

**Manitoba** 

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**Budget Paper A**

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**THE  
ECONOMY**

# THE ECONOMY

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## ■ CANADIAN ECONOMY

The Canadian economy grew 2.9% in 2005, the same rate as in 2004 (see Chart 1). Nominal GDP increased by 6.1%.

Although the economy continued its solid performance, growth was constrained by the appreciating Canadian currency relative to the United States dollar. While the Canadian dollar slipped in value against its U.S. counterpart through the first five months of 2005, it appreciated significantly through the latter half of the year. Overall, the Canadian dollar averaged US\$0.825 in 2005, an increase of 7.4% from the 2004 average of US\$0.768. The strong performance of the Canadian currency has continued into 2006, with the average exchange rate for February 2006 at US\$0.870 (see Chart 2). In early March, the dollar closed at \$0.8839, the highest close since December 1991.

The higher-valued Canadian dollar has intensified competitive pressure on Canadian firms as U.S. goods and services entering Canada become cheaper relative to domestically produced goods and services. Likewise, with a higher Canadian dollar, Canadian goods and services cost more in the U.S. market. Canada and the U.S. are each others' largest trading partner. Canadian exports to the U.S. account for 80% of Canada's merchandise exports and U.S. exports to Canada account for 25% of U.S. foreign exports.

There is reason to believe that many Canadian industries have made significant progress in adapting to the new exchange rate levels as export volumes have improved in the latter half of 2005 after stagnating through 2004 and the first half of 2005. However, it is too early to tell whether the rebound in exports will continue.

While the stronger dollar acted as a drag on Canadian economic growth last year, Canadian producers of primary products continued to enjoy strong market conditions. Helped by robust demand from China,

Chart 1

### Real Gross Domestic Product At Market Prices

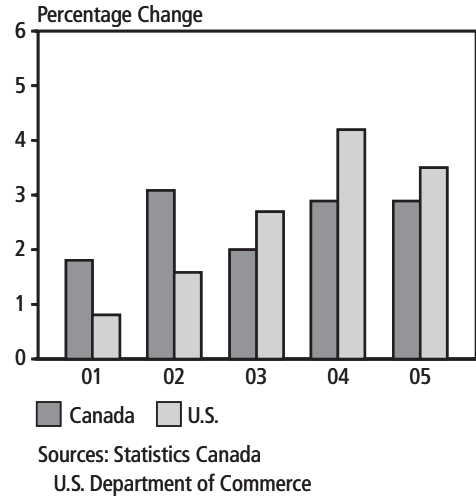
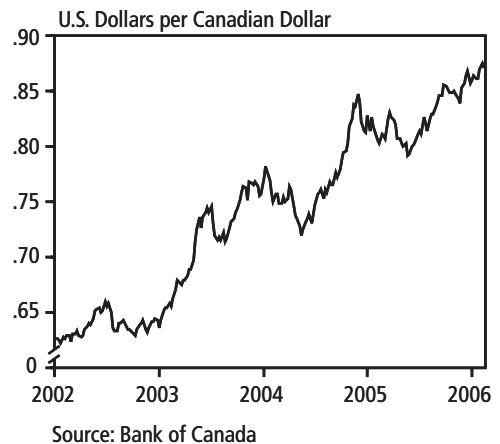


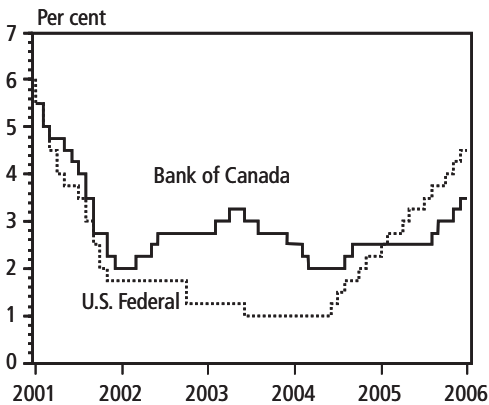
Chart 2

### Canada-U.S. Exchange Rate



*One of the principal developments for world economies last year was the significant jump in energy prices. Oil prices rose by a third over the course of 2005, while natural gas prices more than doubled.*

**Chart 3**  
**Canada and U.S. Interest Rates**



Source: Bank of Canada

recent prices for many base metals and other resource products came close to, or have surpassed, previous records.

One of the principal developments for world economies last year was the significant jump in energy prices. Oil prices rose by a third over the course of 2005, while natural gas prices more than doubled. These increases in energy prices pushed up the energy component of the Consumer Price Index (CPI), by 9.7% in 2005. This follows an increase of 6.8% in 2004. However, the 2005 rise in core CPI (excluding food and energy) remained relatively modest at 1.4%. This suggests that energy price increases are not yet being passed broadly through to core inflation. Forecasters believe that consumer price inflation will continue to remain moderate and below the mid-point of the Bank of Canada's 1% to 3% inflation target range for the next two years.

In the Bank of Canada's view, however, the Canadian economy is operating at or near its capacity, which could lead to inflationary pressure in the near future. This risk was magnified with the significant increases in energy prices. Therefore, in spite of the relatively low core inflation, the Bank of Canada continued to notch up interest rates in 2005. After holding rates constant through the first eight months of 2005, the Bank instituted four consecutive quarter-per cent increases in the overnight target rate between September 2005 and January 2006.

As well, the Federal Reserve in the United States continued to implement rate increases, extending the string of consecutive quarter-per-cent hikes to 14. In doing so, the Federal Reserve boosted the Federal Funds rate from 2.25% at the beginning of 2005 to 4.25% at the end of 2005. A further 25 basis point increase was implemented on January 31, 2006 (see Chart 3).

Canada's employment grew 1.4% in 2005, down from 1.8% posted in 2004. Full-time employment increased 1.6%. The public sector job creation

performance was significantly stronger than the private sector, with public employment increasing 2.6% while private employment grew 1.1%, the lowest annual increase in private sector jobs since 1993. This result reflects, in part, the continued weak performance of Canada's manufacturing employment; manufacturing posted a 3.7% decline in jobs last year, the weakest result since 1992. Manufacturing employment declined by over 100,000 jobs over the course of 2005.

While employment growth moderated last year, the low rate of labour force growth contributed to a tight labour market. Canada's labour force increased 0.9%, the lowest increase since 1995. The weaker labour force growth contributed to a decline in the unemployment rate, with unemployment averaging 6.8%, the lowest annual rate in over 30 years.

Private economic forecasters, surveyed by Manitoba Finance, project an average employment growth of 1.5% in 2006 and 1.3% in 2007. Similarly, the national unemployment rate will continue to improve, declining to 6.5% in 2006 and rising marginally to 6.6% in 2007. The Canadian labour market is expected to continue to be tight for the next two years.

Manitoba Finance's survey projects that Canada's real GDP will increase by 3.0% in 2006 and 2.8% in 2007, in line with the 2.9% increase recorded in 2005, reflecting a pattern of consistent long-term growth. Nominal GDP is expected to grow in 2006 and 2007 by 5.5% and 4.3%, respectively.

Considerable risks remain for the Canadian economy in 2006, including adverse economic consequences of a further appreciation of the Canadian currency, the evolution of oil prices and possible changes to the pace of expansion in the economies of the U.S. and China.

## Canada Forecast Summary, 2006 and 2007

	Percentage Change	
	2006	2007
Gross Domestic Product	5.5	4.3
Real Gross Domestic Product	3.0	2.8
Consumer Price Index	2.0	1.8
Employment	1.5	1.3
Unemployment Rate (%)	6.5	6.6

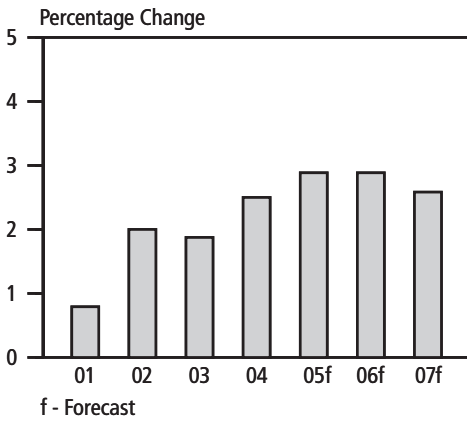
Source: Manitoba Finance, survey of economic forecasters

**“[Canadian] Domestic demand is forecast to remain strong in 2006 as real wage gains and better job growth keep consumer confidence elevated.”**

Conference Board of Canada  
Winter Provincial Forecast  
February 2006

Chart 4

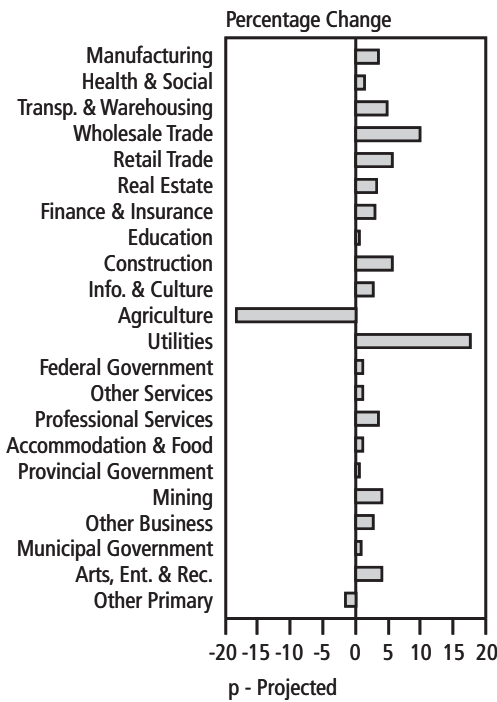
**Manitoba Real Gross Domestic Product**



Sources: 2001-2005: Manitoba Bureau of Statistics  
2006-2007: Manitoba Finance, survey of economic forecasters

Chart 5

**Manitoba Real Gross Domestic Product at Basic Prices by Industry, 2005p**



Note: ranked by size in descending order

Source: Manitoba Bureau of Statistics

**MANITOBA ECONOMY**

According to the Manitoba Bureau of Statistics, Manitoba's projected real economic growth improved in 2005 to 2.9%, up from 2.5% growth reported in 2004 (see Chart 4). Last year's performance was the strongest since 2000 and well above the five-year average growth estimated at 2.3%. The Canadian economy grew by 2.9% in 2005, equal to the provincial growth rate. Manitoba's projected nominal GDP advanced 5.1% in 2005 to a record \$42.0 billion, an increase of \$2.0 billion over the previous year.

