Budget Paper A

# THE ECONOMY



### THE ECONOMY

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#### THE CANADIAN ECONOMY

The Canadian economy grew 2.7% in real terms in 2006, down slightly from the 2.9% growth of 2005 (see Chart 1). Nominal gross domestic product (GDP) increased by 4.9%, down from the 6.2% growth posted in 2005.

Canada started 2006 with a strong 3.8% annualized increase in real GDP in the first quarter. For the rest of the year however, growth slowed sharply, averaging 1.8% on an annualized basis. The increase in the last quarter of the year was only 1.4%.

Economic growth was led by an uptick in service sector activity, as it did much better than goods industries. Led by wholesale and retail trade and finance, insurance and real estate, service industries posted growth of 3.6%.

Among industries, the manufacturing sector was hard hit, posting a 1.2% real decline. Utilities and forestry also fared poorly in 2006, reducing overall real growth in the goods-producing sector of the economy to 0.8%. Industrial production fell in 2006 by 0.5%, the first decline since 2001.

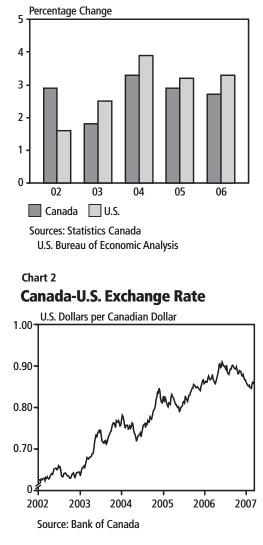
A number of factors contributed to the economic slowdown, including a pull back in housing construction, higher interest rates, slower U.S. growth and an increase in the value of the Canadian dollar. The latter two factors played a role in the 2.1% fall in merchandise exports to the U.S. and a decline in manufacturing output last year.

The U.S. is Canada's largest trading partner, accounting for over 80% of all exported merchandise. Similarly, Canada is the single largest market for U.S. exports, accounting for 22% of that country's exports. With this integration of trade, currency fluctuations are important to both economies. In 2006, the Canadian dollar value averaged US\$0.882, an increase of 6.9% from the 2005 average of US\$0.825 (see Chart 2).

Despite weakness in certain sectors of the economy, primary goods producers continued to enjoy solid market conditions. Last year, prices for many base metals and other resource products approached or exceeded previous records.

Unlike 2004 and 2005, when oil prices generally traced a steady upward trajectory, 2006 saw oil prices stronger in the second and third quarters but weaker in the first and fourth quarters. With the increase in oil prices moderating and natural gas prices averaging lower, the inflationary pressure of energy prices that had played such a significant role in pushing up consumer prices over the previous two years eased. The energy component of the Consumer Price Index (CPI) rose 5.1%, down from the 9.7% increase in 2005 and the lowest increase since 2002. Overall, the national

#### Chart 1 Real Gross Domestic Product At Market Prices



### **Industrial Commodity Prices**

Index: 2004=100	2005	2006
Newsprint	110	120
Pulp, Northern Bleached	101	113
Zinc	133	314
Nickel	107	175
Copper	128	235
Gold	109	148
Oil, WTI	137	160

Source: Scotiabank

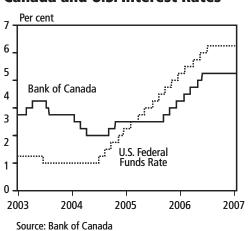
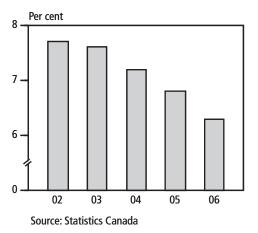


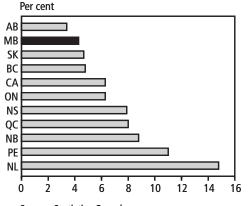
Chart 3 Canada and U.S. Interest Rates



Canada Unemployment Rate, 2002 to 2006



#### Chart 5 Unemployment Rate By Province, 2006



Source: Statistics Canada

CPI increased 2.0% in 2006, down slightly from 2.2% in 2005. The 2006 rise in core CPI (excluding food and energy) remained relatively modest at 1.5%. This suggests that the impact of energy price increases is not being passed through to general prices to a degree that would significantly affect overall inflation. Manitoba Finance's survey of private economic forecasts shows the CPI growth is forecast to remain moderate, near the mid-point of the Bank of Canada's 1 to 3% inflation target range, for the next two years.

Between September 2005 and May 2006, the Bank of Canada raised the overnight target rate seven times in 25 basis point increments, boosting the rate to 4.25%. Contained inflationary pressures and slower economic growth in the second half of 2006 appear to have brought the Bank of Canada's series of interest rate hikes to an end (see Chart 3). Most forecasters expect only small changes to interest rates in 2007.

Employment grew by 1.9% in 2006 and exceeded most forecasters' expectations. Full-time employment increased 2.3%, while part-time employment advanced by 0.4%. Over 314,000 jobs were created, virtually all of them in the service sector. Canada's manufacturing sector continued to shed jobs, as employment declined by 4.1% after a 3.7% drop in 2005. This sector has lost 175,000 jobs over the last two years, with the majority of cuts coming in Ontario and Quebec.

Robust job growth in Canada helped push the unemployment rate down to 6.3%, an improvement from 6.8% in 2005 and the lowest rate in over 30 years (see Chart 4). Canada's labour force participation rate remained steady at 67.2% while the employment rate reached a record-high level of 63.0%, up from 62.7% in 2005.

Private economic forecasters, surveyed by Manitoba Finance, predict employment growth will slow in line with generally weaker Canadian economic growth in 2007 and 2008. Employment growth is projected at 1.3% in both 2007 and 2008. The national unemployment rate is expected to remain relatively unchanged from its current low level, rising modestly to 6.4% in both years. Manitoba Finance's survey projects that Canada's real GDP will increase by 2.3% in 2007 and 3.0% in 2008. Nominal GDP is expected to grow by 4.2% in 2007 and 5.1% in 2008.

Considerable risks remain for the Canadian economy in 2007, including adverse trade consequences of a further appreciation of the Canadian currency, resource price volatility and possible weaker than forecast growth in the economies of the U.S. and China.

#### THE MANITOBA ECONOMY

Preliminary estimates show that Manitoba's economy expanded by 3.1% in 2006, up from 2.8% growth posted in 2005 (see Chart 6). The strong performances of construction, agriculture and mining were principally responsible for the improvement.

Most goods-producing industries posted gains last year. Manufacturing shipments increased 5.2%, with a broad-based positive performance in spite of a higher exchange rate and a slowing U.S. economy. Robust investment in both residential and non-residential projects added strength to the construction industry last year. Propelled by strong prices for metals and significantly higher levels of activity in the oil industry, Manitoba's mining sector also enjoyed significant growth in 2006. Although weaker prices for hogs dampened agriculture output growth, strong shipments of cattle combined with a very favourable year for crop production boosted real GDP in agriculture by 16.2%.

Overall, goods-producing industries grew by 6.7% in real terms, while service industries expanded by 1.8%.

Manitoba's retail sales grew 6.0% last year following 6.4% growth in 2005. Almost all major retail trade categories were up last year.

Manitoba's unemployment rate fell to 4.3% in 2006, the lowest level in over 30 years and well below the national rate of 6.3%. Manitoba's unemployment rate was the second lowest among provinces. Manitoba's employment grew by 6,700 last year, or 1.2%. About nine in ten jobs were created by the private sector.

Strong growth in capital investment continued in 2006 as total capital investment rose 14.2%, second highest among provinces. Private capital investment grew by 11.0%, while public investment grew 23.4%. For 2007, Statistics Canada estimates that capital investment in Manitoba will grow by 11.3%, maintaining the second-highest ranking among provinces and growing by more than double Canada's increase of 4.6%.

Manitoba registered very strong export growth in 2006. Total foreign merchandise exports increased 17.2%, significantly higher than the 0.5% increase posted for Canada as a whole (see Chart 7). Exports to the U.S., which account for about three-quarters of total exports, were up 15.1%, while non-U.S. exports increased 24.4%.

Manitoba's CPI rose 1.9% in 2006, just below the national increase of 2.0%. The Manitoba increase was down from 2.7% in 2005, reflecting more moderate growth in energy prices compared to the previous two years.

#### Chart 6 Manitoba Real Gross Domestic Product

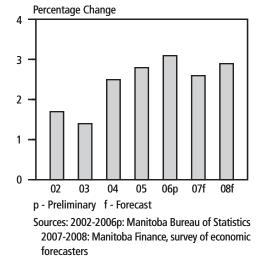
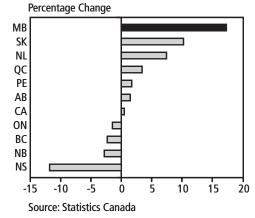


Chart 7
Foreign Exports By Province, 2006



# Manitoba Real Gross Domestic Product, at Basic Prices by Industry, 2005 and 2006p

(Millions of Chained 1997 Dollars)	2005	2006p	Percentage Change
Goods	8,714	9,300	6.7
Agriculture	1,286	1,495	16.2
Mining	643	809	25.8
Other Primary	67	65	-2.2
Manufacturing	4,069	4,108	0.9
Construction	1,529	1,735	13.5
Utilities	1,120	1,088	-2.9
Services	24,512	24,953	1.8
Transportation & Warehousing	2,289	2,334	2.0
Information & Culture	1,310	1,325	1.1
Wholesale Trade	2,119	2,056	-3.0
Retail Trade	2,232	2,322	4.0
Finance & Insurance	1,803	1,865	3.5
Real Estate	1,784	1,841	3.2
Imputed Rent	3,081	3,184	3.3
Professional Services	842	865	2.7
Other Business Services	569	584	2.7
Federal Government	1,037	1,044	0.7
Provincial Government	726	731	0.7
Municipal Government	592	595	0.5
Education Services	1,709	1,727	1.0
Health & Social Services	2,449	2,490	1.7
Arts, Entertainment & Recreational	341	351	2.9
Accommodation & Food	714	713	-0.1
Other Services	916	926	1.1
Real GDP at Basic Prices	33,224	34,253	3.1
p – Preliminary Source: Manitoba Bureau of Statistics Totals may not add due to rounding and chained.			

Totals may not add due to rounding and chained.

Manitoba's 2007 economic outlook remains positive. Based on Manitoba Finance's survey of private economic forecasters, real GDP is expected to grow 2.6%, and exceed Canada's increase for the second consecutive year. CPI growth is projected to moderate further to 1.5%, while employment growth will be 1.0%. Manitoba is expected to continue to have the secondlowest unemployment rate in Canada in 2007 at 4.3%.

#### Manufacturing

The manufacturing sector is a key part of the Manitoba economy, generating 12% of total GDP. It also accounts for about 11% of total employment in the province, the third-highest share among provinces following Ontario and Quebec.

The sector has a broad base with many medium-sized industries and two larger industries – food processing and transportation equipment manufacturing. Manitoba's diversified manufacturing sector contributed to the balance and sustainability of the overall economy.

Manitoba manufactures a wide spectrum of industrial, commercial and household goods, including urban and intercity energy-efficient buses, aerospace equipment, industrial chemicals, fertilizers, pharmaceuticals, processed food, furniture, apparel, newsprint, plastic products, windows, and fabricated and primary metals.

Sales of value-added manufactured goods dominate provincial exports. Over two-thirds of international merchandise exports and over 40% of interprovincial exports are manufactured goods. The main destination for international exports is the U.S., while Ontario and Alberta are the major Canadian markets.

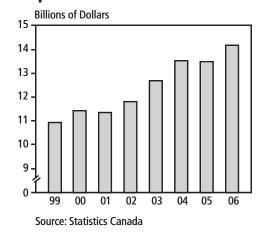
Manufacturing is the largest single contributor to total provincial income. In 2006, it provided, on average, \$750 per week per employee, well above the economy average of \$677 per week and up 2.9% from 2005. The highest-paid category in this sector is chemical manufacturing, at \$1,245 per week, followed by sawmill and wood manufacturing at \$949 per week.

Manitoba's manufacturing sector has outperformed the national average in five of the last six years. In 2006, Manitoba manufacturing shipments rose 5.2%, the second-highest growth among provinces and much more favourable than the national decline of 0.6%. Manitoba is now consistently generating in excess of a billion dollars worth of sales every month. In 2006, total shipments tallied a record \$14.2 billion (see Chart 8).

