in retail sales growth in 2001, not surprising in view of its strong labour market, a 7.9% increase in wages and salaries, and a \$1.1 billion provincial personal income tax cut.
- Alberta also has the highest level of retail sales per capita.



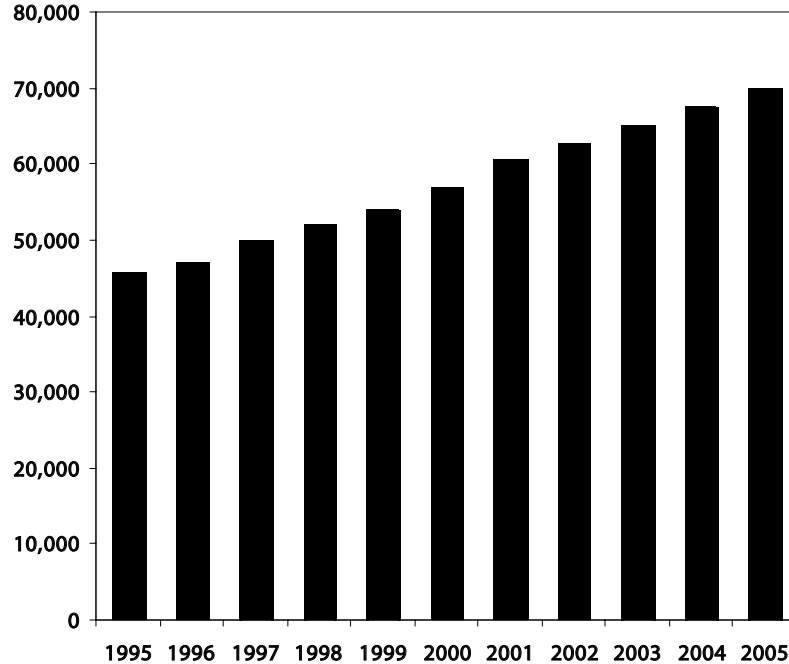
Source: Statistics Canada

---

## REAL CONSUMER SPENDING REMAINS STRONG

(1997 \$millions)

- Consumer spending is expected to remain strong in the medium term as Alberta's healthy labour market, low taxes, and solid wage gains continue attracting interprovincial migrants.



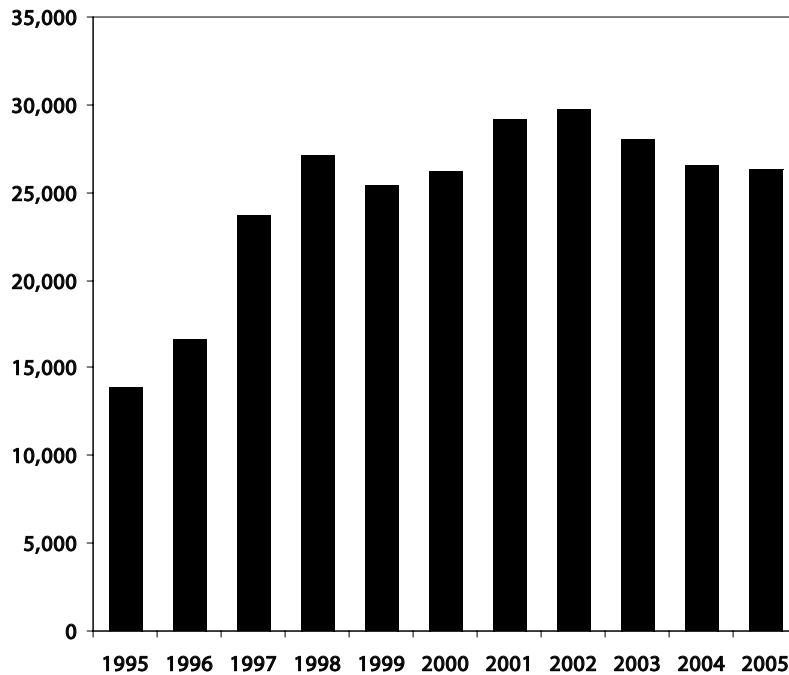
Source: Alberta Finance

---

## STRONG HOUSING STARTS

(number of units)

- Alberta's total housing starts reached 29,174 in 2001, up 11.1% from 2000. This is the highest level since 1981.
- Over the medium term, housing starts in Alberta are expected to stabilize at around 27,000 per year due to strong interprovincial migration, low interest rates, and a healthy economy.