Economic activity in 2005 was characterized by strong growth in consumer spending and modest increases in both business investments and government spending. Increases in these categories propelled real domestic expenditures by 4.0%, the highest annual increase since 1997.

External trade remained firm in 2005 with real exports advancing 4.1% following a 4.6% gain in 2004. With increased consumer and business spending, imports increased by 6.3%.

Goods-producing industries led the Manitoba economy last year (see Chart 5). In the utilities sector, Manitoba Hydro capitalized on higher water flows in the Hudson Bay drainage area, which restored hydro generating capacity, leading to increased electricity generation and record export sales. Contrary to the national trend, manufacturing continued to expand in 2005, despite the currency appreciation and higher interest rates. Growth was primarily driven by a 15.4% increase in shipments of fabricated metal products and by a 14.5% increase in shipments of electrical and electronic equipment.

In construction, a number of major capital projects were started in 2005, including the Red River Floodway Expansion Project, the Winnipeg Airports Authority's airport site redevelopment, and Manitoba Hydro's downtown office tower. Residential construction activity continued to accelerate as the number of housing starts increased by 6.6%

## Manitoba Real Gross Domestic Product at Basic Prices by Industry, 2004 and 2005p

(Millions of Chained 1997 Dollars)

	2004	2005p	Percentage Change
<b>Goods</b>	<b>8,657</b>	<b>8,797</b>	<b>1.6</b>
Agriculture	1,453	1,186	-18.4
Mining	563	585	3.9
Other Primary	84	83	-1.6
Manufacturing	4,144	4,284	3.4
Construction	1,470	1,551	5.5
Utilities	943	1,108	17.5
<b>Services</b>	<b>23,961</b>	<b>24,751</b>	<b>3.3</b>
Transportation & Warehousing	2,226	2,336	4.9
Information & Culture	1,293	1,327	2.7
Wholesale Trade	2,097	2,305	9.9
Retail Trade	2,116	2,235	5.6
Finance & Insurance	1,703	1,752	2.9
Real Estate	1,831	1,890	3.2
Imputed Rent	2,893	2,964	2.4
Professional Services	850	880	3.5
Other Business Services	542	556	2.7
Federal Government	982	991	1.0
Provincial Government	744	748	0.5
Municipal Government	549	553	0.8
Education	1,612	1,623	0.6
Health & Social Services	2,423	2,460	1.5
Arts, Entertainment & Recreational Services	367	381	3.9
Accommodation & Food	820	828	1.0
Other Services	913	922	1.0
<b>Real GDP at Basic Prices</b>	<b>31,617</b>	<b>33,551</b>	<b>2.9</b>

p – Projected

Source: Manitoba Bureau of Statistics

Totals may not add up due to rounding and chained

to 4,731 units. This is the third consecutive year in which starts exceeded 4,000 units and the fifth consecutive year of growth in total starts. Multiple housing starts - which include apartments, duplexes and row housing - increased in 2005 to 1,022 units, up from 956 units in 2004 and the second-highest number of units started in 15 years.

*The first full year of operations of one of North America's busiest entertainment complexes, the MTS Centre, boosted activity in arts, entertainment and recreation.*

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**“Manitoba is well positioned to capitalize on western Canada's robust expansion.”**

**CIBC World Markets  
Provincial Forecast  
February 2006**

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Manitoba's agriculture sector is relatively well-balanced between livestock and crop production. The performance of these two sectors over the last year was mixed. Activity in the livestock industries, especially cattle shipments, increased with the re-opening of the U.S. border. Crop producers in the province faced major challenges as weather conditions were extremely adverse throughout the growing season. Many crop producers rated the 2005 season as their worst year ever because of the combination of poor yields, drowned-out crops, depressed commodity prices and increased input costs.

Increased global demand and record, or near record, high prices for base metals, precious metals and crude oil have had a positive impact on Manitoba's mining industry. Sustained high prices have renewed interest in exploration activity and spurred new developments and expansion plans for existing facilities throughout Manitoba.

On the services side of the economy several sectors experienced firm growth. The first full year of operations of one of North America's busiest entertainment complexes, the MTS Centre, boosted activity in arts, entertainment and recreation. Continued strength in the housing market helped maintain growth in finance, insurance and real estate. The currency appreciation, which led to increased imports, has had a positive impact for the province's wholesale and retail trade. The increased volume of trade flowing in and out of Manitoba stimulated the transportation and communication sector, despite the higher energy costs. The resumption of live cattle shipments to the U.S. further stimulated activity in transportation.

Manitoba's Consumer Price Index advanced 2.7% in 2005, up from 2.0% in 2004. Consumer prices rose sharply in the first nine months of 2005, and fell in the last three months of the year. During the first nine months, increases in energy prices drove consumer prices up. During the last three months, the combined effects of increased global production



and a high Canadian dollar lowered prices of imported goods, causing the CPI to fall. With the fall in prices in the latter part of the year, the year-over-year inflation rate in December 2005 was only 1.3%.

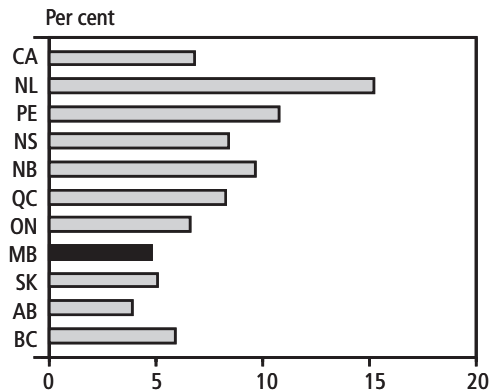
Manitoba's October 1st, 2005 population estimate was 1,178,109, up 0.4% or 4,751 persons from 2004. The largest contributor to the population increase was international migration, which increased by a net 6,791 persons. Natural increase in population (births less deaths) contributed a net 3,935 persons, while the movement of non-permanent residents and Canadian citizens traveling abroad added 740 persons. Total net interprovincial migration contributed to the remaining net change in Manitoba's population.

Last year, a record 580,300 workers were employed in Manitoba, an increase of 3,700 workers from 2004. The unemployment rate dropped to 4.8%, the lowest annual rate since 1976 and the second-lowest among provinces (see Chart 6). Manitoba has had the lowest or the second-lowest unemployment rate in Canada in the last five years. The province's labour force participation rate and the employment rate remained at near record-high levels in 2005. This suggests that there are more and more Manitobans seeking work and finding it.

Reflecting positive developments in the labour market, Manitoba has maintained strong growth in employment income. Labour incomes from wages and salaries rose by 4.4% in 2005 to almost \$21.0 billion, and average weekly earnings increased by 3.5% in 2005 following a 4.0% gain in the previous year. Manitoba's average weekly earnings growth in 2005 was ranked fifth-highest among provinces while the growth in 2004 was the highest in Canada.

High commodity prices for resources and robust activity in wholesale and retail trade helped lift corporate profits by 11.9% in 2005, the third consecutive year of double-digit growth. Since 1999, corporate profits have increased by almost 84% in

**Chart 6**  
**Unemployment Rate By Province, 2005**



Source: Statistics Canada

*Since 1999, corporate profits have increased by almost 84% in Manitoba.*

Manitoba. In the last three years, the province has continued to set new records for profits as a share of GDP. In 2003, corporate profits accounted for 9.6% of GDP, surpassing the previous high set in 1981 at 9.2%. In both 2004 and 2005, the share of corporate profits to the Manitoba economy increased further to 10.6% and 11.3%, respectively.

The strong growth in labour and corporate income is being reflected in high consumer and business confidence in the Manitoba economy.