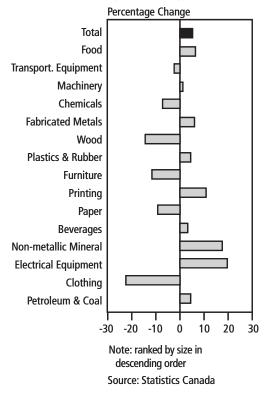
Of the 15 industry categories within the sector, nine reported increased shipments (see Chart 9). The strong pace of residential and non-residential construction activity boosted electrical equipment and appliance shipments by 19.4% and non-metallic mineral product (cement and concrete) shipments by 17.6%. Printing and related support activities sales rose by 10.9% last year. Food processing, the largest manufacturing category, increased 6.5%.

Manitoba's manufacturing employment declined by 2.8% in 2006, a smaller decline than the country overall. The largest losses in manufacturing

#### <sup>Chart 8</sup> Manitoba Manufacturing Shipments



#### Chart 9 Manitoba Manufacturing Shipments by Industry, 2006



Manitoba is now consistently generating in excess of a billion dollars worth of manufacturing sales every month.

"In the [Manitoba] aerospace industry, a new training and simulation facility will provide training to the Canadian Air Force under a 20-year \$1.8 billion contract."

> Provincial Trends Scotiabank Group March 2007

employment were in Newfoundland and Labrador, where manufacturing employment fell 6.5%, and Quebec, where it fell by 5.6%.

The Canadian manufacturing sector is presently encountering many challenges, including the appreciation of the Canadian dollar against the U.S. dollar, rising energy costs, increased global competition and skilled labour pressures.

In the face of increasing global competitive pressures, Manitoba manufacturers are adapting to the challenge of the stronger Canadian dollar and taking advantage of enhanced government incentives, such as the manufacturing investment tax credit, by increasing spending on new technology and making capital investments to enhance efficiency.

According to Statistics Canada's investment intentions survey, capital investment in machinery and equipment and new structures in the manufacturing sector grew by 16.2% in 2006, with a further 29.8% increase expected in 2007. The Conference Board of Canada's long-term economic forecast predicts recent manufacturing investments will fuel growth in several industries, including agrifood, aerospace and transportation equipment. The Manitoba aerospace industry is identified as growing into one of the largest in Canada over the next several years.

#### Agriculture

The agriculture sector, directly and through spinoffs, is a major contributor to the Manitoba economy. Crop and livestock enterprises produce a variety of commodities and provide a strong link to other sectors of the rural and urban economy, including food manufacturing, transportation and storage, retail and wholesale trade as well as finance, insurance and real estate.

Agriculture directly employs approximately 29,400 workers and generates about 4.4% of total GDP in the province. The sector, on average, generates about \$3.8 billion worth of income annually. Revenue from production is split relatively evenly between crops and livestock, with crops accounting for 42% and livestock 58% of receipts in 2006.

Real output in Manitoba's agricultural sector rose 16.2% in 2006 after a 12.8% decline in 2005. In 2005, farmers were plagued by heavy rains, flooded fields and a closed U.S. border for Manitoba cattle in the first half of the year. Near-normal weather conditions and a partial opening of the border to cattle exports benefited Manitoba farmers in 2006.

Despite the sharp increase in crop production and favourable prices, sales receipts from crops were up only 2.1% in 2006. Sales reflect the poor yields in 2005 as farmers had very little stored crop to market in the first half

of 2006. Crop receipts have picked up in the second half of 2006 which bodes well for 2007 as the 2006 crop is sold out of inventory. Receipts from hog production were down 12.6% in 2006 due to low prices. Mainly driven by exports sales, receipts from cattle and calf production were up 19.4% in 2006 (see Chart 11).

Last year, hog production in Manitoba increased by 1.6%, while total interprovincial and international hog exports expanded by 4.7%. New records were set for both hog production and exports. Manitoba produced over 9.2 million hogs in 2006. Manitoba exported over 5.4 million hogs, accounting for three-fifths of Canadian international hog exports. Reflecting increased exports, hog slaughter volumes were down by 4.8% in 2006. At any one time, Manitoba has an average of approximately three million hogs in inventory.

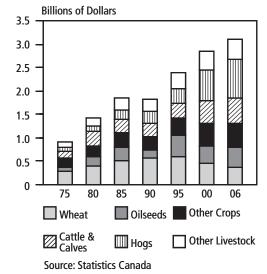
Manitoba is the fourth-largest cattle producing province after Alberta, Saskatchewan and Ontario. In 2006, Manitoba produced 586,300 calves or 10.6% of the Canadian total. Manitoba accounted for 16.5% of Canadian exports of cattle, the second largest among provinces.

Cattle exports resumed to the U.S. on July 18, 2005, after the 26-month BSE ban was lifted for cattle less than 30 months of age. In 2006, Manitoba shipped almost 172,000 head of cattle compared to none in 2004. The level of exports has not recovered to the pre-closure levels as trade is being hampered by a strong Canadian dollar, BSE-related trade rules, transportation bottlenecks and a somewhat saturated U.S. cattle market. The oversupply in the U.S. market resulted from southern U.S. ranchers selling off large portions of their herd due to drought-like weather conditions. The sell off prompted Manitoba's cattle producers to cut production by 4.7% in 2006. As a result of slower production combined with a resumption of exports, Manitoba's herd was reduced by 110,000 head in 2006, from 1.49 million in 2005 to 1.38 million.

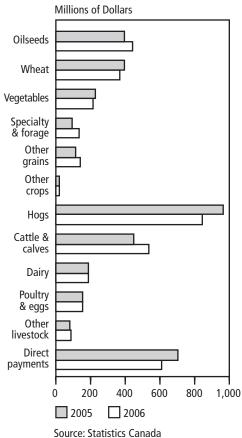
Cattle prices decreased by 1.3% in 2006 and hog prices declined 5.9%. As higher feed prices filter into livestock prices, the current excess supply will likely dissipate in 2007 as ranchers cut back on production. Due to the length of the production cycle for cattle and pigs, the tight supply condition is anticipated in the second half of 2007 and into 2008. Prices for chicken are expected to increase earlier as the chicken production cycle is much shorter.

Crop production in 2006 increased significantly. Wheat, barley and oat yields were up 67.3%, 68.1% and 122.1%, respectively. The volume of the canola harvest increased by 44.9% while flaxseed production increased by 31.0%. Most other specialty crops including soybeans, coloured beans and

#### Chart 10 Manitoba Market Receipts by Commodity

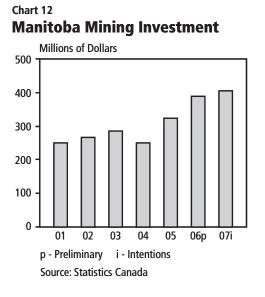


#### Chart 11 Manitoba Farm Cash Receipts by Product, 2005 and 2006



"Manitoba crop production rebounded strongly last year across all crop harvests, along with boosts in yield and quality. Rising grain prices, attributable to droughts in several major producing countries alongside strong global demand, should provide for another good year in 2007."

> Provincial Trends Scotiabank Group March 2007



dry peas also experienced significant increases in yield. The grade quality of the 2006 cereal and oilseeds harvest was average to above average.

Crop and livestock prices went in different directions in 2006. Poor weather conditions in the U.S., tight inventory levels and surge in demand related to ethanol production pushed overall crop prices up. Wheat prices increased by almost 10% in 2006, amid tight global supply conditions. Barley prices rose by 13.4% due to adverse weather conditions in key growing regions of the world and because of increased demand from ethanol producers seeking substitute grains as inputs. Barley prices were up 39% compared to the previous year. Canola prices averaged 10.6% higher in 2006, rebounding from their decline in 2005. Crop prices, especially for feed wheat, barley and corn, are expected to remain stable over the medium term.

#### Minerals

Mining is the second-largest primary resource industry in the province. Mining, which directly accounts for 2.4% of the output in the Manitoba economy, had the strongest growth of any industry last year at 25.8%. The industry employed approximately 5,000 workers in 2006, up 8.7% from 2005. Average earnings in mining are the highest among industries in the province.

Record-high prices for base metals, precious metals and crude oil have boosted the value of production of Manitoba's mining and petroleum industries. Sustained high prices for these commodities have renewed interest in exploration activity and spurred new developments and expansion plans for existing facilities throughout Manitoba.

Two new mines have been developed that will extend operations in the Flin Flon and Snow Lake areas until 2016, approximately 90 years after the first mines there were opened. Similarly, new investments at CVRD Inco's Thompson mines are projected to extend mining operations until 2016, about 60 years after initial production began. Southwest of Thompson, Crowflight Minerals will spend \$66 million to develop its Bucko nickel deposit near Wabowden and Victory Nickel is conducting a feasibility study at its Minago deposit north of Grand Rapids.

HudBay Minerals Inc. has increased its Manitoba exploration budget to \$34.5 million for 2007 and its copper and zinc production estimates have also been raised. BHP Billiton will spend \$15 million to explore a potentially large potash deposit and Agrium Inc. has acquired a 45,000 hectare potash exploration permit. Mustang Minerals is conducting feasibility studies at its Maskwa site near Lac du Bonnet for nickel. Near Lynn Lake, Carlisle Goldfields Ltd. plans to reopen the McClellan gold mine and Independent Nickel is in the midst of an aggressive exploration program. High prices and a supportive policy environment led to an unprecedented expansion of mining and oil and gas sectors. In 2006, construction and machinery and equipment investments in mining grew 20.4% to \$389.1 million, on the heels of 28.9% growth in 2005 (see Chart 12). Investment in mining and oil and gas extraction is expected to increase 4.5% in 2007, with particular strength coming from machinery and equipment investment.

The overall production value of minerals in Manitoba exceeded \$2 billion in 2006, 65.3% greater than in 2005 (see Chart 13). The value of Manitoba's four chief products – nickel, zinc, copper and gold – increased 78.1% in 2006, to a record \$1.9 billion. Each commodity has seen its price rise significantly last year, as global demand has been high and inventories have generally been tight.

In 2006, nickel prices on the London Metal Exchange averaged 60% higher than in 2005 as supplies fell dramatically. The volume of nickel produced in the province was largely unchanged from the previous year, but owing to sharply higher prices, the value of Manitoba nickel production increased 50.4%. Several advanced nickel projects have benefited from an extremely strong market.

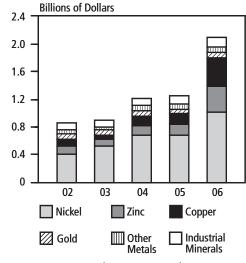
Due to a surge in demand from China and India, zinc inventories were drawn down last year. As a result, prices increased to levels significantly greater than historical norms, averaging 137% higher in 2006 compared to the previous year. As in the case of nickel, the increased price contributed to the higher value of Manitoba production, up 111.2%, as volumes of zinc production were up only slightly at 0.6%.

Global copper inventories plunged in 2004 and the market has remained tight over the past few years as supplies gradually increased. Reacting to demand, prices rose to a record US\$3.99 per pound in May 2006 and averaged US\$3.05 over the year, up 82.7% from 2005. Copper production in Manitoba increased by 54.3% in 2006 and, coupled with high prices, the value of production increased by 167.7%. So far in 2007, prices have moderated from the beginning of the year reflecting higher supply. Prices remain at historically high levels.

Gold also experienced large price swings in 2006, reaching almost US\$720 per ounce in May. The overall New York Mercantile Exchange average annual price increased 35.8% in 2006 over the previous year. San Gold Corporation opened its Bissett-area mine in April and poured its first gold bars in August. Manitoba gold output volumes increased by 20.4% and the value of production rose 50.9%.

Manitoba's petroleum industry had its busiest year in 2006, with a 59.0% increase of production (see Chart 14) and 478 new wells drilled. This represents an increase of almost 70% over the number of wells drilled in

Chart 13 Manitoba Mineral Production



Source: Natural Resources Canada



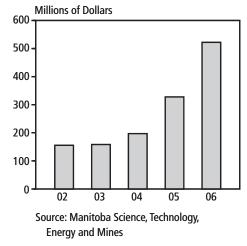
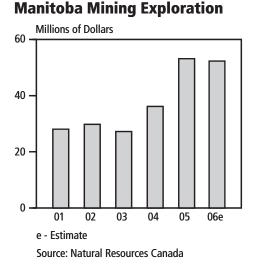
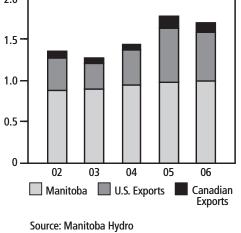


Chart 15



### Chart 16 Manitoba Hydro-Electricity Sales 2.0 Billions of Dollars



2005 and eclipses the previous record set over 50 years ago. The industry set a new benchmark by investing \$400 million in exploration and production last year. Almost 100 exploratory wells revealed potential new discoveries in several areas, including Sinclair, Pierson, Waskada, Daly, Goodlands and Regent. Sinclair, discovered in 2004, already accounts for over 40% of Manitoba oil production. The relatively shallow depth of sedimentary rocks in Manitoba and the generally flat terrain keep drilling costs fairly low.