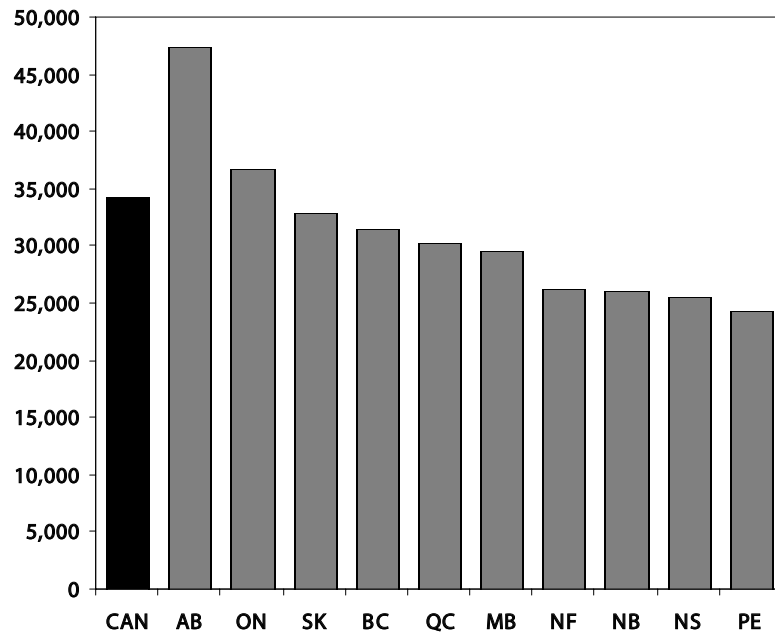
Source: Canada Mortgage and Housing Corporation and Alberta Finance

---

## ALBERTA HAS HIGHEST NOMINAL GDP PER CAPITA AMONG PROVINCES

(dollars per capita)

- Alberta had the highest nominal gross domestic product per capita among the provinces for 2000, the last year for which data are available.
- In 2000, Alberta's GDP per capita was 29% higher than the next highest province, Ontario, and 38% higher than the average for Canada.



*Source:* Statistics Canada and Alberta Finance



# Oil Price Forecast Benchmark

West Texas Intermediate (US\$/bbl)

Organization	2002	2003	2004	2005
<b>National Forecasting Agencies</b>				
Conference Board of Canada (Dec/01)	20.95	23.79	24.20	24.85
DRI-WEFA (Dec/01)	22.62	24.64	25.88	26.54
<b>Investment Houses</b>				
CS First Boston (Feb/02)	21.00	18.50	18.50	18.50
Goldman Sachs (Feb/02)	18.00	18.00	18.00	18.00
JP Morgan (Feb/02)	25.80	24.70	23.90	22.90
Lehman Brothers (Feb/02)	19.00	19.00	19.00	19.00
RBC Dominion Securities (Feb/02)	20.00	22.00	22.00	22.00
<b>Industry Analysts</b>				
Ross Smith Energy Group* (Dec/01)	18.00	23.00	23.30	23.70
Peters & Co. Limited (Feb/02)	20.00	22.00	22.00	22.00
High	25.80	24.70	25.88	26.54
Low	18.00	18.00	18.00	18.00
Average	20.60	21.74	21.86	21.94
<b>Alberta Government (calendar year)</b>	<b>20.00</b>	<b>20.00</b>	<b>20.00</b>	<b>20.00</b>