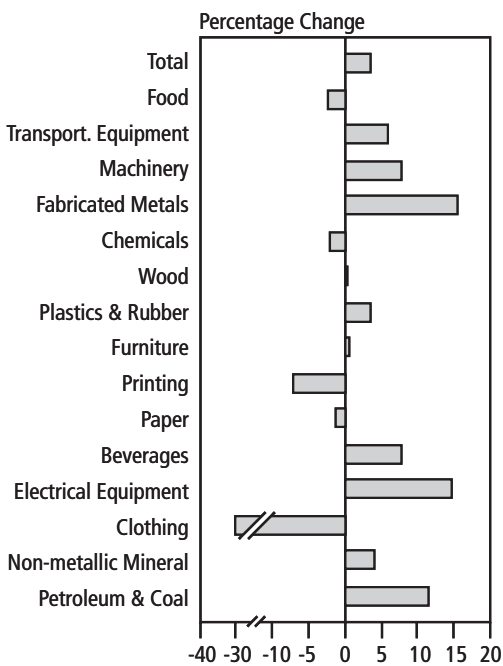
### Manufacturing

Manufacturing plays a key role in the Manitoba economy. Manufacturing output accounts for 12.8% of Manitoba's real GDP. Exports of manufactured goods contribute approximately 56% of total exports from the province and about 70% of those are destined for the United States. In 2005, the manufacturing sector employed 68,500 people, accounting for 11.8% of total provincial employment.

Manitoba's manufacturing sector is highly diversified, producing a variety of industrial and commercial goods including urban and intercity buses, aerospace equipment, chemicals and fertilizer, machinery, pharmaceuticals, processed meats, processed vegetables, furniture, apparel, newsprint, plastic products, windows and fabricated metals. Diversification provides stability within the sector especially during challenging economic conditions. It also provides opportunities to develop new products and to expand into new markets domestically and globally.

Despite the strong currency appreciation, Manitoba's manufacturing sector has continued to expand and has outperformed the national average in each of the last three years. In 2005, Manitoba's shipments of manufactured goods increased by 3.5% to a record \$13.0 billion, following a 10.1% gain in 2004 (see Chart 7).

**Chart 7  
Manitoba Manufacturing Shipments by Industry, 2005**



Note: ranked by size in descending order  
Source: Statistics Canada

In 2005, the seasonally adjusted value of monthly shipments of Manitoba manufacturers was consistently over \$1 billion. In July 2005, the province set a new monthly record in shipments of \$1.12 billion, surpassing the previous record of \$1.11 billion set in April 2005.

The strength in the sector was relatively broad-based with 10 of the 15 industry categories reporting increases in shipments. The North American construction boom contributed to a 15.4% increase in shipments from fabricated metals producers, as well as a 14.5% increase in shipments from electrical equipment and appliance manufacturers. Machinery equipment sales, which include agricultural implements, were up 7.7%.

With firm orders for transit buses coupled with an improving aerospace sector, Manitoba's transportation equipment sales were up 6.0% in 2005. Competition from off-shore suppliers and the strengthening Canadian currency led to a 30.2% drop in clothing shipments and a 7.1% reduction in printing and related support activities.

In terms of total value, the top five export categories in the manufacturing sector are: food and beverage products, transportation equipment, machinery and equipment, primary metals, and chemicals and pharmaceuticals.

### Agriculture

Manitoba's agriculture sector is evenly balanced between livestock and crop production. Since 2001, the cash receipts from livestock operations has averaged \$1.64 billion, while from crop operations it averaged \$1.70 billion (see Chart 8).

The performance of agriculture in 2005 was mixed. Livestock production increased with the limited opening of the U.S. border for live cattle exports. Crop production faced major challenges as adverse weather conditions prevailed throughout the growing season.

## Top Five Manufacturing Exports by Industry

Five Year Average

### International Exports

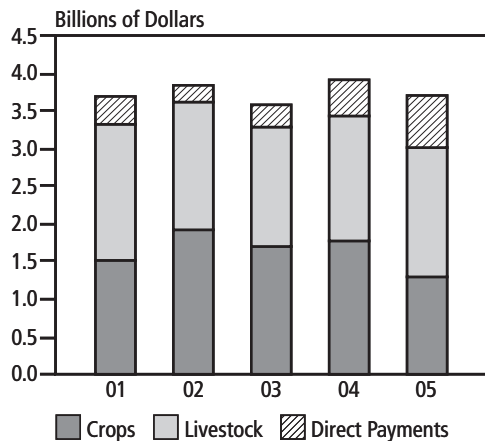
1. Transportation equipment
2. Machinery & equipment
3. Primary metal products
4. Food & beverage products
5. Chemicals & pharmaceuticals

### Interprovincial Exports

1. Food & beverage products
2. Printing & publishing
3. Machinery & equipment
4. Primary metal products
5. Transportation equipment

Source: Manitoba Bureau of Statistics

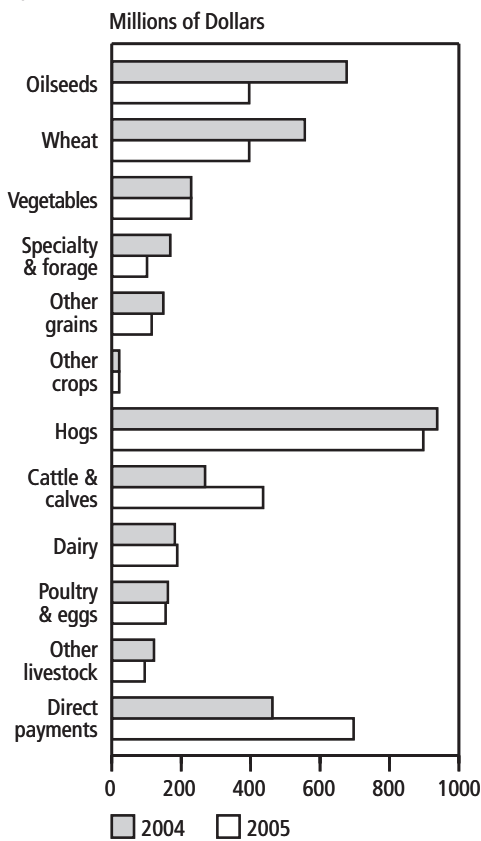
**Chart 8  
Manitoba Farm Cash Receipts**



Source: Statistics Canada

*After a 26-month complete closure, the U.S. border re-opened to Canadian live cattle shipments in July 2005.*

**Chart 9  
Manitoba Farm Cash Receipts  
by Product, 2004 and 2005**



Source: Statistics Canada

After a 26-month complete closure, the U.S. border re-opened to Canadian live cattle shipments in July 2005. U.S. imports are limited to live cattle under 30 months old and imported animals are subject to increased testing. Since the opening of the U.S. border, preliminary data indicate that fed-cattle exports are in the process of recovering. Exporters have encountered several challenges, including the higher Canadian dollar, transportation bottlenecks and higher fuel costs.

In mid-December 2005, the Government of Japan decided to re-open its border to beef from Canada. The border opening date is pending the completion of risk assessments and final administrative procedures. The Japanese market will also be limited to beef from cattle verified to be less than 21 months of age.

The U.S. border opening has had a positive impact on Manitoba producers, as it has not only expanded the market but also increased cattle prices. For 2005, farm cash receipts from cattle and calf production are up 64% (see Chart 9), reversing the sharp two-year declines of 39% and 22% in 2003 and 2004, respectively.

Hog production in Manitoba increased slightly in 2005 following strong growth in 2004. Exports of weanlings increased last year, as did domestic slaughter production. Hog production capacity continues to increase as new sow barns and feeder barns are built in the province. The addition of feeder barns bodes well for generating higher-value sales with greater domestic pork processing in the province. Due to excess supply of pork in the North American market, pork prices decreased last year. With increased production but lower prices, farm cash receipts for pork sales decreased by 4% in 2005, down from the 22% increase of 2004.

The Manitoba hog industry has become the single most dominant source of revenue in the province's agriculture sector. Since 2000, cash receipts from hogs exceeded any other commodity including wheat, which

is now second. Receipts from hogs account for almost a quarter of total farm cash receipts (see Chart 10).

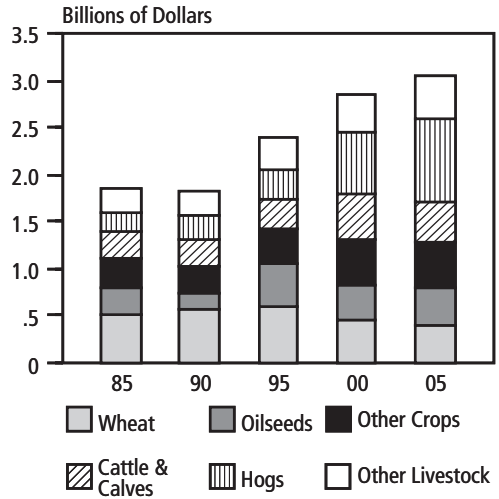
Southern Manitoba experienced the wettest June and the second-wettest July on record with rainfall amounts in excess of 200% to 400% above average in various areas. Excessive moisture conditions hampered seeding activity at the start of the season and drowned a significant portion of the seeded area through mid-season. After the rains stopped, the growing season was plagued by the onset of drought conditions which affected some of the later-seeded crops.

Many crop producers in the province rated the 2005 season as their worst year ever because of the combination of poor yields, drowned-out crops, depressed commodity prices and increased input costs. Due to the poor weather conditions, the quantity and quality of many grains and oilseeds in Manitoba were significantly lower compared to the 2004 season. Wheat yields decreased by 37%, while barley yields were down 50%. Canola production decreased by 29% and rye decreased by 56%. A limited number of secondary crops recorded increases in production, including flax, corn, sunflower seed, beans and buckwheat.

With the combination of lower prices, yields and quality, overall crop receipts declined 28% in 2005 after a 4% gain in 2004. Receipts from wheat and barley decreased by 29% and 40%, respectively. Receipts from canola were down 41%.