In addition to rich mineral deposits, Manitoba offers a number of economic advantages that support the mining and minerals sector including affordable land, at- or near-surface geological resources, a transparent land tenure system, a well-defined permitting and protected areas process, competitive business costs, high-quality transportation infrastructure, access to a sea port, and reliable low-cost electricity.

Higher price signals, clear and consistent regulation among companies and fair application of policies over time, plus support for the industry through tax credits and exploration assistance programs, were all factors in attracting higher levels of investment in Manitoba's mining industry (see Chart 15).

#### **Hydro-Electricity**

Manitoba Hydro is Manitoba's largest utility and accounts for virtually all electricity generation, transmission and distribution in the province. Over 98% of Manitoba Hydro's electricity last year was produced by water, a clean and renewable source of energy. Currently, Manitoba Hydro has a generating capability of more than 5,000 MW, with a further 5,000 MW of identified undeveloped resources.

Electricity sales declined last year following two years of significant growth. The increases in electricity generation in 2004 and 2005 were associated with higher water flows due to higher levels of precipitation. Lower precipitation in 2002 and 2003 had weakened hydraulic electricity generation. The value of Manitoba Hydro's sales declined 5.5% in calendar year 2006 to \$1.7 billion, down from the historical high established the previous year (see Chart 16).

The value of Manitoba in-province electricity sales, which account for 59% of the total, increased 1.7% in 2006. The value of electricity export sales, which account for the remainder, declined by 14.1%. The total value of U.S. exports declined 7.9% and sales to other provinces (Ontario and Saskatchewan) fell by 39%, offsetting some of the 164% increase posted the

previous year. The U.S. is presently the key market for Manitoba's electricity exports and accounted for about 86% of total out-of-province sales in 2006.

Manitoba Hydro has been working closely with northern Aboriginal communities to develop new generating facilities in the province. Manitoba Hydro and Nisichawayasihk Cree Nation (NCN) have signed a Project Development Agreement for the joint development of the Wuskwatim Generating Station on the Burntwood River in Northern Manitoba. Through this agreement, NCN can acquire up to a one-third partnership interest in the station. Construction of the access road to the generating station site has begun which will allow for an expected 2012/13 in-service date for the project. The cost for this project is estimated at \$1.3 billion.

In November 2006, the government announced that the Conawapa dam will be built. The schedule for this project has not yet been announced, although Manitoba Hydro has initiated discussions in respect of establishing process agreements with certain local communities regarding Aboriginal participation in the project. The multi-billion dollar generating facility project would be similar in magnitude to Manitoba's Limestone facility, currently the largest single generating station in the province, and will add net generating capacity of 1,250 MW. The construction activity associated with the facility would provide a considerable impetus for economic activity in Manitoba.

Keeyask is another potential hydro-electric development under consideration. Manitoba Hydro is also involved in active negotiations with four local communities which may partner with the utility to build this 620 MW project on the Nelson River.

A new \$210 million 99 MW wind energy project near St. Leon began operation in early 2006. The project was privately financed and takes advantage of Manitoba's world-class wind energy capabilities. It was facilitated by a 20-year power purchase agreement with Manitoba Hydro. The 63 wind turbine generator wind farm is one of Canada's largest.

Large-scale wind power is one of the most competitive forms of renewable energy. The provincial government is committed to further harvest Manitoba's potential for clean, affordable energy with plans to develop up to 1,000 MW of wind power over the next 10 years. A request for proposals for the development of a further 300 MW of wind energy was issued in March 2007. Manitoba is well positioned to be a global leader in wind generation and, in so doing, will contribute to the reduction of global greenhouse gas emissions. "Manitoba hopes to aggressively expand electricitygenerating capacity, to take advantage of its large hydroelectric potential."

Provincial Trends Scotiabank Group March 2007

2,000

1,000

0

02 03 04 05

Corporation

e - Estimate f - Forecast

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#### Housing

Manitoba's housing market continued to be one of the most active in Canada last year. In 2006, Manitoba housing starts grew 6.3% to 5,028 units (see Chart 17), the third-strongest among provinces. This was the sixth consecutive year of housing starts growth and pushed the number of housing starts to the highest level since 1988.

Driven by the construction of semi-detached homes, apartments and condominiums, multiple-unit housing starts grew 44.4% in 2006. The 1,476 multiple-unit starts were the highest level of starts since 1988.

Single-detached housing starts declined 4.2% in 2006. This was the first decline in single-detached housing starts since 1999. Single-detached dwelling units represented over 70% of total housing starts in Manitoba last year.

The Canada Mortgage and Housing Corporation (CMHC) projects that Manitoba's housing starts will slip by 2.5% in 2007, compared to the projected national decline of 7.9%. Manitoba's decline will be the smallest among provinces. For 2008, CMHC projects a further decline of 3.1% for Manitoba and a 6.7% drop in national housing starts.

The value of residential building permits issued in 2006 indicates that home builders invested a significantly higher amount in residential construction activity last year. Overall residential building permits increased to \$829 million from \$695 million in 2005, a 19% increase (see Chart 18). In Winnipeg, residential building permits increased by 32% to \$529 million. Winnipeg's increase can partly be attributed to good growth in home alterations and additions.

The robust Manitoba housing market was also reflected in strong growth in Manitoba house prices last year. In 2006, CMHC estimates that the average residential resale price grew by 12%, the fourth consecutive doubledigit increase in house prices for the province (see Chart 19). Despite the increase, Manitoba's average residential resale price remained relatively low compared to most other provinces.

CMHC projects Manitoba's house prices will continue to increase in 2007 and 2008. For 2007, Manitoba's average residential resale price is forecast to increase by 6.4%. For 2008, CMHC projects a further increase of 5.7%. In both years, CMHC projects that Manitoba's house price increases will exceed the national average.

In 2006, the total number of residential resales in Manitoba increased for the fourth consecutive year. Resales increased 1.9% while national resale

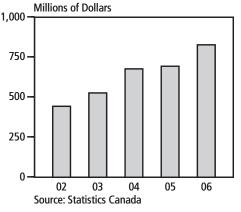
# "As a place to live, Manitoba stood out in affordability with the lowest cost of living."

Source: Canada Mortgage and Housing

The Institute of Chartered Accountants of Manitoba MB Check-Up 2006

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activity was virtually unchanged in 2006. CMHC predicts that Manitoba residential resale activity will increase by 1.9% and 0.4% in 2007 and 2008 respectively. Manitoba is the only province projected to have continued resale activity growth in both years.

According to WinnipegREALTORS (formerly Winnipeg Real Estate Board), MLS sales activity of 12,304 properties and \$1.9 billion in 2006 established a new all-time high for number of sales and sales dollar volume. The dollar volume of houses sold in 2006 was 15% higher than in 2005. Over half of the residential detached homes sold in Winnipeg last year were in the \$100,000 - \$160,000 price range.

#### **Retail Trade**

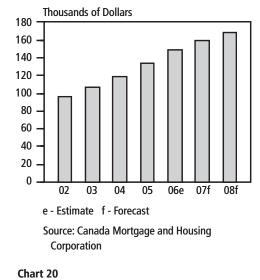
Manitoba's retail sales rose 6.0% in 2006 (see Chart 20), fourth highest among provinces. Manitoba is the only province outside Alberta to post three consecutive years of growth at or above 6.0% and ranks as the second fastest over that period. Low unemployment, positive consumer confidence and rising incomes helped support consumer spending.

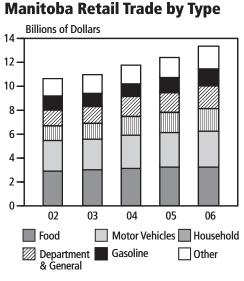
Winnipeg's sustained real estate boom continued to boost retail sales. WinnipegREALTORS reported double-digit growth in the value of sales in five of the last six years. Housing starts increased and greater activity in the new and resale housing market promoted strong increases in sales of household goods. Last year, home centre and hardware store sales were up 16.9% and furniture store sales increased 14.9%. Sales at department and general merchandise stores rose 11.6%. These three sectors generate more than a fifth of all retail sales.

Motor vehicles sales continued to accelerate in 2006 with an overall increase of 4.5%. Sales of pre-owned vehicles and recreational vehicles increased by 35.4%, while sales of new motor vehicles fell slightly by 1.2% in 2006. Manitoba new auto dealers sold 45,924 vehicles in 2006, of which trucks, minivans and SUVs accounted for 57% or 26,188 units, and passenger vehicles accounted for 43% or 19,736 units. These sales comprise more than a fifth of all Manitoba retail sales. High gas prices also contributed to retail sales as gasoline sales were up 8.4%

The largest decline among retail categories came from specialized building material and garden stores, with sales falling 20.7%. In 2005, these sales were up 27.9% over the previous year. Food and beverage sales, which account for almost a quarter of all Manitoba retail sales, were largely flat, up by 0.1%.

#### Chart 19 Manitoba Average Residential Resale Price





Source: Statistics Canada

# "Manitoba offers visitors a broad range of activities from fishing and hunting to week-long festivals."

Winnipeg Airports Authority Leading Transportation Innovation & Growth February 2006

#### Tourism

Manitoba's tourism activity growth outpaced the national average in 2006. A combination of favourable weather, a strong economy and record attendances at festivals and events mitigated the pressure from sustained high gasoline prices, the appreciation of the Canadian dollar and security concerns.

Most of Manitoba's popular festivals and events reported successes in 2006. The Winnipeg Fringe Festival attained a new record at 69,320 paid attendance for the 12-day event. The Winnipeg Folk Festival also reported a record of 45,190 concert-goers. The Canadian Football League's Grey Cup championship game in Winnipeg sold 44,786 tickets.

The total number of non-resident travellers entering the country in Manitoba fell 6.1%, compared to a 7.7% drop for Canada overall. The number of U.S. travelers to Manitoba fell 6.3% and declined 8.8% nationwide.

Trips to Manitoba by non-residents that were one or more nights in duration were down 4.3%. Same-day trips were particularly weak, down 8.3%. Response to gas prices and the exchange rate were factors, as gas prices were highest through the summer months last year and the Canadian dollar gained 6.9% relative to the U.S. dollar in 2006 on an annual average basis.

Passenger traffic at Winnipeg's James Armstrong Richardson International Airport was up 4.8% in 2006 after increasing 6.5% in 2005. Business travel supported increased passenger traffic.

2006 was a banner year for the number of conventions held in Winnipeg, up 4.3%. The scale of the conventions was also much larger than in 2005, as the number of delegates leapt 16.8%. The Winnipeg Convention Centre, the main convention facility in the province, was voted by convention planners as one of the favourite meetings facilities in Canada in 2006.

Winnipeg hotel occupancy rates rose to 65% in 2006, despite the lower traffic from the U.S. Increased domestic and overseas travel in Manitoba appear to have offset lower U.S. volumes. PKF Consulting, a hospitality and tourism industry consulting firm, commented that Winnipeg was one of the best-performing markets for revenue growth in its market outlook.

Overall, the Manitoba tourism season was solid in 2006, according to the Conference Board of Canada, attributed to good weather, pent-up demand, an enhanced provincial marketing strategy and a strong economy. The Conference Board estimates total domestic and foreign overnight trips increased 2.0% last year. In its outlook for 2007, the Conference Board projects travel to Manitoba will increase 2.3% overall, owing to an improving Ontario economy, more business travel, lower gasoline prices and higher wages. However, the Board projects that U.S. visits will fall 1.9% in 2007, the third consecutive decline, due to new passport regulations.