\* formerly ARC Financial Corporation

# Natural Gas Price Forecast Benchmark

Alberta Average Wellhead Gas Price (Cdn\$/mcf)

Organization	2002	2003	2004	2005
Ross Smith Energy Group* (Dec/01)	3.45	4.55	4.60	4.65
Gilbert Lausten Jung Associates (Jan/02)	3.95	4.35	4.45	4.50
National Bank Financial (Feb/02)	2.65	3.00	n/a	n/a
Merrill Lynch (Feb/02)	3.67	4.20	3.89	4.04
Peters & Co. Limited (Feb/02)	2.85	3.55	3.55	3.55
RBC Dominion Securities (Feb/02)	3.07	4.17	4.30	4.30
High	3.95	4.55	4.60	4.65
Low	2.65	3.00	3.55	3.55
Average	3.27	3.97	4.16	4.21
<b>Alberta Government (calendar year)</b>	<b>2.79</b>	<b>3.17</b>	<b>3.12</b>	<b>2.78</b>

\* formerly ARC Financial Corporation

In developing its forecast, the Department of Energy also looks at forecasts from the following forecasters: PIRA, Purvin & Gertz, CGES, CERA, EIA, Petroleum Economics Ltd. and Ziff.

## Canadian Short-Term Interest Rate Forecast Benchmark

3-month Canadian Treasury Bills (per cent)

Organization	2002	2003	2004	2005
<b>National Forecasting Agencies</b>				
Conference Board of Canada (Dec/01)	3.17	5.08	5.68	5.45
DRI-WEFA (Feb/02)	2.17	4.44	4.91	4.90
<b>Banks</b>				
Bank of Montreal (Feb/02)	2.19	4.15	n/a	n/a
Canadian Imperial Bank of Commerce (Feb/02)	2.34	3.98	n/a	n/a
Royal Bank (Feb/02)	2.00	n/a	n/a	n/a
Scotiabank (Feb/02)	2.43	3.50	n/a	n/a
Toronto Dominion Bank (Jan/02)	1.94	4.19	n/a	n/a
<b>Investment Dealers</b>				
CIBC World Markets (Jan/02)	1.58	2.55	n/a	n/a
BMO Nesbitt Burns (Feb/02)	2.03	3.17	n/a	n/a
High	3.17	5.08	5.68	5.45
Low	1.58	2.55	4.91	4.90
Average	2.21	3.88	5.30	5.18
<b>Alberta Government (calendar year)</b>	<b>2.38</b>	<b>3.75</b>	<b>4.50</b>	<b>4.50</b>

## Canadian Long-Term Interest Rate Forecast Benchmark

10-Year Government of Canada Bond Yield (per cent)

Organization	2002	2003	2004	2005
<b>National Forecasting Agencies</b>				
Conference Board of Canada (Dec/01)	5.78	6.65	6.94	6.81
DRI-WEFA (Feb/02)	5.31	5.32	5.55	5.65
<b>Banks</b>				
Bank of Montreal (Feb/02)	5.60	5.98	n/a	n/a
Canadian Imperial Bank of Commerce (Feb/02)	5.73	6.55	n/a	n/a
Royal Bank (Feb/02)	5.65	n/a	n/a	n/a
Scotiabank (Feb/02)	5.60	5.89	n/a	n/a
Toronto Dominion Bank (Jan/02)	5.51	5.88	n/a	n/a
<b>Investment Dealers</b>				
CIBC World Markets (Jan/02)	5.21	5.68	n/a	n/a
BMO Nesbitt Burns (Feb/02)	5.38	5.66	n/a	n/a
High	5.78	6.65	6.94	6.81
Low	5.21	5.32	5.55	5.65
Average	5.53	5.95	6.25	6.23
<b>Alberta Government (calendar year)</b>	<b>5.60</b>	<b>6.00</b>	<b>6.00</b>	<b>6.00</b>