A key factor that provided a stabilizing influence, and buoyed agricultural receipts in 2005, was non-market support payments to producers, which increased by 51%. Due to poor crop conditions and the U.S. border closure for cattle shipments, direct payments to Manitoba producers have risen sharply in the last three years from \$219 million in 2002 to \$694 million in 2005. Major income categories of stabilization programs for Manitoba farmers include: Canadian Agricultural Income Stabilization Program, Income Disaster Assistance Program, Provincial Stabilization Programs, and Manitoba Crop Insurance.

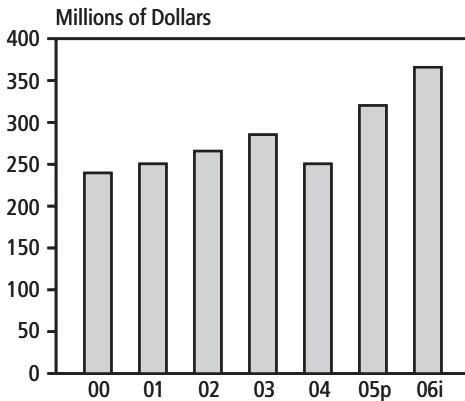
**Chart 10**  
**Manitoba Market Receipts**  
**by Commodity**



Source: Statistics Canada

*With the combination of lower prices, yields and quality, overall crop receipts declined 28% in 2005 after a 4% gain in 2004.*

**Chart 11**  
**Manitoba Mining Investment**



p - Preliminary i - Intentions

Source: Statistics Canada

*There are nearly 1,900 producing wells in the province, generating approximately 4.7 million barrels of oil.*

## Minerals

Mining is the second-largest primary resource industry in the province. Mining output directly accounts for 1.7% of the output in Manitoba's economy. The industry employed approximately 4,600 workers in 2005, a 2.2% increase from 2004. Average weekly earnings in mining are over \$1,170, the highest among industries in the province.

The principal mineral commodities produced in Manitoba are nickel, oil, zinc, copper, gold, tantalum and cesium. The major mining centers are Flin Flon, Thompson and the southwest corner of the province which has emerged as the province's "oil patch."

Strong global demand coupled with record-high prices for base metals, precious metals and crude oil have boosted Manitoba's mining industry. Sustained high prices for these commodities have renewed significant interest in exploration activity and spurred new developments and expansion plans for existing facilities throughout Manitoba.

Mineral exploration investments in 2005 are estimated at \$53 million. This represents a 47% increase in expenditures from the \$36 million spent in 2004. The total land area under mineral exploration is estimated to have increased by over 67%, while surface exploration for diamond drilling is expected to have increased by over 37% in 2005.

Petroleum exploration is also rapidly expanding in the southwest corner of the province. The number of oil wells drilled increased by 139% from 119 wells in 2004 to 285 in 2005. The number of drilling licenses issued more than doubled from 137 in 2004 to 384 in 2005. The data for January 2006 indicate a continued record-setting pace in Manitoba's petroleum sector in the current year.

The petroleum industry spent approximately \$190 million in 2005 and provided employment for about 400 people. There are nearly 1,900 producing wells in the province, generating approximately 4.7 million barrels of oil.

Several new mining developments have been announced by the major mining companies in Manitoba. Inco Limited reported a significant boost to its capital spending budget, which includes a \$45 million investment in a new mine at the north end of its existing Thompson facility. Construction will begin in 2006 with first production scheduled for 2008. In preparation for processing nickel concentrate from Voisey's Bay in 2006, Inco will spend \$100 million to rebuild the main smelter in Thompson. Hudbay Minerals (formerly Hudson Bay Mining and Smelting) announced a \$10 million exploration budget for their large Manitoba and Saskatchewan properties.

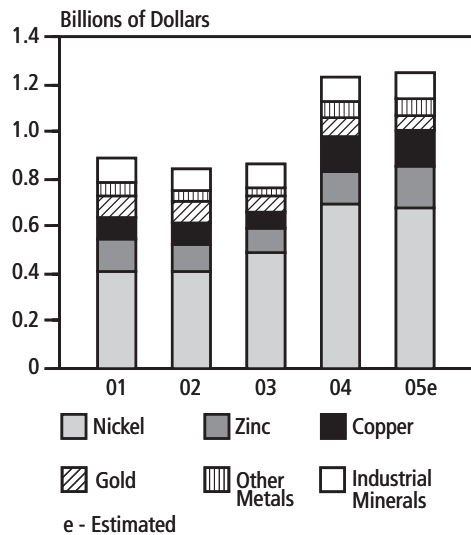
The overall value of mineral production stabilized in 2005, increasing 1.9%, after increasing at an extraordinary rate of 44.2% in 2004. The value of nickel and gold production decreased in 2005, while zinc and copper value increased.

After increasing by 22.2% and 38.2% in 2003 and 2004, respectively (see Chart 12), the value of nickel production in Manitoba retreated slightly, down 0.6% in 2005. Several factors contributed to the pause in the value of nickel production. The price of nickel declined slightly after almost doubling since 2001. Production declined at the Thompson Inco mine due to an annual summer maintenance shutdown lasting longer than usual.

Copper prices increased by 19.6% in 2005, while the volume produced decreased by 10.1% in Manitoba. As a result, the value of copper produced in Manitoba increased by 7.6% in 2005, up further from the 110.4% gain reported in 2004. With a 4.5% increase in volume and a 22.6% increase in price, the value of zinc production in the province increased by 28.0% in 2005.

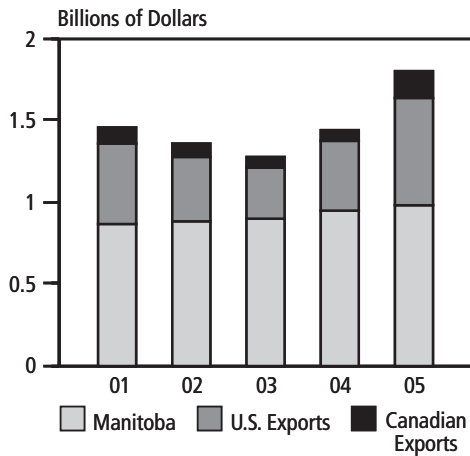
The suspension of the mining operations at the New Britannia gold mine in September 2004 is now being reflected in the value of gold production. Manitoba's value of gold production decreased by 33.6% in 2005, despite an increase in price.

**Chart 12**  
**Manitoba Mineral Production**



Source: Natural Resources Canada

Chart 13  
**Manitoba Hydro-Electricity Sales**



Source: Manitoba Hydro

## Hydro-Electricity

Manitoba Hydro is Manitoba's largest utility and accounts for virtually all electricity generation, transmission and distribution in the province. Almost all of Manitoba Hydro's electricity is produced by water, a renewable source of energy. Currently, Manitoba Hydro has a generating capability of more than 5,000 MW, with a further 5,000 MW of underdeveloped potential resource.

Electricity sales rebounded last year following two years of significant declines associated with the effects of low water flows on generating capacity. In 2005, average precipitation in the Hudson Bay drainage basin provided higher water flows for hydraulic generation. Consequently, the value of Manitoba Hydro's sales increased 25.3% in calendar year 2005 to \$1.8 billion – a historical high (see Chart 13). The increase in sales was primarily in export markets and was largely due to the increased generation coupled with strong U.S. demand for power.

The value of Manitoba's in-province electricity sales, which account for 55% of the total, increased 3.5% in 2005. The value of electricity export sales, which account for the remainder, increased by 68% last year. The total value of U.S. exports rose 53%. The U.S. is a key market for Manitoba's electricity exports and accounts for about 80% of total out-of-province sales.

In 2005, Manitoba and Ontario agreed to a major upgrade in the transmission capacity between the two provinces. The existing 200 MW transmission line connecting the two provinces will be upgraded to 400 MW by 2009.

Manitoba Hydro is currently working closely with northern Aboriginal communities to develop new generating facilities. There are two new facilities under active consideration. The first is the proposed Wuskwatim generating station that would be built on the Burntwood River in Northern Manitoba. This station would generate 200 MW of power, with the earliest in-service date being 2012. A referendum on



the project by the Nisichawayasihk Cree First Nation is pending.

The second facility is the Gull (Keeyask) generating facility to be constructed on the Nelson River near Gillam. The Gull station would produce about 620 MW of power. Both generating stations in Northern Manitoba would require the construction of a transmission line to deliver power to Southern Manitoba which connects to the Northwest U.S. electricity power grid. The combined cost of these two generating projects is approximately \$4 billion.

Another option under active consideration is the development of the Conawapa site. This 1,250 MW generating facility project would be similar in magnitude to Manitoba's Limestone facility, currently the largest single generating station in the province. This project would assist in meeting the needs of out-of-province customers who would contract for the delivery of power from Manitoba Hydro.

In December 2004, construction began on a new 99 MW wind energy project near St. Leon. The \$210 million project will take advantage of Manitoba's world-class wind energy capabilities and was facilitated by a 20-year power purchase agreement with Manitoba Hydro. At the completion of the project in early 2006, 63 new wind turbine generators will be installed at what will become one of Canada's largest wind farms.

Large-scale wind power is one of the most competitive forms of renewable energy. The provincial government and Manitoba Hydro are 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. Manitoba is well positioned to be a global leader in wind generation.