#### Labour Market

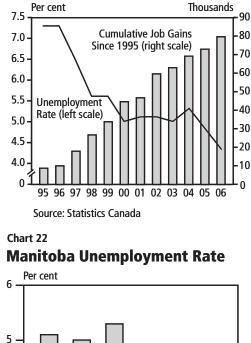
In 2006, the Manitoba economy generated 6,700 jobs, raising employment to a record 587,000. The rate of job creation doubled last year to 1.2% from 0.6% in 2005, with the private sector accounting for almost nine in ten jobs created. Private sector employment increased by 5,900, while public sector employment increased by 800. Since 1995, Manitoba has created a cumulative 79,300 jobs (see Chart 21).

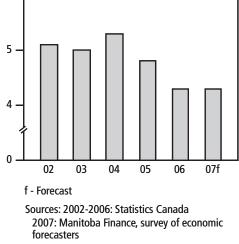
With employment growth outstripping growth in labour supply, unemployment declined to 26,500, the lowest level in 29 years. Compared to the peak of 51,800 in 1993, the number of unemployed has almost been cut in half.

In the last two years, Manitoba employers generated 10,400 new jobs, all in the private sector, and reduced the number of unemployed by 5,800. Annual employment and labour force levels have consistently grown in the province over the last fourteen years, matching Ontario and Alberta for the longest-lasting growth cycle.

Strong labour market conditions helped reduce the unemployment rate to 4.3% in 2006, the lowest level since 1974 and the second-lowest rate among provinces (see Chart 22). Manitoba had the lowest or the secondlowest annual unemployment rate in Canada since 1998. The national unemployment rate was 6.3% in 2006.

#### Chart 21 Manitoba Employment and Unemployment Rate

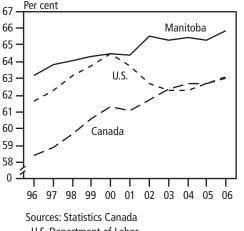




#### Labour Market Definitions

- **Employment:** Non-institutionalized, civilian working-age adults (15 years of age and older) that work at paid jobs plus those who are self-employed, including unpaid workers who contribute to the family's farm or other business.
- **Unemployment:** People without work who are available for work and are actively looking for jobs, or have looked for work in the previous four weeks.
- Labour Force: The sum of employment and unemployment. Excludes those who are not employed and who are not looking for work.
- Participation Rate: Labour Force as a percentage of working-age adults.
- Employment Rate: Employment as a percentage of working-age adults.

#### Chart 23 Manitoba, Canada and U.S. Employment Rates



U.S. Department of Labor

Since 1993, the number of unemployed has almost been cut in half. With Manitobans encouraged by employment opportunities in the province, the employment rate set a new record at 65.8% in 2006 (see Chart 23). Similarly, the labour force participation rate nudged up last year, indicating a larger portion of the working-age population is entering the labour market. This bodes well for future growth in the province and instills employers with confidence in the labour market.

Almost all Manitoba regions experienced a reduction in the number of unemployed last year. In growth rate terms, the Interlake (-43.5%) and the North Central region (-40.0%) reported solid declines in the number of unemployed. Winnipeg, with the largest labour market in the province, reduced its level of unemployed by 2.2% in 2006.

Buoyed by high commodity prices, employment in Manitoba's mining, forestry and fishing sector grew 9.9%. Strong employment gains were also posted in the wholesale and retail trade sector (8.3%) and construction (6.1%). The largest losses are reported in the utilities sector (-18.4%) and business, building and other support services (-7.0%).

Manitoba Finance's survey of economic forecasters shows the projected annual employment growth in 2007 at 1.0%, just below Canada and tied for fourth among provinces. The unemployment rate is forecast to remain at 4.3% in 2007 and increase slightly to 4.4% in 2008 as the labour force expands.

Manituda S I		e Stati	siics, 2000				
Economic Region	Working Age Population	Labour Force	Employment	Unemployment	Unemployment Rate	Participation Rate	Employment Rate
		(	Thousands)			(%)	
Southeast	74.7	53.0	50.9	2.1	4.0	71.0	68.1
South Central	42.4	27.6	26.9	0.8	2.9	65.1	63.4
Southwest	81.8	53.4	51.2	2.2	4.1	65.3	62.6
North Central	35.5	22.9	22.3	0.6	2.6	64.5	62.8
Winnipeg	528.9	368.8	351.2	17.7	4.8	69.7	66.4
Interlake	68.6	46.5	45.2	1.3	2.8	67.8	65.9
Parklands & North	60.1	41.2	39.3	1.9	4.6	68.6	65.4
Manitoba	892.0	613.5	587.0	26.5	4.3	68.8	65.8

#### Manitoba's Labour Force Statistics, 2006

Source: Statistics Canada, Labour Force Survey (LFS)

LFS does not include persons on reserves, members of the armed forces and people living in institutions (penal institutions, hospitals, nursing homes).

LFS totals may not add due to rounding.

#### Investment

Capital investment remains extremely buoyant in Manitoba. Statistics Canada's Survey of Private and Public Investment Intentions reports capital investment in Manitoba is expected to expand by 11.3% in 2007 (see Chart 24). This is the second-highest increase among provinces and more than twice the national increase of 4.6%. Capital spending is forecast to increase to a record \$8.7 billion this year, up \$880 million after a \$971 million increase in 2006.

Led by a 42.1% increase in the transportation and warehousing sector (primarily the Winnipeg airport redevelopment) and a 37.9% increase in the wholesale trade sector, investment in construction is projected to grow by 13.7% in 2007.

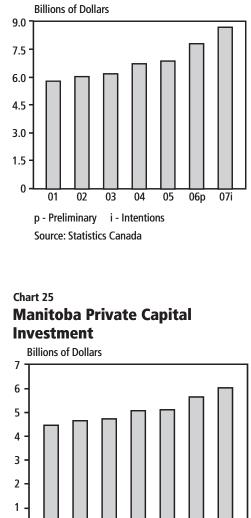
Consistent with the significant increase in construction, the strong Canadian dollar, tight labour market and high commodity prices, machinery and equipment purchases are expected to grow by 7.6% in 2007. Machinery and equipment investment in the mining and oil and gas extraction sector is expected to increase by 63.3% in 2007. Machinery and equipment upgrades in public administration are projected to increase by 56.6% and by 44.9% in the manufacturing sector.

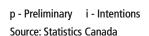
The outlook for capital investment in Manitoba beyond 2007 remains positive. The Conference Board of Canada projects capital investment to grow by 9.7% in 2008. Manitoba's investment profile is expected to be the second highest among provinces in 2008. The three-year growth for capital spending from 2006 to 2008 is estimated at 36.6%, the best performance in Canada and slightly above Alberta's 36.1%.

In 2006, Manitoba's total capital investment increased 14.2%, second highest among provinces. Private capital investment grew 11.0% (see Chart 25), while public investment grew 23.4%. Both public and private investment growth were considerably higher than for Canada overall.

Investment in construction increased by 21.4% in 2006. Combined with the intentions for 2007, investments in structures should increase by 38.1% over two years, the best growth among provinces. Machinery and equipment investment increased by 5.0% in 2006. In 2006, non-residential building permits issued in Manitoba jumped 27% to \$550 million. Industrial building permits increased by 68%, while commercial permits rose 3%. Government and institutional building permits increased by 66% in 2006.

#### Chart 24 Manitoba Total Capital Investment





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01

Chart 26 Share of Domestic and Foreign Investment in Manitoba, 2006 Per cent Total Machinery & Equipment Construction 25 50 75 n 100 Foreign Domestic Investment Investment

Source: Statistics Canada

The three-year growth for capital spending in Manitoba is estimated to be the best performance in Canada. According to Statistics Canada, about 16% of capital investments in Manitoba last year were made by foreign firms (see Chart 26), two-thirds of which are from the U.S.

There are several factors motivating strong capital spending in Manitoba. These include robust domestic demand fueled by continued population growth, rising personal incomes and record corporate profits. Record- or near-record-high commodity prices have revived several business and mining projects and have generated significant mineral exploration activity and other commercial ventures. The relatively low land and energy costs in Manitoba contribute to a higher rate of return on equity from commercial projects built in the province. The recent rise in the Canadian dollar has provided a strong incentive for business to import productivity-enhancing machinery and equipment.

Several major capital projects either have just been completed, are under way or are planned. Examples include:

- Winpak Ltd. will spend \$47 million over a three-year period to improve their 10 plastic packaging plants located across North America. Expansion of the 400,000-square-foot Winnipeg location began in 2006.
- Manitoba Hydro is taking initial steps to facilitate the construction of the Conawapa Generating Station. With a net capacity of 1,250 MW, the \$5 billion Conawapa Station will be Manitoba's largest hydro-electric project. The project will create about 13,000 person years of direct and indirect employment over its eight-year construction period. The Conawapa site is located in northern Manitoba on the Nelson River, about 90 kilometres downstream from Gillam.
- Construction of the **Wuskwatim Generating Project** began in August 2006 with work on an access road to the site of the future generating station. Construction of the \$1.3 billion generating facility is forecast to take approximately six years. Depending upon the season and construction phase, the workforce will range from 140-540 persons at any given time.
- Winnipeg Airports Authority work is under way on a major capital project to upgrade the international airport facilities, representing an investment of more than \$580 million. The completion of a new terminal building and other airport infrastructure is expected in 2009 and the project's parkade is now open.
- Four Points Sheraton at the Richardson International Airport will undergo a \$10 million expansion and renovation to accommodate growing demand. The project will add about 72 new rooms to the existing 132-room hotel and will allow for a larger banquet facility and new meeting rooms.

- The Province of Manitoba announced additional funding of \$50 million over the next two years for Winnipeg's streets and bicycle routes. The City of Winnipeg will be able to incorporate the additional funding into the plans for the upcoming 2007 construction season.
- Shape Foods Inc. plans to build a \$30 million facility in Brandon to produce natural flax oil and meal (Omega-3). The facility would be the first of its kind in North America. Natural flax oil and meal are believed to reduce the risk of heart attacks and strokes. Within five years the facility will require about 70,000 acres of flax and generate \$3.8 million in annual payroll.
- Construction on the new **Siemens Institute for Advanced Medicine** will begin in mid 2007. The cost of the new 100,000-square-foot structure is estimated at \$35 million. The Institute will be built adjacent to the Health Sciences Centre in Winnipeg and will become a global centre of excellence in the development of advanced medical technology. When fully operational in 2009, it will employ about 300 people. The Institute will feature four surgical research centres integrated with the hospital's new trauma centre operating rooms, biomedical engineering labs, clinical trial ward and neuroscience research laboratory.
- **Canad Inns** has proposed building a 19-storey hotel adjacent to the Health Sciences Centre at a cost of \$25 million. The hotel provides a unique opportunity by linking accommodation services adjacent to a major health care facility which includes the new Siemens Institute for Advanced Medicine. By facilitating visiting doctors and researchers, the hotel hopes to boost Winnipeg's reputation as a world class biotechnology and life sciences centre. The hotel will also accommodate families of patients from rural and remote areas. Construction is expected to start in the spring of 2007 and finish in 2008.
- Construction is under way on the \$660 million **Red River Floodway Expansion**. The project will more than double the size of the floodway to protect Winnipeg from a one-in-700-year-level flood. Completion of the project is expected in 2010 and will generate approximately 1,000 jobs over the course of the project.
- Rona Inc. is planning to increase the number of retail stores in the province. By 2009, Rona hopes to have 25 retail stores in Manitoba, 15 more than the existing stores they currently manage. Most of the additional stores are slated to be built in rural centres. Rona's latest retail store opened last summer.

"The construction sector will be the main growth driver for the goods-producing industries over the next two years, due to strong business and public investment."

Conference Board of Canada Winter Provincial Forecast February 2007 "Non-residential construction sites in Manitoba are experiencing the fastest growth among the provinces."