## Canada/United States Exchange Rate Forecast Benchmark

(US¢/Cdn\$)

Organization	2002	2003	2004	2005
<b>National Forecasting Agencies</b>				
Conference Board of Canada (Dec/01)	64.1	65.5	66.4	66.5
DRI-WEFA (Feb/02)	65.4	68.0	69.0	69.5
<b>Banks</b>				
Bank of Montreal (Feb/02)	64.0	65.6	n/a	n/a
Canadian Imperial Bank of Commerce (Feb/02)	65.1	67.3	n/a	n/a
Royal Bank (Feb/02)	63.9	66.7	n/a	n/a
Scotiabank (Feb/02)	62.9	65.2	n/a	n/a
Toronto Dominion Bank (Jan/02)	62.4	65.9	n/a	n/a
<b>Investment Dealers</b>				
CIBC World Markets (Jan/02)	63.9	66.3	n/a	n/a
BMO Nesbitt Burns (Feb/02)	63.2	64.9	n/a	n/a
High	65.4	68.0	69.0	69.5
Low	62.4	64.9	66.4	66.5
Average	63.9	66.2	67.7	68.0
<b>Alberta Government (calendar year)</b>	<b>63.8</b>	<b>65.8</b>	<b>67.8</b>	<b>69.8</b>

## Alberta Real Gross Domestic Product Forecast Benchmark

(per cent change)

Organization	2001	2002	2003	2004	2005
<b>National Forecasting Agencies</b>					
Conference Board of Canada (Jan/02)	3.1	1.7	3.7	4.6	3.6
DRI-WEFA (Jan/02)	2.0	2.4	4.5	4.1	3.6
<b>Banks</b>					
Bank of Montreal (Oct/01)	4.0	3.5	4.5	n/a	n/a
Canadian Imperial Bank of Commerce (Feb/02)	4.0	3.5	n/a	n/a	n/a
Royal Bank (Jan/02)	3.6	3.0	4.9	n/a	n/a
Scotiabank (Jan/02)	3.2	2.4	4.2	n/a	n/a
Toronto Dominion Bank (Dec /01)	2.7	2.0	3.4	n/a	n/a
<b>Other</b>					
Canada Mortgage and Housing Corporation (Feb/02)	3.9	2.5	3.3	n/a	n/a
BMO Nesbitt Burns (Feb/02)	3.0	2.2	4.1	n/a	n/a
High	4.0	3.5	4.9	4.6	3.6
Low	2.0	1.7	3.3	4.1	3.6
Average	3.3	2.6	4.4	4.4	3.6
<b>Alberta Government (calendar year)</b>	<b>4.5</b>	<b>2.5</b>	<b>3.9</b>	<b>3.7</b>	<b>3.4</b>

# Tracking the Forecasts of Oil Prices

West Texas Intermediate (US\$/bbl)

Organization	How Did They Do 2001 <sup>a</sup>	What They Were Saying About 2002 in Budget 2001	What They Are Saying About 2002 in Budget 2002
<b>Actual</b>	<b>25.93</b>		
Ross Smith Energy Group*	+0.07	23.00	18.00
Deutsche Bank	-0.43	23.50	n/a
Conference Board of Canada	+0.99	25.18	20.95
CS First Boston	-2.93	18.50	21.00
Goldman Sachs	-2.43	22.00	18.00
JP Morgan	+1.77	22.00	25.80
Lehman Brothers	-0.43	21.00	19.00
Peters & Co. Limited	-0.93	25.00	20.00
RBC Dominion Securities	-0.93	25.00	20.00
Standard and Poor's DRI	+0.60	24.40	--
The WEFA Group**	+0.52	24.63	--
DRI/McGraw-Hill**	--	--	22.62
Average	-0.38	23.11	20.60
<b>Alberta Government (calendar year)</b>	<b>-0.73</b>	<b>21.25</b>	<b>20.00</b>

\* formerly ARC Financial Corporation

\*\* now DRI-WEFA

<sup>a</sup> This compares an organization's forecast for 2001 at the time of Budget 2001 to what actually happened. A minus sign indicates an underestimate and a plus sign indicates an overestimate.