Manitoba Hydro continues to strengthen its position as a leader among Canadian utilities in voluntarily reducing greenhouse gas emissions. The wind energy project in St. Leon has the potential to displace

## Manitoba Hydro Generating Stations

Station	River	MW
Limestone	Nelson	1,340
Kettle	Nelson	1,220
Long Spruce	Nelson	1,010
Grand Rapids	Saskatchewan	479
Kelsey	Nelson	223
Seven Sisters	Winnipeg	165
Great Falls	Winnipeg	133
Jenpeg	Nelson	131
Pine Falls	Winnipeg	88
Pointe du Bois	Winnipeg	78
Slave Falls	Winnipeg	67
McArthur Falls	Winnipeg	55
Laurie River I & II	Laurie	10
Hydraulic Capacity		4,999
Thermal Stations		471
Total System		5,470

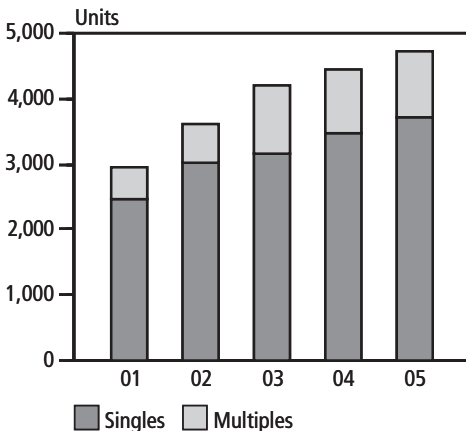
Source: Manitoba Hydro

**“Extensive watersheds provide Manitoba with low-cost, renewable, and reliable hydro-electric power. As a result, Manitoba has among the lowest electricity rates in North America.”**

**Dominion Bond Rating Service  
Credit Rating Report  
May 2005**

*Winnipeg Real Estate Board  
reported record sales of  
residential properties in 2005  
at 12,087 units, an increase  
of 6% over 2004.*

**Chart 14**  
**Manitoba Housing Starts**



Source: Canada Mortgage and Housing Corporation

400,000 tonnes of CO<sub>2</sub> emissions from the thermal coal plants. Looking to the future, there will be further opportunities to allow Manitoba Hydro to play an increasingly important role in meeting more of North America's electrical energy needs through environmentally desirable hydro-electric resources and clean renewable wind power. In so doing, it will contribute to the reduction of global greenhouse gas emissions.

## Housing

The Manitoba housing industry reported another solid performance in 2005. Good population growth combined with low interest rates and growing personal incomes proved to be ideal economic conditions for stimulating both new home construction and resale activity throughout the province.

Manitoba's demographic profile shows two distinct groups of individuals, the "baby boom" generation and the "echo boom" generation. Given this profile, the current housing demand is driven by the move-up market ("baby-boom") and the first-time home buyers or renters ("echo boom").

Driven by strong demand, new housing construction activity continued to accelerate last year as the province reported a total of 4,731 new housing units started (see Chart 14). This is the third consecutive year in which starts exceeded 4,000 units and the fifth consecutive year of growth in the annual number of starts.

Multiple dwelling starts, which include apartments, duplexes and townhouses, increased in 2005 to 1,022 units, up from 956 units in 2004 and the second-highest number of units over the last 15 years, behind only 2003.

Repair and renovation activity continued to increase last year, however, the pace of growth slowed considerably from the previous year because of higher costs for building material and labour.

The housing outlook for 2006 and 2007 calls for continued growth in the sector. Canada Mortgage and Housing Corporation (CMHC) predicts Manitoba will be one of only two provinces in Canada to record an increase in housing starts this year. CMHC is projecting at least 4,800 housing starts in 2006 and 5,000 starts in 2007. Residential average resale price is expected to increase by 8% in 2006 and by 7% in 2007.

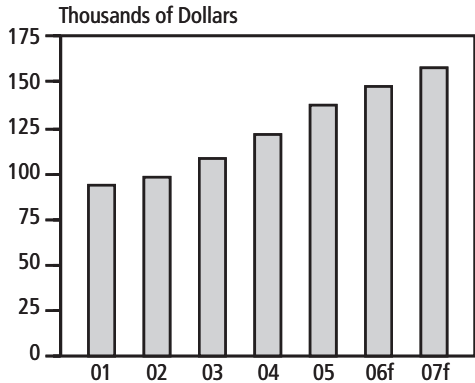
Winnipeg Real Estate Board reported record sales of residential properties in 2005 at 12,087 units, an increase of 6% over 2004. The dollar value of property transactions was up 21%, to a record \$1.62 billion in 2005. A key factor in this increase was the shift in preference to higher-valued homes. The average price of a residential property was \$133,854 in 2005, up from \$119,245 in the previous year. Property values in Manitoba have increased by almost 40% since 2002, an average annual increase of almost 12% (see Chart 15).

Despite increases in property values in Manitoba, the province's housing costs remain affordable. In a recent study, the Royal Bank of Canada concluded that housing in Manitoba has remained among the most affordable in the country, even as Manitoba posted the highest increase in house prices in several categories used in the analysis. The study ranked Manitoba favourably in all four categories. Manitoba ranked third for the detached bungalow category and second-most affordable in standard, two-storey houses. For the standard townhouse and standard condominium categories, Manitoba ranked as the most affordable jurisdiction in Canada.

**Retail Trade**

Manitoba's retail sales rose 6.4% in 2005, above the national average of 6.1% and third-highest among provinces (see Chart 16). Over the past two years, retail sales have increased 13.6%, reflecting Manitoba's good labour market conditions, low interest rates, rising personal incomes and positive consumer confidence.

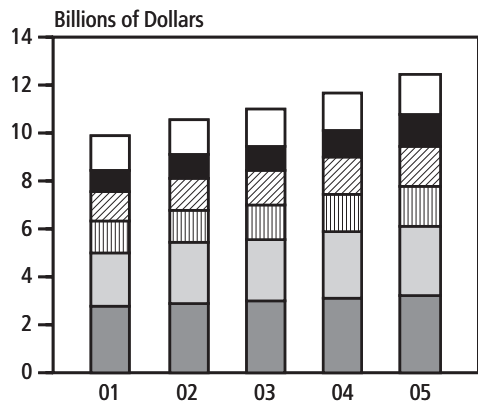
**Chart 15  
Manitoba Average Residential Resale Price**



f - Forecast

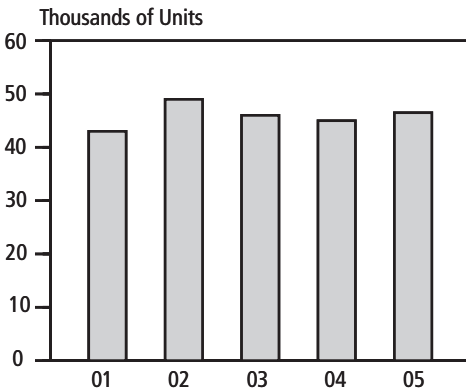
Source: Canada Mortgage and Housing Corporation

**Chart 16  
Manitoba Retail Trade by Type**



Source: Statistics Canada

Chart 17

**Manitoba Motor Vehicle Sales**

Source: Statistics Canada

The continuing strong performance of Manitoba's housing market was also a significant factor in directly boosting retail sales. Increased activity in the new and resale housing market promoted strong increases in sales of household supplies. In 2005, sales for hardware, gardening and building supplies stores in the province were up 16.6%, while home furnishing stores sales increased 9.8%.

Automotive sales remained brisk in 2005. The value of new car sales increased by 3.7%, while sales of recreational vehicles, used motor vehicles and parts increased 21.0%. After two consecutive years of decline, the number of new motor vehicles sold rebounded 2.6% in 2005 (see Chart 17). Of the 46,503 vehicles sold in Manitoba last year, growth was primarily related to trucks, minivans and SUVs at 3.8%. Passenger car sales rose 1.1%.

High gas prices also boosted retail sales as the value of gasoline sold increased by 17.3%. The largest decline in retail sales came from convenience and specialty food stores (6.9%), which accounted for 1.3% of total retail sales in 2005.

In addition to rising personal income, the rapidly increasing residential property prices in the province are contributing to increased consumer spending. As property values have risen, the perceived future return from the sale of property also increased, thereby reducing the immediate need to save out of current income for retirement or other future financial obligations. Appreciation of property values can also be used for personal loan guarantees and for lowering interest rates on lines of credit. The "wealth effect" of appreciating real estate is more significant than for other types of investments, such as stocks or fixed income securities. People spend more per dollar of appreciation in housing prices compared to gains from equities or bonds. The "wealth effect" coupled with historical low interest rates have been cited by many market analysts as the main driving force behind the surge in consumer spending in North America.

With CMHC projecting further property value appreciation in 2006 and in 2007, the effect of the housing market on retail sales is expected to remain strong in the near term.

## Tourism

Manitoba's tourism industry has been relatively stable for the past four years. Preliminary indicators suggest that, while the number of tourists from the U.S. was down in 2005, domestic and overseas travel to Manitoba was up.

The currency appreciation, rising fuel costs and weather conditions have negatively affected travel from the U.S. to Canada. All provinces in Canada experienced a decline in numbers of overnight visits from the U.S., except P.E.I. The number of direct entries from the U.S. to Manitoba decreased by 12.1% in 2005. This compares to an 8.6% decline nationally.

The Winnipeg Airports Authority reported a sharp 6.5% increase in passenger traffic in 2005, as passenger traffic reached a record 3.2 million. The increase is primarily credited to business and leisure travel within Canada. Domestic travel, which makes up almost 90% of visits to Manitoba, is estimated to have increased by 1.8% in 2005. Overseas tourism, a small portion of total travellers, was up 8.3% in Manitoba.