> Global Insight Economic Outlook – Provinces Overview November 2006

- **BMO Bank of Montreal** is investing \$5.1 million in 2007 and \$5.3 million in 2008 to renovate existing branches and build a new one in south Winnipeg. The bank will also update existing ATMs and increase the number of employees by about 10%.
- Fairview Corporation Ltd. announced a \$30 million, 20,000-squarefoot expansion to the Polo Park Shopping Centre, the largest shopping mall in Winnipeg. Construction began in January and will be completed by fall of 2007.
- The University of Manitoba has begun construction on the Apotex Centre, a new pharmacy building at the Bannatyne Campus. The new 70,000-square-foot building will cost \$17 million and include a new stateof-the-art laboratory space, lecture theatres and research space. The new facility will double the current building's teaching and research capacity.
- The University of Winnipeg is building a new three-storey science building near its downtown campus. The new complex will house the biology, chemistry and environment studies departments and is expected to open in 2009. The building design incorporates innovative technologies for heating, air conditioning, lighting and renewable construction materials. The project is estimated to cost \$30 million.
- Sharon Home's Simkin Centre has started a \$30 million expansion at the non-profit personal care home. The expansion will increase the number of personal care beds and add a new kitchen facility. Construction is expected to be completed in early 2008.
- West Kildonan Collegiate has started construction on a new 100,000-square-foot, \$17.7 million building in Winnipeg. The new school, a few blocks north of the existing school, will feature a number of specialty classrooms for science and computer labs, graphics/drafting and electronics, as well as a 300-seat theatre.
- **Husky Energy** is constructing a new \$145 million ethanol plant at its existing site in Minnedosa. The new facility would utilize 350,000 tonnes of wheat per year to produce about 130 million litres of ethanol annually. The plant will be operational in 2007.
- **Crowflight Minerals Inc.** will spend \$66 million over the next 12 to 18 months to develop a new nickel mine at Bucko Lake near Thompson. The mine should be operational by early 2008 and is expected to produce 12.5 million pounds of nickel annually, while employing between 60 and 100 people.
- HudBay Minerals Inc. announced plans to spend a total of \$34.5 million next year on mining exploration. The majority will be spent in the Flin Flon

Greenstone Belt. The company plans to spend \$26 million in Manitoba on early-stage exploration and another \$8.5 million on later-stage activities at its Bur mineral deposit near Snow Lake.

- **CVRD Inco Ltd.** is spending \$135 million in capital projects in 2007. Investments include an environmental project to capture dust in the smelter, smelter modernization, continued mine development and various other projects across its mines and processing plants.
- The Province of Manitoba and the Victoria General Hospital Foundation are investing more than \$21.5 million in the construction of a new oncology department and redevelopment and expansion of the emergency department at the hospital. The Province is investing \$13 million while the Victoria General Hospital Foundation is committing an additional \$8.5 million.
- Hecla Oasis Resort, Spa and Golf Course is currently being redeveloped with a \$15 million investment by the Paletta Group. The investment includes construction of 30 additional guest rooms and suites, a health spa, a wellness centre and an indoor waterslide park.

#### Foreign Markets

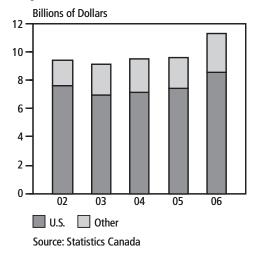
Manitoba's export performance was the best among provinces, exceeding the second-highest province by a large margin. The value of Manitoba's foreign merchandise exports increased 17.2% to \$11.3 billion in 2006 (see Chart 27). Canada's total exports were up slightly at 0.5%. Geographically, strength in Manitoba foreign exports was balanced, with both U.S. and non-U.S. markets growing significantly. Gains were largely concentrated in primary industries.

Manitoba's exports to the U.S., which accounted for about three-fourths of total foreign merchandise exports last year, grew 15.1% in 2006, while Canada's U.S. exports declined 2.1%. More than half of Manitoba's exports to the U.S. were destined for mid-western states. Although the Canadian dollar appreciated against the U.S. dollar last year, a full year of cattle exports and high commodity prices contributed to healthy growth in primary industry exports.

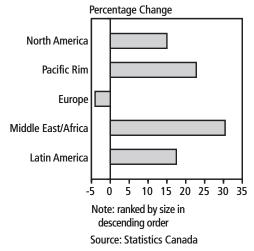
Manitoba's exports to non-U.S. destinations jumped 24.4% last year to \$2.7 billion, with major increases to Taiwan, Hong Kong, China and Mexico (see Chart 28). The largest improvement came from a four-fold increase in exports to India. For Canada overall, exports to non-U.S. markets were up 14.3%.

Though primary industries account for a small proportion of Manitoba's economy, their exports accounted for most of the improvement in foreign

#### Chart 27 Manitoba Foreign Merchandise Exports



#### Chart 28 Manitoba Foreign Exports By Region, 2006



# Manitoba Foreign Exports

BY INDUSTRY	2002	2003	2004	2005	2006р	2006 Share
		(N	lillions of Dollars	)		(%)
Manufacturing						
Primary Metals	847.1	870.2	963.0	920.2	1,624.8	14.3
Transportation Equipment	944.9	878.4	932.2	1,007.2	1,070.1	9.4
Food	1,058.6	1,085.7	1,195.6	1,083.5	1,050.0	9.3
Chemical Products	396.3	459.7	457.7	459.9	955.3	8.4
Machinery	679.8	620.8	728.7	777.2	746.2	6.6
Wood	573.3	553.0	638.4	623.0	502.5	4.4
Paper	267.1	298.6	300.5	294.2	268.1	2.4
Plastics	221.4	229.1	233.9	242.3	248.4	2.2
Electrical and Electronic	188.2	187.9	192.4	238.2	220.0	1.9
Printing	195.2	182.7	183.9	189.4	186.7	1.6
Fabricated Metals	119.2	116.2	130.8	163.1	156.9	1.4
Petroleum and Coal	135.4	186.1	166.4	97.9	91.2	0.8
Furniture and Fixtures	166.8	125.2	111.1	94.9	76.2	0.7
Clothing and Textiles	145.2	122.4	99.0	74.8	65.6	0.6
Other Manufacturing	164.5	142.7	166.6	148.5	147.8	1.3
Total Manufacturing	6,103.0	6,058.6	6,500.3	6,414.4	7,409.8	65.3
Agriculture	1,838.9	2,072.1	1,960.0	1,719.4	2,065.6	18.2
Electricity	390.5	263.7	379.7	572.1	648.0	5.7
Other Primary	792.3	520.1	431.1	596.8	817.1	7.2
Other Exports	279.5	279.7	322.7	376.0	402.4	3.5
Total Exports	9,404.3	9,194.2	9,593.9	9,678.7	11,343.0	100.0
BY DESTINATION						
United States	7,604.7	6,986.3	7,155.1	7,470.7	8,596.0	75.8
Japan	475.0	508.0	455.0	476.5	469.2	4.1
China	79.5	157.5	413.9	230.6	348.5	3.1
Mexico	148.0	204.6	255.0	176.2	208.9	1.8
Hong Kong	112.1	130.8	171.7	129.8	204.2	1.8
Taiwan	55.8	54.9	61.8	60.5	96.1	0.8
Belgium	117.9	115.0	74.7	87.4	92.3	0.8
South Korea	43.9	43.3	45.9	90.8	80.4	0.7
India	20.5	26.2	19.6	18.3	79.0	0.7
United Kingdom	72.7	70.8	62.6	83.5	76.9	0.7
Other countries	674.1	896.7	878.7	854.3	1,091.6	9.6
Total Exports	9,404.3	9,194.2	9,593.9	9,678.7	11,343.0	100.0

Note: Totals may not add due to rounding. Source: Manitoba Bureau of Statistics exports in 2006. Leading the way were exports of metals and oil, cattle, and grains and oilseeds.

Outside of primary goods and related manufacturing, only chemical and chemical products posted a significant gain, driven by a four-fold surge in pharmaceuticals and medicines.

For the majority of industries within the manufacturing sector, gains and losses were relatively modest. The exception was engineered wood products, where exports declined because of negative developments in the oriented strand board and strawboard manufacturing industry.

The hog industry, including live hog production and related pork processing, also experienced a substantial decline in exports. Lower prices for hogs and pork products through the first half of last year resulted in a substantial 10.5% decline in the value of hog exports. Prior to last year, industry exports had been up 19% on an annual average basis for three years.

The outlook for Manitoba exports in 2007 is for modest growth. In part, a weaker U.S. economic outlook combined with stable or lower prices for primary goods is expected to temper foreign export growth this year. If prices for metals and oil decline, Manitoba could see a drop in its value of exports. Recently, strong prices for grains, oilseeds and cattle have buoyed optimism for these sectors. Continued positive results, in terms of prices and the size of the 2006 crop, could offset risks of weaker metal and oil prices.

#### Population

On July 1, 2006, Manitoba's population was estimated at 1,177,765 persons, up 0.3% or 3,617 persons from July 2005 (see Chart 29). While population data is released quarterly, the July 1, 2006 estimate is considered the "official annual" population for the year. Manitoba's 2006 population growth was fifth highest among provinces. Several provinces recorded population declines last year, including Newfoundland and Labrador, Nova Scotia, New Brunswick and Saskatchewan.

The latest quarterly estimate for January 1, 2007, shows continued growth in Manitoba's population to 1,180,004 persons, an increase of 2,239 persons from July 2006. For the year ending on January 1, 2007, population increased by 0.5% or 5,351 persons. From January 2006 to January 2007, Manitoba gained a record 8,663 persons through net international inmigration and 3,748 persons through net natural increase (births less deaths). Manitoba also gained 770 persons through movement of nonpermanent residents and Canadian citizens traveling abroad. "Led by a strong performance in agri-food and industrial goods, Manitoba's export growth is among Canada's best."

Export Development Canada November 2006

#### Chart 29 Manitoba Population, 1996 to 2006

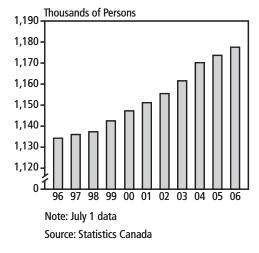
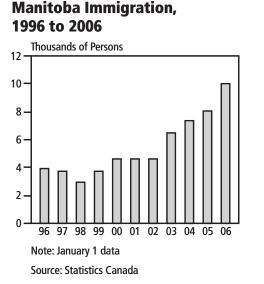


Chart 30



Manitoba has been successful in attracting international immigrants, setting new records for the number of international migrants entering the province annually. The loss through net interprovincial migration decreased significantly in 2006 to 7,830 persons from 9,880 persons in 2005. In the last two years, the booming Alberta economy has been the destination of choice for most migrants, not only from Manitoba but from all regions of Canada. Every province lost population to Alberta in 2006. However, the pace of Manitoba's interprovincial migration appears to be slowing, suggesting that individuals may be relatively less likely to move to Alberta in the future.

Manitoba has been successful in attracting international immigrants, setting new records for the number of international migrants entering the province annually. In 2006, Manitoba received 10,040 immigrants. Immigration has averaged 8,521 in the last three years, well above the previous five-year average of 4,817 persons (see Chart 30).

This sharp increase in immigration is largely attributable to the Manitoba Provincial Nominee Program (PNP), which facilitates visa and workpermit applications from skilled foreign workers and families. The PNP has achieved its primary objective, which was to raise Manitoba's share of national immigration to Manitoba's national population share, currently 3.6%. It has exceeded its goal as Manitoba's share of national immigration increased to 4.0% in 2006. The program has helped attract almost 37,000 immigrants over the past five years. A secondary goal for the program, announced in the Manitoba Speech from the Throne, is to increase the immigration target by 1,000 each year over the next ten years. Sustaining this increase will ensure a steady flow of new workers for the labour market and help expand the provincial economy. The success of Manitoba's PNP has made it a leader and a model for other provinces.

Natural increase (births minus deaths) was the second-largest contributor to population growth in 2006. Last year, there were 13,888 births and 10,140 deaths in the province, resulting in a net natural population increase of 3,748 persons. Due to the demographic profile, which includes the ageing "baby boom" generation, the pace of natural rate of population increase has gradually moderated over the 1990s. The rate has now stabilized with the "echo boom" generation entering the more fertile age cohort, higher immigration levels, and the introduction of more family supporting and sustaining programs and tax measures.

Manitoba Finance's survey of demographic forecasters shows that Manitoba's annual population growth is projected to increase over the medium term (2007 to 2012). The average annual growth from 2007 to 2009 is expected to be about 0.5%, increasing to 0.6% annual growth in subsequent years.

### HIGHER INCOMES

One of the principal benefits of a growing economy is growing incomes. Higher incomes support savings, investment, personal consumption and increased living standards.

Personal income and personal disposable income are two principal measures of overall economic well-being. Personal income includes wages and salaries, investment income and transfers from government (for example, employment insurance benefits and CPP income). Personal disposable income is defined as personal income less personal income taxes and social security program contributions. Broadly, personal disposable income is the income available to individuals after their personal taxes have been paid.