# Tracking the Forecasts of Natural Gas Prices

Alberta Average Wellhead Gas Price (Cdn\$/mcf)

Organization	How Did They Do 2001 <sup>a</sup>	What They Were Saying About 2002 in Budget 2001	What They Are Saying About 2002 in Budget 2002
<b>Actual</b>	<b>5.40</b>		
Ross Smith Energy Group*	+1.00	5.35	3.45
Gilbert Lausten Jung Associates	+2.50	5.90	3.95
National Bank Financial	-0.20	3.90	2.65
Merrill Lynch	+0.60	5.00	3.67
Peters & Co. Limited	-0.40	5.00	2.85
RBC Dominion Securities	+0.10	4.80	3.07
Average	+0.60	4.99	3.27
<b>Alberta Government (calendar year)</b>	<b>+0.82</b>	<b>3.89</b>	<b>2.79</b>

\* formerly ARC Financial Corporation

<sup>a</sup> This compares an organization's forecast for 2001 at the time of Budget 2001 to what actually happened. A minus sign indicates an underestimate and a plus sign indicates an overestimate.

# Announced Major Projects Over \$100 Million

Announced or Under Construction

Company Name	Location	Type of Project	Cost (\$millions)	Timing
<b>OIL AND GAS</b>				
Albian Sands Energy Inc.	RM of Wood Buffalo (Muskeg River)	Oil Sands Mining/Extraction Plant	2,200	1999-2002
Canadian Natural Resources Ltd.	MD of Bonnyville (Cold Lake and Beartrap, Charlotte and Pelican Lakes)	In situ Bitumen Production	800	1997-2002
	Lakeland County (Primrose/Wolf Lake)	In situ Bitumen Production Expansion Stage 1	130	2001-2004
Conoco Canada Resources (formerly Gulf Canada Resources)/Fina Resources Inc.	RM of Wood Buffalo (Surmont)	SAGD Bitumen Commercial Project - Phase 2 and 3	500	2003-2010
Imperial Oil	Strathcona County	Strathcona Refinery Upgrades	500	2001-2005
Imperial Oil Resources	MD of Bonnyville (near Cold Lake)	Heavy Oil Plant Expansion "Mahkeses"	650	2001-2002
Japan Canada Oil Sands Co. Ltd. (JACOS)	RM of Wood Buffalo (Hangingstone)	SAGD Bitumen Production - Phase 3	130	2001-2002
PanCanadian Petroleum	RM of Wood Buffalo (Christina Lake)	SAGD Bitumen Production	400	2000-2009
Petro-Canada Oil and Gas	RM of Wood Buffalo (MacKay River)	SAGD Bitumen Production	290	2001-2002
	Strathcona County	Strathcona Refinery: Gasoline De-sulpherization - Phase 1	130	2001-2003
Petro-Canada Oil and Gas/ Nexen Inc.	RM of Wood Buffalo (S of Fort McMurray)	"Meadow Creek" SAGD Bitumen Production	645	2005-2006
Petrovera Resources Ltd.	Lindbergh/Elk Point/ Frog Lake/Marwayne	In situ Bitumen Production	1,200	2000-2010
Ranger Oil Ltd.	MD of Bonnyville (Lindbergh/Wolf Lake/ Elk Point/Cold Lake)	In situ Bitumen Production Expansion	225	1996-2003
Shell Canada Ltd.	Strathcona County	Scotford Refinery Modifications	450	2000-2002
Shell Canada/Western Oil Sands/Chevron Canada Res.	Strathcona County	Bitumen Upgrader	1,700	2000-2002