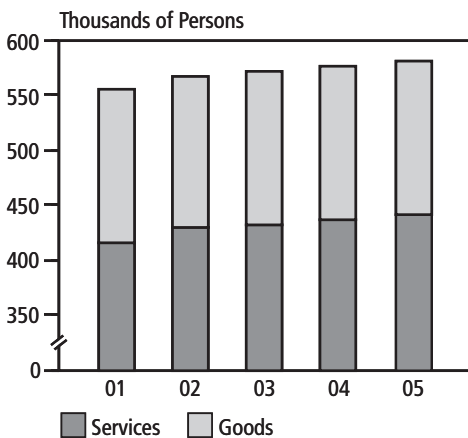
Last year, almost 250,000 people stopped at the six travel information centres operated by Travel Manitoba. This represents a slight decrease from 2004 and is consistent with the decline in U.S. cross-border traffic. Fewer road trips by American tourists and a weaker U.S. dollar would be expected to impact more on tourism in Manitoba than Canada since Americans make up a higher proportion of visits in Manitoba (98%) than in Canada (88%).

Some of the major festivals in Manitoba reported increased attendance last year, including the Winnipeg Folk Festival, the Brandon Folk Festival, the Festival du Voyageur, the Manitoba Stampede

*The Winnipeg Airports Authority reported a sharp 6.5% increase in passenger traffic in 2005, as passenger traffic reached a record 3.2 million.*

*Some of the major festivals in Manitoba reported increased attendance last year, including the Winnipeg Folk Festival, the Brandon Folk Festival, the Festival du Voyageur, the Manitoba Stampede and the Winnipeg Fringe Theatre Festival.*

**Chart 18**  
**Manitoba Employment**



Source: Statistics Canada

and the Winnipeg Fringe Theatre Festival. Principally due to poor weather conditions, Folklorama attendance numbers fell slightly in 2005.

Winnipeg hotel occupancy rates increased from 62.9% to 63.2% in 2005, despite the lower traffic from the U.S. Increased domestic and overseas travel would appear to have offset lower U.S. volumes.

For 2006, the Conference Board of Canada forecasts that domestic overnight person trips to Manitoba will grow by 1.8% with overseas visits up 6.2% and U.S. visits up 0.7%.

### Labour Market

Employment in Manitoba reached an all-time high in 2005 at 580,300 workers. Total employment increased 0.6% (see Chart 18). There were 466,500 full-time workers and 113,900 part-time workers in the province last year. The number of Manitobans unemployed decreased by 3,200 to 29,100 people in 2005, the second-lowest level since 1980.

The provincial labour supply growth has maintained a steady pace in the past few years. However, partly dampened by the demographics of an aging work force, Manitoba's labour force increased by only 500 workers in 2005 to a total of 609,400. With more jobs created than there were workers entering the labour market, unemployment fell, and tight labour market conditions persisted throughout the year.

Manitoba's unemployment rate decreased by half a per cent from 5.3% in 2004 to 4.8% in 2005, the second-lowest rate among provinces (see Chart 19). Manitoba has had the lowest or the second-lowest unemployment rate in Canada in the last five years. The national average unemployment rate also decreased in 2005 to 6.8%, down from 7.2% in 2004.

The unemployment rate in Manitoba for most age categories fell in 2005. The youth (ages 15-24) unemployment rate decreased from 10.9% in 2004

to 9.7% in 2005. Manitoba's youth unemployment rate was the second-lowest among provinces. The rate for workers between ages 60 and 64 fell from 3.8% to 3.3%. The unemployment rate for workers between ages 50 and 54 dropped to 2.9%, its lowest level since 1976. The low unemployment rate coupled with near-record low levels of unemployed in the province is an indication that the Manitoba economy is operating at or near full employment.

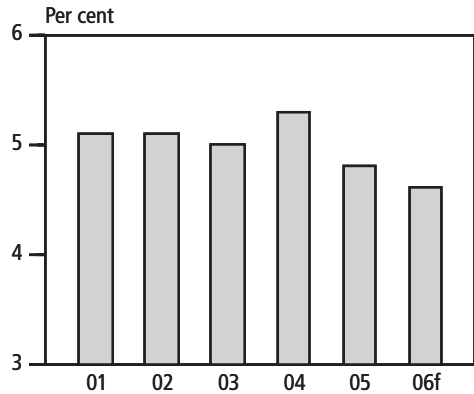
The service sector, which accounts for 76% of all jobs in Manitoba, posted a 0.9% gain in 2005. Employment growth in services was led by a 17.4% gain in finance and insurance and a 7.4% gain in accommodation and food services. Goods-producing sector employment remained flat in 2005. However, within the sector there was a 2.2% increase in the mining, oil and gas employment, and a 1.8% increase in construction employment. Employment in manufacturing declined by 0.6%, a modest reduction compared to Canada's 3.7% decline.

In the past four years, Manitoba's labour force participation rate set a new record and has remained near record levels. In 2002, the rate increased to 69.0% and in 2004 it further increased to 69.1%. In 2005, it retreated slightly to 68.6%. The provincial labour force participation rate is currently the second-highest in Canada following Alberta. Manitoba has maintained the second place ranking for the last five years.

The employment rate, the number of individuals working as a share of the total working age population, has expanded by an average of 0.2% annually during the last five years. It has averaged 65.2% in the last five years (2001-2005), up from 62.9% average in the previous five-year period (see Chart 20). Similar to the participation rate, the employment rate has set record highs and has remained near record levels in the last four years. In 2002, the rate hit a record high of 65.5%. In 2005, the employment rate was 65.3%.

Employment growth and higher participation rates underscore the fact that an increasing number of

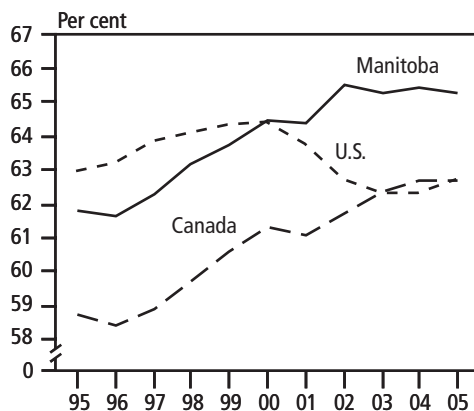
**Chart 19**  
**Manitoba Unemployment Rate**



f - Forecast

Sources: 2001-2005: Statistics Canada  
2006: Manitoba Finance, survey of economic forecasters

**Chart 20**  
**Manitoba, Canada and U.S. Employment Rate**



Sources: Statistics Canada  
U.S. Department of Labor

## 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.

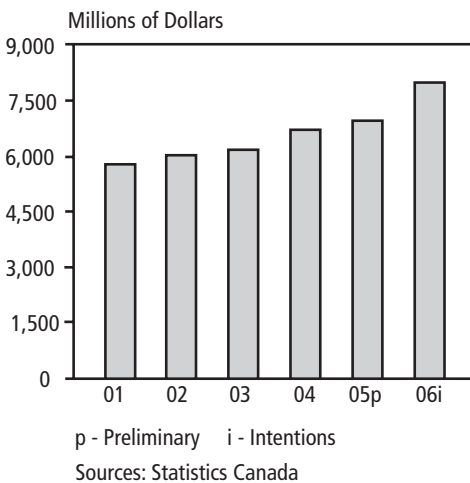
**Employment Rate:** Employment as a percentage of working-age adults.

Manitobans are willing to work and are finding work. This bodes well for future growth in the province and instills confidence in the labour market.

Manitoba Finance's survey of economic forecasters shows Manitoba's annual employment growth rate is projected at 1.0% in 2006. The unemployment rate is forecast to further decrease to 4.6% in 2006 down from 4.8% in 2005.

Chart 21

### Total Capital Investment



## Investment

Manitoba is set to lead all provinces in capital investment growth in 2006. According to Statistics Canada's Survey of Private and Public Investment, total capital investment will increase to \$8.0 billion, a rise of 14.6%. This is more than double the expected rate of growth in national investment of 6.1% and brings the five-year growth in total capital investment in the province to 37.6%, or \$2.2 billion. In 2005, Manitoba's total investment increased 3.9% (see Chart 21).

Private capital investment is projected to increase 10.4% in 2006, second-highest in Canada and more than double the estimated national growth rate. Private investment rose 2.2% in 2005 (see Chart 22). Private investment accounts for three-quarters of total capital investment in the province.



Public capital investment in Manitoba is estimated to increase 27.1% in 2006, the second-highest growth in Canada. In 2005, public capital investment increased 9.5%, in line with the national increase.

Among industries, 2006 investment in each of manufacturing, education services, public administration, construction, transportation and warehousing, utilities, and retail trade is expected to rise by over 20% versus 2005 estimated levels. Capital investment in housing is projected to be up by 6.8%, bringing the level of housing investment to \$1.7 billion, an 87% increase versus 2000.