In 2006, Manitoba's income increased at its second-highest rate in 16 years. Personal income per capita grew 4.6% and disposable income rose 5.0% (see Chart 31). Income growth was supported by a sharp rebound in accrued farm income, from \$48 million in 2005 to \$267 million in 2006. Wages and salaries rose by 4.3% in 2006, the fifth consecutive year growth exceeded 4%. The growth in disposable income was buoyed by slower growth in personal income taxes.

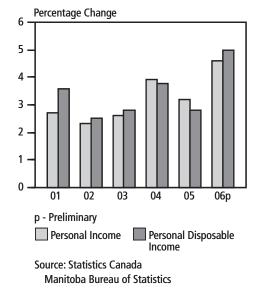
After adjusting for inflation, 'real' personal income in Manitoba continued to increase. On a per capita basis, 2006 estimates by the Manitoba Bureau of Statistics indicate real personal income increased by 2.6% and real personal disposable income rose by 3.0%.

Manitoba's real disposable income per capita has been on a steep upward trajectory since 1997, rising by 15% from \$17,109 (1997\$) to a record \$19,675 in 2006. Since 1981, when records started being kept, real disposable income has never been higher (see Chart 32).

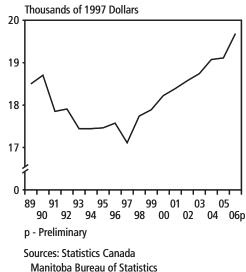
Looking ahead, Manitoba Finance's survey of private forecasters indicates a positive outlook for income in 2007 with Manitoba growth on par with the national forecast. Per capita disposable income is estimated to rise 2.9%, for both Manitoba and Canada. This year, real per capita personal disposable income for Manitobans is projected to rise 1.2%, close to the 1.4% forecast for Canada.

#### Chart 31

#### Manitoba's Personal Income Per Capita and Personal Disposable Income Per Capita, 2001 to 2006p

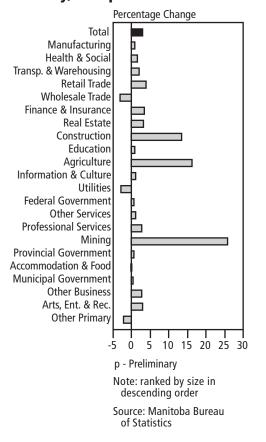


#### Chart 32 Manitoba Real Personal Disposable Income Per Capita, 1989 to 2006p



#### Chart 33

#### Manitoba Real Gross Domestic Product at Basic Prices by Industry, 2006p



### MANITOBA OUTLOOK

Manitoba Finance surveys several private economic forecasters regarding their outlook for the Manitoba economy. The survey is used to form a consensus medium-term economic outlook. Since last year's Budget, the forecasters have raised the growth expectations for real GDP in 2006 and 2007. The current forecast calls for acceleration of growth in 2006 to 3.1% (see Chart 33) followed by 2.6% in 2007 and a 2.9% increase in 2008. Economic expansion over all three years on average is well above the 10-year historical average of 2.6%.

The moderation of growth in 2007 reflects the private sector's view about a soft landing for the U.S. economy and corresponding slower growth in eastern Canada precipitated by higher interest rates, a stable and strong Canadian dollar, a significant slowdown in housing activity and completion of several major capital projects related to natural resources.

Manitoba's economic outlook in 2007 is expected to be characterized by continued strong growth in residential and non-residential construction, robust mining and exploration, a rebound in agriculture prices, increased electricity sales and modest growth in consumer spending.

Nominal GDP in Manitoba is projected to increase by 4.1% in 2007 and by 4.7% in 2008. This compares with projected national growth of 4.2% in 2007 and 5.1% in 2008. The factors driving nominal GDP growth in both Canada and Manitoba are strong growth in business profits and rising employment and farm incomes.

Manitoba's labour market is expected to remain healthy. The unemployment rate is expected to remain fairly stable at 4.3% in 2007 and 4.4% in 2008. The tight labour market conditions are expected to persist in the near term, with employment growth moderating to 1.0% in 2007 and 0.9% in 2008. Lower energy prices and improvements in global productivity are expected to slow Manitoba's consumer price inflation to 1.5% in 2007, from 1.9% in 2006.

Manitopa Outlook at a Glance	2006	2007f	2008f
		(% Change)	
Gross Domestic Product			
Real	3.1	2.6	2.9
Nominal	5.8	4.1	4.7
Employment	1.2	1.0	0.9
Unemployment Rate (%)	4.3	4.3	4.4
CPI	1.9	1.5	1.9

### Manitoba Outlook at a Glance

f - Forecast

Sources: 2006: Statistics Canada and Manitoba Bureau of Statistics preliminary 2007-2008: Manitoba Finance, survey of economic forecasters

### THE MANITOBA ECONOMY: STRENGTH IN DIVERSITY

Economic diversity with a broad industrial base is a key attribute of the Manitoba economy. Credit rating agencies and economic forecasters, including Moody's Investors Services, Standard and Poor's, Dominion Bond Rating Services, Conference Board of Canada and Canadian Imperial Bank of Commerce, have all cited diversity as one of the province's main economic assets.

The large and diverse structural base has provided Manitoba with stability and measured growth over the long term. Fluctuations of economic performance have been moderated as weaker sectors have been offset by stronger sectors.

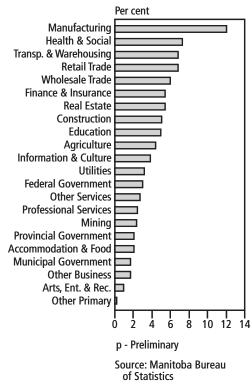
According to Statistics Canada's real GDP data, Manitoba is the most stable economy in Canada as measured by the least amount of variation in growth over a ten-year period. Manitoba is one of only three provinces that have generated fourteen consecutive years of positive employment growth. Among these, Manitoba's employment growth has been the most stable and consistent.

The province has developed a diverse economy partly because of its strategic location at the geographic centre of Canada. As a result, it has become a distribution centre for northwestern Ontario, western prairies and Nunavut. To the south, the mid-continent trade corridor has opened opportunities to promote economic development and trade with the United States and Mexico. To the north, the Port of Churchill has opened up a gateway linking the economy of central North America to key European, Mediterranean and African destinations.

The cost synergy arising from location advantages has helped the province develop a wide range of private, public and non-profit ventures. Likewise, the province's relatively affordable living and business costs have helped develop world-class products and services in traditional and emerging fields, including biotechnology and health science, aerospace, food processing, industrial chemicals, fertilizers, pharmaceuticals, metal smelting, crop and livestock agriculture, finance and insurance, and air, rail and trucking transportation. Manitoba is fortunate to have a variety of important sectors. These sectors are relatively evenly distributed among small, medium and large segments (see Chart 34).

Manufacturing, the largest sector, contributes around 12% of total GDP in the province. This sector itself is relatively diverse with several similarsized industries and two larger ones. Food processing and transportation equipment are the two largest industries in manufacturing. The food Manitoba is one of only three provinces that have generated fourteen consecutive years of positive employment growth. Among these, Manitoba's employment growth has been the most stable and consistent.

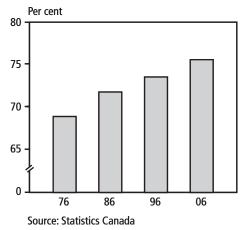
#### **Chart 34 Shares of Manitoba Gross Domestic Product, 2006p**



# "Broad-based strength is lifting provincial GDP growth."

Global Insight Economic Outlook – Provinces Overview November 2006

#### Chart 35 Manitoba Service Industries Share of Total Employment



processing industry comprises 200 food and beverage manufacturers. Most are small- and medium-sized enterprises. The largest firms operate in many countries in the meat, potato product, vegetable oil and baking sectors.

The transportation equipment industry includes two large bus manufacturers (Motor Coach Industries Limited and New Flyer Industries Limited) that produce buses for the North American market. Manitoba is also a major centre for the manufacture of aerospace equipment with Boeing Canada, Bristol Aerospace, Standard Aero and Air Canada Technical Services all located in Winnipeg.

Manitoba's agriculture sector is typically balanced between livestock and crop industries and produces a wide range of products. The construction sector has three similar-sized industries: repair and renovation, residential construction and non-residential construction. The mining sector, although concentrated in metal mining, is rapidly diversifying into oil extraction.

Finance, insurance and real estate sectors are evenly divided between finance and insurance industries and real estate industries. The finance and insurance sector is highlighted by Investors Group, the largest mutual fund distributor in Canada, Great West Life Assurance Company, the largest insurance provider in Canada, and National Leasing Group Incorporated, the largest independent Canadian leasing company. Manitoba's commercial banking sector includes the major Canadian chartered banks and 55 credit unions and seven caisses populaires with over 200 branches around the province.

Research and innovation have been pivotal in promoting the diversification and diffusion of new technologies and processes that have strengthened industry in the province. Manitoba is a centre of excellence in the areas of infectious disease identification and management. A number of major research establishments are located in Manitoba, including University of Manitoba, St. Boniface General Hospital Research Centre, Health Sciences Centre, Manitoba Institute for Cell Biology, Manitoba Institute of Child Health, Manitoba Clinic, Health Canada's National Microbiology Laboratory, the Canadian Food Inspection Agency's National Centre for Foreign Animal Disease, the National Research Council's Institute for Biodiagnostics, the Canadian Centre for Agri-food Research in Health and Medicine, Richardson Centre for Functional Foods and Nutraceuticals, Food Development Centre, and Agriculture and Agri-Food Canada's Cereal Research Centre and Cereal Grains Institute. The province is home to the only biopharmaceutical manufacturing activity in Western Canada - centred around Cangene Corporation, Apotex Fermentation, Biovail and Vita Health.

Manitoba's central location has helped broaden the transportation and warehousing sector by spawning an extensive intermodal transportation network. The province is a hub for several railway lines linking eastern and western Canada and linking the Port of Churchill to the U.S. and Mexico. The province has two class-one railways (CN and CP) that have intermodal terminals where both trailers and containers are transferred between the rail and road modes. Manitoba has about 5% of the national trucking business and is home to five of Canada's 25 largest employers in the trucking industry. The large volume of traffic at the Emerson border has made Manitoba the second-busiest international border crossing point in Western Canada. Winnipeg James Armstrong Richardson International Airport offers a variety of air passenger and cargo services, including international carriers, commuter airlines, jet freight carriers, fixed base operators and various charter operations.

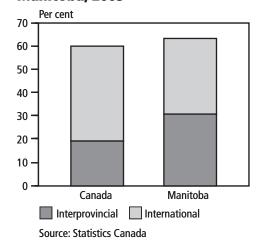
Manitoba's service sector encompasses a wide range of private and public sector activity. Service industries accounted for approximately 73% of Manitoba's economy in 2006, higher than the Canada average. The service sector accounts for about 76% of jobs in the province (see Chart 35).

Diversification has provided Manitoba business with a stable environment to flourish. Businesses can respond to research and development opportunities to achieve economies of scale, launch new products and expand into new markets. The gradual expansion of value-added production in the province can be best illustrated by the change in the shares of exports among major industries. In particular, manufacturing, which accounted for about 57% of Manitoba's foreign merchandise exports in 1996, has now increased to over 65%. New products, such as processed vegetables, prepared meats, pharmaceuticals and industrial chemicals have increased dramatically. This continual broadening and renewal of Manitoba's economic base offers the prospect for even greater stability and certainty for Manitobans in the future.

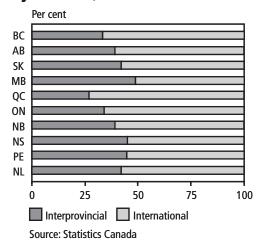
Manitoba's pattern of external trade also lends itself toward economic stability. Manitoba is the most export-oriented province in Canada. As indicated on Chart 36, exports account for 63.4% of the Manitoba economy, ahead of the national average of 60.3%. Moreover, the exports are evenly split between interprovincial and international destinations, with almost a 1:1 ratio, the most balanced among provinces (see Chart 37). Manitoba's balance between interprovincial and international exports provides a measure of stability during currency or financial market shocks and regional disparities in growth. It reduces Manitoba's exposure to sharp changes to external sales.

The merits of a diversified economic structure are clear: it provides a stabilizing mechanism during challenging economic conditions and an opportunity to expand into development of new goods and services in new domestic and global markets.