# Announced Major Projects Over \$100 Million

Announced or Under Construction

Company Name	Location	Type of Project	Cost (\$millions)	Timing
<b>OIL AND GAS (continued)</b>				
Suncor Energy Inc.	RM of Wood Buffalo (Fort McMurray)	Production Enhancement	127	1999-2002
	Lakeland County (Primrose/Burnt Lake)	In situ Bitumen Facilities - Phase 2	100	2001-2002
	RM of Wood Buffalo	"Firebag" In situ Bitumen Recovery Project - Phase 1	1,000	2001-2005
Synchrude Canada Ltd.	RM of Wood Buffalo (Fort McMurray)	Continuous Improvement Program	1,500	1997-2007
	RM of Wood Buffalo (Fort McMurray)	Phase 3: Upgrader Expansion Phase 1/ Aurora Mine Train 2	4,100	2001-2004
Union Pacific Resources Group Inc.	Cold Lake/Provost/Lindbergh	In situ Bitumen Production	400	2001-2003
<b>PIPELINES</b>				
Cold Lake Pipeline Limited Partnership	Foster Creek to Bonnyville area to Hardisty	Expansion of Cold Lake Pipeline System	143	2002-2004
Corridor Pipeline Ltd. (Trans Mountain Pipeline)	RM of Wood Buffalo (Muskeg River) to Strathcona County	"Corridor" Bitumen Pipeline	700	2000-2003
Nova Gas Transmission Ltd.	across Alberta	Pipeline Capacity Addition	1,000	1999-2003
<b>MANUFACTURING</b>				
Shell Canada Ltd.	Strathcona County	Hydrogen Manufacturing Plant for Scotford Upgrader	180	2000-2002
<b>COMMERCIAL, RETAIL AND REAL ESTATE CONSTRUCTION</b>				
Cameron Corporation/ Grosvenor International Canada Ltd.	Edmonton	"South Edmonton Common" Retail Complex	250	1997-2005
East Village Partnership Group	Calgary	Re-development of East Village	1,500	2001-2010
Heartland Development Corp.	Airdrie	Heartland Business Centre	500	2001-2010
Shivam Developments	Strathcona County (Sherwood Park)	Auto Mall and Shopping Centre	150	2002-2006

# Announced Major Projects Over \$100 Million

Announced or Under Construction

Company Name	Location	Type of Project	Cost (\$millions)	Timing
<b>OTHER</b>				
Bell Intrigna/Bell Nexxia/Axia NetMedia & Partners	Across Alberta	Fibre-optic Communications Grid	300	2001-2003
Calgary Airport Authority	Calgary	Airport Improvements	800	1998-2007
Canadian National Railways	Edmonton to Ontario	Railway Upgrade	100	1997-2002
Stone Creek Properties	Canmore	Silver Tip Hotel/Resort Village	270	1995-2015
Various Irrigation Districts	Across Southern Alberta	Irrigation Systems/Rehabilitation	600	1997-2006
<b>POWER PLANTS</b>				
AES Calgary Inc.	MD of Rocky View (east of Calgary)	Natural Gas Fired Power Station (525 MW)	450	2002-2004
Atco Power/Shell Canada Ltd./ Air Products Canada Ltd.	Strathcona County	Co-generation Facility (150 MW)	140	2000-2002
Calpine Corp.	Calgary	Calgary Energy Centre Gas-Fired Power Plant (250MW)	220	2001-2003
TransAlta Utilities	Parkland County (Lake Wabamun)	Expansion of Keephills Coal-fired Generating Plant (900 MW)	1,600	2002-2005
	Parkland County	Efficiency Update at Sundance Thermal Plant (218 MW)	200	2001-2002
TransCanada PipeLines Ltd./ Petro-Canada	RM of Wood Buffalo (near Fort McMurray)	MacKay River Co-Gen Project (165MW)	135	2001-2003
<b>TOTAL</b>			<b>26,415</b>	