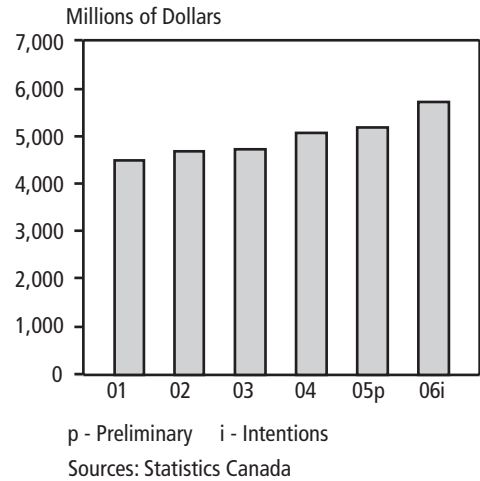
According to the Manitoba Bureau of Statistics, real (inflation-adjusted) non-residential business investment in Manitoba is projected to have grown 3.9% in 2005, with a 7.3% real increase in non-residential structures and a 2.7% increase in real machinery and equipment spending. Real non-residential business investment has increased significantly in Manitoba in the past five years. In particular, real investment in machinery and equipment has increased by 30% between 1999 and 2004, one of the strongest increases among the provinces (see Chart 23). The Manitoba Bureau of Statistics projects continued growth in 2005. The rising value of the Canadian dollar, which reduces the effective price of machinery and equipment imports for Manitoba businesses, helped push up the rate of capital goods investment.

Manitoba's building permits data shows that, for 2005, the value of permits issued in Manitoba declined by 1.7% as non-residential permits declined 8.6%. Institutional/government project permits led the decline with a 25.5% drop.

The Conference Board of Canada, in its February 2006 forecast, projects that capital investment in Manitoba in 2007 will increase 7.6%, the highest among provinces.

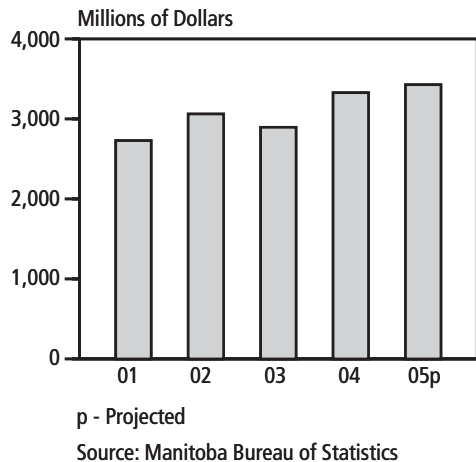
Several major capital projects have just been completed, are under way or are now planned.

**Chart 22**  
**Private Capital Investment**



*Manitoba is set to lead  
all provinces in capital  
investment growth in 2006.*

**Chart 23**  
**Real Machinery & Equipment Investment**



*The Conference Board of  
Canada, in its  
February 2006 forecast,  
projects that capital  
investment in Manitoba in  
2007 will increase 7.6%, the  
highest among provinces.*

Examples include the following projects:

- In October 2005, **Husky Energy** announced that it would build a new \$145 million ethanol plant at its existing site in Minnedosa. The new facility would use about 1,000 tonnes of wheat per day to produce about 130 million litres of ethanol annually. The plant will become operational in 2007.
- Construction has begun on the new **Manitoba Hydro** Head Office in downtown Winnipeg. The new \$258 million, 22-storey office tower will provide Hydro with 690,000 square feet of space and will be one of the most energy efficient buildings in the world. Completion of the project is expected in 2007.
- **INCO Ltd.** plans to invest \$45 million over the next two years to develop the new 1-D Lower ore body in Thompson, and is investing an additional \$100 million for upgrades to its Thompson facilities, including rebuilding its main smelter furnace.
- **Can-Oat Milling Inc.** plans to invest \$14 million to expand and renovate its Portage la Prairie mill. The new facility should be operational in 2007 and would increase the company's production level from 290,000 to 340,000 tonnes per year.
- The **Paletta Group** is investing \$15 million in the Gull Harbour resort, located in Hecla Provincial Park. The redevelopment of the property into the Hecla Oasis Resort, Spa and Golf Course is currently under way and should be completed by 2007.
- In the autumn of 2005, construction began on the **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.

- Construction on the new **Siemens Institute for Advanced Medicine** will begin in spring 2006. The Institute will focus on developing technological advancements in neurosciences, infectious diseases, medical informatics/simulation, advanced imaging and new advanced surgical technologies. The \$25 million facility will be built adjacent to the Health Sciences Centre in Winnipeg.
- Construction of the **Richardson Centre for Functional Foods and Nutraceuticals** is nearing completion, with the Centre expected to become operational in the spring of 2006. This \$31 million facility will bring together researchers from the agriculture, foods sciences, human nutrition, medicine and pharmacology disciplines, along with their industry partners, to study and develop functional foods and nutraceuticals.
- The 99 MW **St. Leon Wind Energy Project** is nearing completion, with the project expected to be operational in early 2006. A total of 63 wind turbines will be installed at the site, with project costs estimated at \$210 million. The project will be big enough to supply the energy needs of 35,000 homes when completed and will be one of the largest wind farms in Canada.
- **Winnipeg Airports Authority** has started a major capital project to upgrade the international airport facilities with more than \$500 million investment. The project will include a new terminal building, a new parkade and investment in other airport infrastructure. The work on the project began in autumn 2005 and will continue until project completion in 2009.
- Brandon's new Keystone Centre's \$8.5 million **Agriculture Centre of Excellence** will open in March 2006 and support continued growth of activity in the Centre. This expenditure was part of a total \$15 million capital expenditure project focussed on the Keystone Centre.

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“Manitoba’s economic performance is expected to remain strong, with real GDP growth of 3 per cent in 2006 and 2.8 per cent in 2007.”

Conference Board of Canada  
Winter Provincial Forecast  
February 2006

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“[The] diversified economy of Manitoba is expected to advance at the same beat as Canada as a whole.”

TD Economics  
Provincial Economic Update  
February 2006

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- Construction of the new **Bergen Cardiac Care Centre** at St. Boniface General Hospital is expected to be completed in the autumn of 2006. The new 42,000 square foot project will cost \$21 million. The new facilities will include state-of-the-art cardiac catheterization labs, arrhythmia device implant procedure rooms, electrophysiology and ablation procedure rooms, suites for echocardiography, EKG, pacemaker and defibrillator clinics, and general and specialized cardiology clinics.
- **OlyWest** plans to begin construction of a new hog processing plant in Winnipeg in 2006, with completion of the project expected in 2008. The \$200 million plant would process 2.25 million hogs annually. Up to 1,100 jobs would be created at the new plant.
- **Biovail Corporation** is in the process of constructing a \$28 million expansion of their Steinbach plant which is slated to be completed in the spring of 2006. This expansion is in addition to the \$44 million expansion which Biovail constructed in 2002, and will add a further 150 jobs to a work force that has already increased by 363 jobs in the past few years. Biovail, recognized internationally for their leadership position as an innovative developer of medicines, continues to expand their state-of-the-art pharmaceutical manufacturing facility in Steinbach, designed primarily to create slow release drug products, for which the Steinbach plant holds the world-wide manufacturing mandate.
- **Cangene Corporation** is adding a \$30 million expansion which will be completed in 2006. The expansion will assist Cangene to increase research and production of their antibody products which aid in the fight against some of the world's most deadly biothreats, such as Smallpox, Ebola, and Anthrax.

## Foreign Markets

The value of Manitoba's foreign merchandise exports in 2005 was \$9.9 billion, up 3.6% from 2004 (see Chart 24).

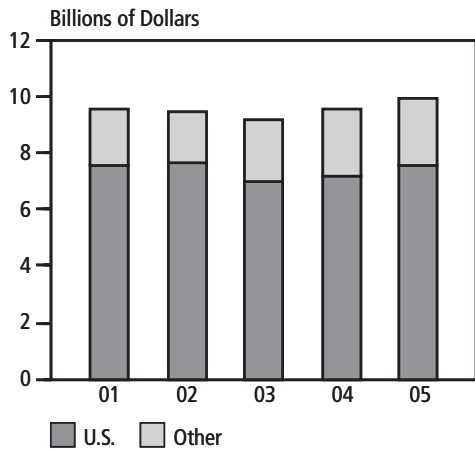
Manitoba's foreign merchandise exports to the U.S., which accounted for 76% of Manitoba's foreign merchandise exports last year, grew 5.3% over 2004 and outpaced the national average. Although the Canadian dollar continued to appreciate against the U.S. dollar, exports to the U.S. continued to improve in 2005. The end of the cattle ban and increased electricity production contributed to this gain.

Manitoba's exports to non-U.S. destinations underperformed those of Canada, falling 1.3% last year to \$2.4 billion. The major cause of the decrease was a sharp drop in exports to China, which declined 37.7%, attributed to weaker wheat and grain sales. On the other hand, significant increases in exports to the United Kingdom, Belgium and Japan were posted, almost offsetting the drop in exports to China. Despite the slight decline in overall exports to non-U.S. destinations last year, this category of exports is up 52.3% since 1999.

Exports of manufactured goods, which account for two-thirds of total foreign exports, were relatively unchanged last year. Industries with the most significant gains were fabricated metals (24.6%), electrical and electronic products (23.8%), transportation equipment (8.1%) and machinery (6.4%). Major declines were experienced in refined petroleum and coal products (-41.2%), clothing and textiles (-24.5%) and furniture and fixture industries (-14.6%).

Agriculture products, accounting for one-fifth of total exports, declined 2.8%, as crop production in both 2004 and 2005 was hampered by poor weather. In 2005, wheat and oilseed exports fell 28.2% and 8.8%, respectively. Bright spots in Manitoba agriculture were hog exports (up 18.7%) and other grain exports (up 9.3%).