#### Chart 36 Ratio of Exports to Gross Domestic Product, Canada and Manitoba, 2005



#### Chart 37 Ratio of Interprovincial to International Exports, By Province, 2005



# **MANITOBA ECONOMIC STATISTICS, 2002 TO 2006**

	2002	2003	2004	2005	2006
		(Mi	llions of Dollars)		
SECTORS					
Farm Cash Receipts	3,848	3,606	3,853	3,799	3,706
Livestock	1,716	1,598	1,639	1,820	1,791
Crops	1,913	1,700	1,784	1,280	1,308
Direct Payments	219	308	430	699	608
Manufacturing Shipments	11,820	12,696	13,517	13,491	14,195
Mining	1,005	1,050	1,406	1,576	2,606
Electric Power Sales	1,361	1,282	1,435	1,797	1,697
Export Sales	472	380	488	818	702
Housing Starts (no. of units)	3,617	4,206	4,440	4,731	5,028
Retail Trade	10,570	10,953	11,692	12,441	13,177
FOREIGN EXPORTS					
Total Exports	9,404	9,194	9,594	9,679	11,343
U.S.	7,605	6,986	7,155	7,471	8,596
GROSS DOMESTIC PRODUCT					
Nominal	36,514	37,408	39,770	41,650	44,085
Real	33,617	34,079	34,934	35,898	37,010
BASE RATE WAGE SETTLEMENTS (%)					
Public	4.6	3.0	3.2	3.0	2.6
Private	1.3	0.6	1.6	2.5	2.9
Total	4.0	2.7	2.6	2.9	2.6
INVESTMENT					
Total	6,013	6,163	6,699	6,836	7,807
Private	4,649	4,721	5,082	5,091	5,653
Public	1,363	1,442	1,617	1,745	2,154
Non-residential	4,876	4,906	5,181	5,201	6,000
Housing	1,137	1,257	1,518	1,635	1,807
POPULATION					
July 1 (000's)	1,156	1,162	1,171	1,174	1,178
LABOUR MARKET Labour Force (000's)	597.8	600.3	608.9	609.4	613.5
Employment (000's)	567.2	570.3	576.6	580.3	587.0
Participation Rate (%)	69.0	68.7	69.1	68.6	68.8
Unemployment Rate (%)	5.1	5.0	5.3	4.8	4.3
	5.1	5.0	5.5	4.0	4.5
CONSUMER PRICE INDEX	400.4		(27.0	121.2	(22.5
(Index, 1992=100)	123.1	125.3	127.8	131.2	133.7
BANKRUPTCIES					
Business	249	243	178	149	160
Farm	41	28	27	26	36
Personal	2,437	2,609	2,339	2,507	2,254

Sources: Statistics Canada, Industry Canada and Manitoba Bureau of Statistics

2002	2003	2004	2005	2006	
	(Annual	Percentage Chan	ige)		
					SECTORS
4.0	-6.3	6.8	-1.4	-2.4	Farm Cash Receipts
-4.6	-6.9	2.6	11.0	-1.6	Livestock
25.9	-11.1	4.9	-28.2	2.1	Crops
-42.7	40.7	39.7	62.4	-13.0	Direct Payments
4.2	7.4	6.5	-0.2	5.2	Manufacturing Shipments
-1.5	4.5	34.0	12.1	65.3	Mining
-5.1	-5.8	11.9	25.2	-5.5	Electric Power Sales
-17.5	-19.4	28.3	67.5	-14.1	Export Sales
22.1	16.3	5.6	6.6	6.3	Housing Starts (no. of units)
7.0	3.6	6.7	6.4	6.0	Retail Trade
					FOREIGN EXPORTS
-1.8	-2.2	4.3	0.9	17.2	Total Exports
1.2	-8.1	2.4	4.4	15.1	U.S.
					GROSS DOMESTIC PRODUCT
3.9	2.4	6.3	4.7	5.8	Nominal
1.7	1.4	2.5	2.8	3.1	Real
					BASE RATE WAGE SETTLEMENTS (%)
-	-	-	-	-	Public
-	-	-	-	-	Private
-	-	-	-	-	Total
					INVESTMENT
3.6	2.5	8.7	2.0	14.2	Total
4.7	1.5	7.7	0.2	11.0	Private
0.2	5.8	12.1	7.9	23.4	Public
1.9	0.6	5.6	0.4	15.4	Non-residential
11.6	10.5	20.8	7.8	10.5	Housing
					POPULATION
0.4	0.5	0.7	0.3	0.3	July 1 (000's)
					LABOUR MARKET
2.4	0.4	1.4	0.1	0.7	Labour Force (000's)
2.3	0.5	1.1	0.6	1.2	Employment (000's)
-	-	-	-	-	Participation Rate (%)
-	-	-	-	-	Unemployment Rate (%)
					CONSUMER PRICE INDEX
1.6	1.8	2.0	2.7	1.9	(Index, 1992=100)
					BANKRUPTCIES
-17.0	-2.4	-26.7	-16.3	7.4	Business
115.8	-31.7	-3.6	-3.7	38.5	Farm
-2.2	7.1	-10.3	7.2	-10.1	Personal

#### APPENDIX: RESEARCH AND INNOVATION

Research and development (R&D) helps form the ideas and create the expertise that ultimately lead to innovation. Those in the forefront of innovation will be best positioned to develop higher value-added sectors and better-paid, knowledge-based jobs. In the absence of innovation, economies may lose competitive position and societies will not realize the full benefits that innovation can bring: higher productivity, rising incomes, a cleaner environment and sustainable development, improvements to personal health and wellness, and so forth.

In Manitoba, fostering R&D and innovation occurs through a partnership of industry, higher education, the non-profit sector and governments. With this partnership, investments in research, innovation and developing a skilled workforce for knowledge-based industries will continue to grow.

#### Manitoba's Research Environment

Statistics Canada estimates that total gross R&D expenditure in Manitoba in 2004 was \$519 million, up 14% from the 2003 level (see Chart 38). The 2004 gross expenditure on R&D in Manitoba was the highest level ever recorded. On a per capita basis, spending on R&D in Manitoba was \$445, up 16% from \$383 per person spent the previous year.

One principal measure of R&D effort is the ratio of R&D expenditure relative to GDP. In Manitoba, the level of gross expenditure on research and development is estimated to be equal to 1.3% of GDP in 2004, up slightly from 1.2% in 2003.

R&D activity is a major source of employment in the province. In 2004, Statistics Canada estimates that 3,860 Manitobans were involved in R&D work, up by 4% from the previous year. Higher education and non-profit organizations accounted for almost half this total, while the business sector accounted for 40% of R&D workers.

Industry is an important contributor to the overall research environment in Manitoba. Over 200 Manitoba businesses are involved in R&D programs in the province. Firms invested \$167 million in Manitoba R&D activities in 2004, about one-third of the total spending on R&D in the province. Virtually all of the R&D work funded by business was performed by business. About 1,500 employees in the business sector were involved in R&D work.

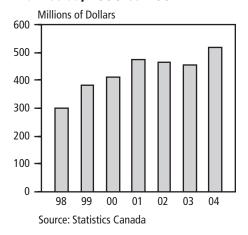
While R&D in the province is conducted across a variety of industries,

manufacturing, Manitoba's largest industry, accounted for approximately 60% of R&D activity in 2004. Sectors involved in research and innovation in Manitoba include pharmaceuticals, aerospace products and other transportation equipment, utilities and agriculture. The list of firms undertaking research in the province includes Medicure Inc., Cangene Corporation, Monsanto Canada, Brett-Young Seeds, New Flyer Industries and Bristol Aerospace.

One of Manitoba's widely recognized research strengths is in the fast-growing life sciences sector. The province is home to about 40 life sciences companies employing about 4,000 people.

According to Statistics Canada, Manitoba's biotechnology R&D expenditures increased to \$84 million in 2005, a 50% increase from 2003. Recent expansions by two companies active in biotechnology, Cangene Corporation and Biovail, have

#### Chart 38 Total R&D Spending in Manitoba, 1998 to 2004



helped enhance Manitoba's reputation for success in life sciences activity. In 2006 alone, Cangene Corporation received orders of over \$500 million from the U.S. government for biodefense-related treatments.

Manitoba is also home to a number of major public R&D facilities. These include the University of Manitoba, the St. Boniface General Hospital Research Centre, the Manitoba Institute of Cell Biology, the Richardson Centre for Functional Foods and Nutraceuticals, the Canadian Science Centre for Human and Animal Health, the National Research Council's Institute for Biodiagnostics, the Composites Innovation Centre, the Industrial Technology

# "Manitoba features one of the fastest growing biotechnology sectors in Canada."

Provincial Trends Scotiabank Group March 2007

Centre, TRLabs, the Food Development Centre, the Manitoba Institute of Child Health, Agriculture and Agri-Food Canada's Cereal Research Centre, Canadian International Grains Institute and the Prairie Agricultural Machinery Institute.

Construction on the new Siemens Institute for Advanced Medicine will begin in mid 2007. The cost of the new 100,000-square-foot structure is estimated at \$35 million. The Institute will be built adjacent to the Health Sciences Centre in Winnipeg and will become a global centre of excellence in the development of advanced medical technology. When fully operational in 2009, the centre will employ about 300 people. Features of the centre include four surgical research centres integrated with the hospital's new trauma centre operating rooms, biomedical engineering labs, a clinical trial ward and a laboratory to support neurosciences research.

The federal government continues to have a major presence in science and technology funding in Canada. In Manitoba, federal funding for R&D was estimated at \$148 million for 2004, about 3.2% of the national total. This is below Manitoba's share of population. The Province has encouraged the federal government to increase funding to Manitoba to correct this deficiency.

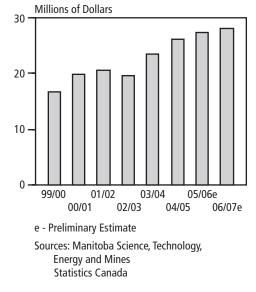
The federal government supports science activities performed by federal departments and agencies, universities, businesses and

other organizations. Federal departments and agencies conducting research in Manitoba include Agriculture and Agri-Food Canada, Environment Canada, Fisheries and Oceans, Health Canada and the National Research Council. Half of the federal expenditures on R&D in Manitoba are for work carried out by these departments and agencies – \$73 million in 2004 – while a roughly equal amount of the federally funded R&D is conducted by universities and business.

#### **Provincial Support for Research and Innovation**

The Province supports research and innovation both through direct spending programs and through the Manitoba Research and Development Tax Credit. In 2006/07, direct expenditure on R&D by the provincial government is estimated at \$28.1 million, up 2.6% from 2005/06 (see Chart 39). Most of the provincial government's direct expenditure commitment to R&D is provided to universities, hospitals and other health organizations, including the Manitoba Health Research Council. The balance of provincial R&D expenditure supports the work of government departments, private companies and others.

#### Chart 39 Provincial Government Expenditure on R&D 1999/2000 - 2006/2007e



Manitoba's Research and Development Tax Credit encourages private sector R&D activity in Manitoba. The Tax Credit Program was established in 1992 and provides firms undertaking R&D in the province with substantial support for investment through a non-refundable credit for qualifying R&D expenditures. Budget 2006 boosted the credit rate to 20% of eligible expenditures from 15% (see "Manitoba Research and Development Tax Credit," page 39).

Manitoba partners with federal government research funding programs through the Manitoba Research and Innovation Fund (MRIF). The MRIF was established to assist in increasing the capabilities of Manitoba universities, colleges, hospitals and the not-for-profit sector to conduct scientific research and product development. The Fund also enhances the ability of Manitoba research institutions to attract and retain world-class researchers and technicians, and increases Manitoba's capacity to innovate through such means as supporting science awareness and technology commercialization.

This program, in part, leverages funds from outside sources, such as the Canada Foundation for Innovation, the Canadian Institutes of Health Research, the Regional Partnerships Program and the Networks of Centres of Excellence Program. In 2006/07, MRIF leveraged an estimated \$18.1 million from these and other public and private sources.

In 2006/07, numerous projects were funded through the MRIF, including several funded in partnership with the Canada Foundation for Innovation, which provides support for research infrastructure. The MRIF supported various research projects in several areas including infectious diseases, microelectronics and genomics. The table "Manitoba Research and Innovation Fund Project List, 2006/07" on page 35 lists of some of the projects funded last year.

As well as providing health research support through the various MRIF sub-component programs, Manitoba has implemented the Health Research Initiative. The objectives of the Initiative are to assist Manitoba's health research centres to increase R&D activities in Manitoba and facilitate sustained economic growth and the creation of high-quality jobs. The program is an incentive-based initiative with the distribution of funds tied to the amount of research revenue each Manitoba health research centre attracts from private industry and from non-governmental granting agencies outside the province. In 2006/07, the Health Research Initiative provided \$2 million to support operating costs for five health research centres in Manitoba.

In 2006/07, the Province provided support grants of almost \$2 million each to the Manitoba Health Research Council (MHRC) and the Manitoba Centre for Health Policy (MCHP). The Council promotes and assists health sciences in Manitoba and advises the Ministers of Health and Science, Technology, Energy and Mines on health matters referred to the MHRC. The Council operates a number of funding programs including awards to post-doctoral and graduate students, PhD dissertation awards, and operating and establishment grants. MCHP is a research unit in the University of Manitoba's Faculty of Medicine. A team of about 50 staff provide population-based health services research and policy analysis to support health care decision makers and providers in offering the most effective and efficient services to maintain and improve the health of Manitobans.

The Government of Manitoba is also a partner with the federal government in the Networks of Centres of Excellence program. This program was established several years ago to support research at universities and hospitals in partnership with the private sector. Manitoba's objectives in developing the Manitoba Centres of Excellence Fund (MCEF) are to attract and maintain world-class R&D activity to Manitoba and to generate related spinoff benefits for local companies and non-profit institutions.

In 2006/07, 10 Networks of Centres of Excellence research programs at the University of Manitoba received support totaling \$656,000 through the MCEF. Grants were provided to research programs such as the Advanced Foods and Materials Network, Arctic Net, Intelligent Sensing for Innovative Structures Canada, the Canadian Arthritis Network, Mathematics of Information Technology and Complex Systems Network, and the Sustainable Forest Management Network.

Manitoba continues to support a number of major research initiatives in the province related to agriculture. Sponsored by the provincial and federal governments, the Agri-Food Research and Development Initiative funds research and development

Description	2006/0 TOTAL
CANADA FOUNDATION FOR INNOVATION	
Life and Environmental Sciences Research Laboratories	\$396,316
Integrated Tissue Imaging Lab	320,000
Aquatic & Riparian Ecosystem Toxicological Monitoring & Plant Process Monitoring Lab	109,165
Lab for Mechanistic Studies of Organometallic Reactions	100,000
Neuropsychology of Vision Perception and Action Lab	100,000
Advanced Blood-Brain Barrier Research Lab	100,000
Specialized Computing Cluster for Electronic Design Automation	100,000
Molecular Biology Lab for Research into Insect Reproduction and Development	100,000
Endocrine Control of Ion and Osmotic Balance in Primitive Fish	100,000
Laboratory for Agriculture and Forest Micrometeorology	99,690
Subatomics Physics Detector Lab	89,031
CANADA RESEARCH CHAIRS	
Infrastructure Support of the Proposed CRC Program in Applied Soil Ecology	125,000
Research Facility for the Interdisciplinary Study of Environment and Health Risk Communication	
Equipment for Lab Testing, Fibre Optic Sensing and Structural Health Monitoring	124,997
Airway Cell and Molecular Biology	124,842
Engineering Research Lab for Advanced Structural Engineering with Smart Materials & Structures	124,707
CANADIAN INSTITUTES FOR HEALTH RESEARCH	
CIHR Strategic Training Program grant	100,000
Host immune response to Chlamydia infection: molecular and cellular basis	55,766
Molecular analysis of leukocyte adhesion and migration	50,000
Impact of High Sucrose Diets	50,000
Structure-Function Relationships of Sodium-Calcium Exchangers	50,000
Modulation of Vascular Smooth Muscle Cell	50,000
Other Projects	371,858
GENOME CANADA	
Conditional Mouse Mutagenesis Project	240,000
Designing Oilseeds	150,000
OTHER	
Richardson Centre for Functional Foods and Nutraceuticals	2,375,000
Canadian Agri-Food Research in Medicine - Clinical Research Infrastructure	1,250,000
Clinical Skills Training and Surgical Simulation Centre	1,000,000
	400,000
Manitoba Centre for Health Policy Endowed Child Health Chair	
Manitoba Centre for Health Policy Endowed Child Health Chair Manitoba Centre for Health Policy	250,000

# Manitaba Pacaarch and Innovation Fund Project List 2006/07

aimed at enhancing diversification, improving techniques, creating value-added opportunities and expanding export capabilities in the province's large agrifood sector.

The Province supports a special operating agency, the Food Development Centre, to undertake R&D and related services to bring new Manitoba food products to market. Located in Portage la Prairie, the Centre provides support to clients in product development, food processing and packaging, and shelf life testing. The Centre completed a significant renovation and expansion in 2005, further supporting the diversification of the agrifood sector and moving more new products from the province into the national and international marketplaces.

Portage la Prairie is also home to the Prairie Agricultural Machinery Institute (PAMI) design, testing and development station. Established over 25 years ago, PAMI is jointly sponsored by the governments of Manitoba and Saskatchewan. PAMI undertakes approximately 100 projects annually for a wide range of clients, including equipment manufacturers, farm producers, commodity organizations and governments. The provincial governments provide financial support to the Institute, although PAMI has been a largely self-supporting research organization through fee-for-service arrangements.

Another special operating agency of the Manitoba government is the Industrial Technology Centre (ITC). ITC, located at the University of Manitoba's SMARTpark, facilitates technological improvements and innovation by providing advanced technical research and testing for a variety of manufacturers, inventors and other clients in a diverse range of products including aerospace, transportation, health, architecture and energy. Facilities and services include a calibration laboratory, noise and vibration analysis, mechanical testing, lottery ticket testing, advanced document examination and administrative support for product development and related activities. ITC operates a Virtual Reality Centre, which uses virtual modeling to allow businesses to realistically simulate new products before they are built. The ITC is the only such facility in Canada geared to addressing industry needs on a fee-for-service basis.

TRLabs, Canada's largest information and communications technology consortium, operates a research laboratory at SMARTpark. Established in 1994, the Winnipeg TRLabs specializes in data networking and health, as well as programs of research in technology for the home and wireless networking. TRLabs is supported by private industry and the provincial and federal governments.

Manitoba's information technology sector will be enhanced by the opening of the new Manitoba Media Centre. Announced in December 2006, the new \$20 million centre is a public-private partnership involving Linux Media Arts, local companies and the Manitoba government. The Centre's goals will include releasing own-source media distribution for the Linux operating system, developing and refining open source media management applications, and conducting R&D of open source media management and archiving tools. The Centre will also examine training opportunities for higher education students including tools for Aboriginal students to help them pursue business opportunities in the media industry.

Manitoba Hydro commits approximately \$5 million per annum to an R&D program to assist in providing higher system reliability, lower electricity rates, increased safety of the system infrastructure and improved customer quality of service. Some of this research is undertaken in-house. Other company-sponsored research is undertaken at universities and other external research facilities. Last year, Manitoba Hydro supported more than 100 individual research projects.

Manitoba Hydro also supports two research chairs: Natural Sciences and Engineering Research Council of Canada and the Industrial Research Chairs in the Faculty of Engineering at the University of Manitoba. Starting in 2005, the corporation is contributing approximately \$730,000 over five years to the Power System Simulation Research Chair and \$500,000 over five years to the Alternative Energy Research Chair. Manitoba Hydro also supports climate change research in the province including funding for a Climate Change Research Professor at the University of Winnipeg.

Manitoba Hydro operates the HVDC Research Centre. The Centre, established in 1981, conducts innovative research and development in HVDC and power electronic technologies, instrumentation, and simulation. The Centre has become a world leader in the technology of electric power system simulation, applied power systems analysis and related technologies.

#### **University of Manitoba**

Universities and other post-secondary institutions play a critical role in R&D activities. These institutions provide the knowledge and the skilled labour necessary for innovation and serve as incubators for new ideas in basic and applied research.

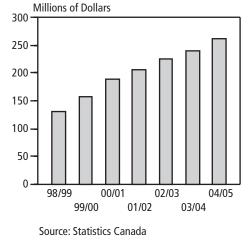
In Canada, higher education institutions account for about one-third of the R&D work performed. In Manitoba, the role of higher education is even more important as higher education (including related institutes, clinics and research stations) accounts for more than half of the R&D activity.

Statistics Canada estimates that R&D expenditure by Manitoba's higher education sector in 2004/05 was a record-high \$260.6 million, up from \$238.7 million in 2003/2004 (see Chart 40). Between 1998/99 and 2004/05, R&D expenditure in higher education in Manitoba doubled.

Natural sciences and engineering accounted for approximately 42% of 2004/05 R&D spending in higher education, health sciences for 35%, while social sciences accounted for the remaining 23%.

The University of Manitoba is one of Canada's major research universities. The University has enrolment of 28,000 students, with more than 5,000 academic and support staff. The University's reputation for outstanding research has earned it national and international recognition, and helped it to earn over \$145 million last year in external research funding. Many of the research projects conducted at the University involve collaboration and partnership with other higher education and research institutions, private firms, community organizations and governments. The University is home to more than 20 research centres and affiliated institutes ranging in scope from defense and security studies to cardiovascular sciences.





The University is an active participant in the national Networks of Centres of Excellence program. Currently, the University's researchers participate in 14 of 23 networks created under this program, which include the University as the network leader of Intelligent Sensing for Innovative Structures Canada, the national network focusing on "smart" civil infrastructure.

The University of Manitoba is currently home to 47 Canada Research Chairs, which are occupied by some of Canada's top scientists and scholars. The research programs of these chairs focus on such important fields as pharmaceutical sciences, neurosciences, endocrinology, environmental sustainability, material sciences and civil infrastructure. The University's life sciences research activities are further strengthened through active partnerships with several local health organizations, including CancerCare Manitoba, the Health Sciences Centre, St. Boniface General Hospital, the Manitoba Institute of Child Health, the Canadian Science Centre for Human and Animal Health, and the Institute of Biodiagnostics.

SMARTpark is a research park adjacent to the University of Manitoba. Established in 1999, SMARTpark brings together industry and the University of Manitoba to promote R&D and the development of knowledge-based industry. One of the key

UNIVERSITY OF MANITOBA National Centres Of Excellence Participation:						
• Intelligent Sensing for Innovative	• Automobile design and engineering	• Stroke research				
Structures (Leader)	• Design research	• Sustainable forest management				
<ul> <li>Advanced foods and materials</li> </ul>	•Mathematics of information	• Vaccines and immunotherapeutics				
• Allergy research	technology	• Water research				
• Arctic research	• Obesity research					
• Arthritis research	• Prion (BSE) research					

features of the park is its proximity and access to the extensive resources of the University. Currently, SMARTpark is home to 17 companies and almost 800 employees.

SMARTpark continues to grow. For example, in April 2006, Cangene Corporation completed a 40,000-square-foot expansion of its plasma fractionation facilities. In May, Richardson Centre for Functional Foods and Nutraceuticals officially opened its \$31 million facility. This Centre focuses on the research, development and testing of beneficial food supplements extracted from plants grown in the prairie region.

#### Manitoba Research and Development (R&D) Tax Credit

Manitoba's R&D tax credit provides support to firms conducting R&D activity in the province. Eligibility for the Manitoba credit is tied to the eligibility for the federal investment tax credit on qualifying R&D expenses and supplements the federal credit.

The federal and provincial R&D credits are activity based, and apply to all sectors and industries. Both current expenditures, which include researchers' salaries and the cost of materials, and prescribed capital expenditures, including machinery and equipment, are eligible expenses for purposes of Manitoba R&D tax credit amounts.

From its introduction in 1992 through to the 2005 taxation year (latest year for which taxation data is available), firms conducting R&D in Manitoba claimed \$128.1 million in provincial R&D tax credits.

Further details in respect of the Manitoba and federal Research and Development Tax Credit programs are available at <u>http://www.cra-arc.gc.ca/taxcredit/sred/menu-e.html</u>.

Over the years, studies by various agencies have repeatedly confirmed that Canada's income tax treatment of research is among the most generous in the world, especially when coupled with provincial incentives. The following table shows the after-tax cost associated with R&D current expenses for a large corporation and a small privately owned corporation, based on 2007 income tax rates.

	Large Corporation	Small Private Corporation
Eligible R&D expenditure	\$100.00	\$100.00
(less) Manitoba tax credit	20.00	20.00
(less) Federal tax credit	16.00	28.00
Deductible Amount	64.00	52.00
Tax Savings:		
Manitoba	8.96	1.56
Federal	14.16	6.82
Net after-tax cost	40.88	43.62

### After-Tax Cost of \$100 R&D Expenditure, 2007