**Chart 24**  
**Manitoba Foreign Merchandise Exports**



Source: Statistics Canada

**“Manitoba’s sale of exports abroad reflects the diversity that characterizes the provincial economy.”**

Canada West Foundation  
Manitoba Economic Profile  
and Forecast  
October 2005

## Manitoba Foreign Exports

BY INDUSTRY	2001	2002	2003	2004	2005	2005
						Share
	(Millions of Dollars)					(%)
Manufacturing						
Food	996.0	1,058.6	1,085.8	1,139.4	1,080.4	10.9
Transportation Equip.	1,139.7	944.9	878.4	932.0	1,007.7	10.2
Primary Metals	803.5	847.1	870.2	963.0	922.9	9.3
Machinery	535.9	679.8	620.8	728.0	774.5	7.8
Wood	531.4	573.3	553.0	638.4	623.0	6.3
Chemical Products	418.1	396.3	459.7	457.7	459.8	4.7
Paper	254.9	267.1	298.6	300.5	294.2	3.0
Plastics	210.5	221.4	229.1	233.9	242.3	2.5
Electrical & Electronic	273.8	188.2	187.9	192.3	238.1	2.4
Printing	165.6	195.2	182.7	183.9	189.4	1.9
Fabricated Metals	126.1	119.2	116.2	130.8	163.0	1.6
Petroleum and Coal	118.7	135.4	186.1	166.4	97.9	1.0
Furniture and Fixtures	171.5	166.8	125.2	111.1	94.9	1.0
Clothing and Textiles	156.6	145.2	122.4	99.0	74.8	0.8
Other Manufacturing	127.1	164.5	142.7	166.5	148.4	1.5
<b>Total Manufacturing</b>	<b>6,029.3</b>	<b>6,103.0</b>	<b>6,058.7</b>	<b>6,443.0</b>	<b>6,411.4</b>	<b>64.8</b>
Agriculture	2,030.0	1,838.9	2,072.2	1,961.6	1,906.8	19.3
Electricity	714.5	792.3	520.1	431.1	596.9	6.0
Other Primary	534.7	390.5	263.7	379.7	595.6	6.0
Other Exports	267.8	279.5	279.7	322.7	375.9	3.8
<b>Total Exports</b>	<b>9,576.2</b>	<b>9,404.3</b>	<b>9,194.3</b>	<b>9,538.2</b>	<b>9,886.6</b>	<b>100.0</b>
<b>BY DESTINATION</b>						
United States	7,517.8	7,604.7	6,986.3	7,155.1	7,534.7	76.2
Japan	454.7	475.0	508.1	456.7	524.5	5.3
China	167.9	79.5	157.5	391.5	243.9	2.5
Mexico	177.3	148.0	204.6	255.0	199.6	2.0
Hong Kong	140.2	112.1	130.8	171.7	129.7	1.3
Korea South	47.7	43.9	43.3	43.6	100.3	1.0
Belgium	147.5	117.9	115.0	74.7	92.8	0.9
United Kingdom	56.1	72.7	70.8	62.4	86.1	0.9
Australia	39.5	47.8	52.0	62.9	64.1	0.6
Taiwan	52.1	55.8	54.9	61.8	60.5	0.6
Other Countries	775.5	646.8	870.9	803.0	850.4	8.6
<b>Total Exports</b>	<b>9,576.2</b>	<b>9,404.3</b>	<b>9,194.3</b>	<b>9,538.2</b>	<b>9,886.6</b>	<b>100.0</b>

Note: Totals may not add due to rounding.  
Source: Manitoba Bureau of Statistics

Above-average precipitation in the first half of 2005 was a boon to hydro-electricity generation; foreign exports of electricity increased by 57%. Export revenue increased sharply in 2005, eclipsing the previous record.

## Population

Manitoba's population was estimated at 1,178,109 persons on October 1, 2005, an increase of 4,751 persons, or 0.4%, from the previous October 1, 2004 total of 1,173,400 (see Chart 25).

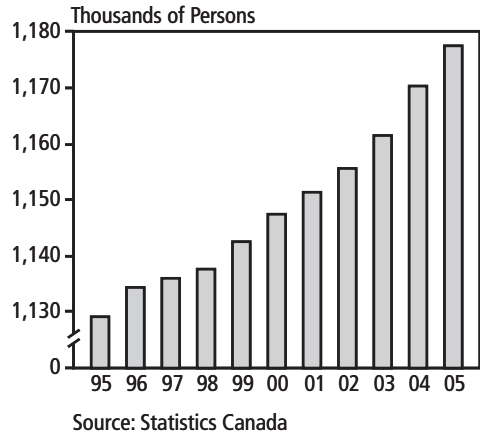
For the twelve-month period (October 2004 to October 2005), the largest contributor to the population increase was international migration, which increased by a net 6,791 persons. Natural increase in population (births less deaths) contributed a net addition of 3,935 persons, while the movement of non-permanent residence and Canadian citizens traveling abroad added 740 persons. Total net interprovincial migration contributed to the remaining net change in Manitoba's population.

International immigration has shown a positive trend for a number of years, but most significantly in the last two years. From October 2004 to October 2005, 8,123 international migrants came to the province, the highest level since 1974. In the previous twelve-month period, a total of 7,559 persons arrived from international destinations. Prior to these two years, the five-year average immigration level was approximately 4,600 persons (see Chart 26).

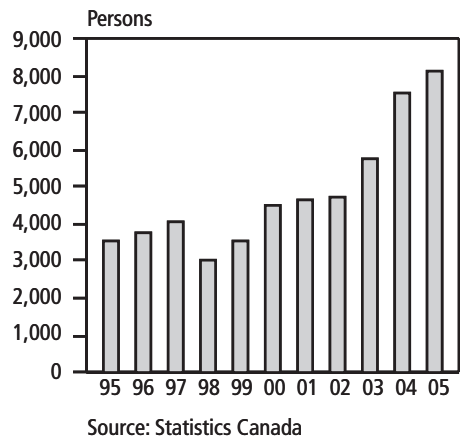
This sharp increase in immigration is mainly due to the successful Manitoba Provincial Nominee Program which facilitates visa and work-permit applications from foreign skilled workers and families. The primary objective of the Manitoba Provincial Nominee Program is to increase Manitoba's share of Canadian immigration to a level equal to the province's share of national population (3.66%) by boosting immigration to 10,000 annually by 2006.

The second-largest contributor to population growth in 2004/05 was natural increase. In the last year

**Chart 25**  
**Manitoba Population,**  
**1995 to 2005**



**Chart 26**  
**Manitoba Immigration,**  
**1995 to 2005**



## ■ MANITOBA'S 2005 POPULATION IN PROFILE

Demographers refer to “baby boomers” as the post-World War II generation born between 1947 and 1966. The “echo boomer” generation consists of children of baby boomers, who were born between 1980 and 1995. In Manitoba, these two groups represent the largest proportion of the population. Baby boomers account for 28.6% of total population while echo boomers represent 22.8%. Canada has an older population than Manitoba with baby boomers representing 30.4% of the population while echo boomers represent 21.5% (see Chart 27).

Manitoba's large echo boom reflects a higher fertility rate than the Canadian average. This makes Manitoba's population profile somewhat unique among provinces. Manitoba has the second-youngest population among provinces with a median age of 37.1, in contrast to a median age of 38.5 in Canada.

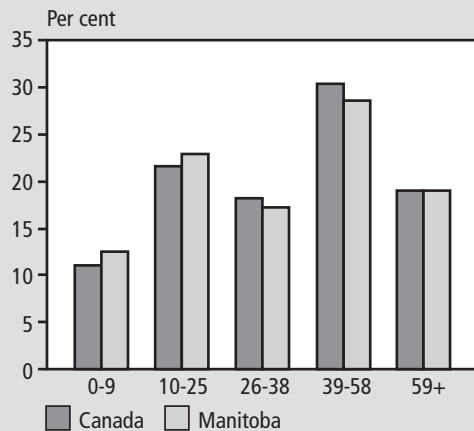
Alberta has the youngest population in Canada with a median age of 35.5, partly reflecting the influx of young people and young families moving into that province. Manitoba has the largest proportion of children under age 10, and the second-smallest proportion of baby boomers in the country, after Saskatchewan.

Though the baby boomers population is relatively smaller in Manitoba, they are the largest single age cohort in the province. The front end of the baby boom group in Manitoba turned 58 in 2005. They are beginning to contemplate retirement and are becoming greater consumers of health services. The peak of this generation was born in 1961 and turned 44 in 2005. Individuals in this group are in their prime earning years with homes that are paid for, being renovated or otherwise upgraded, and children who may be in post-secondary education.

The second-largest group is the echo boom. The oldest echo boomers just turned 25 and the peak of this group is age 15. The size of this generation should ensure that there will be a steady, albeit somewhat smaller, supply of workers entering the labour market over the next decade. This supply will help ease the tight labour market pressure that is anticipated with retiring baby boomers.

Baby boomers will reach the milestone age of 65 in 2012. During the same year, the bulk of the echo boomers will be well into their twenties. This implies that fewer people will be entering the labour market. With this demographic profile, the labour market pressures will intensify not only in Manitoba but throughout Canada.

Chart 27  
Share of Population By Age Groups, 2005



Source: Statistics Canada



there were 14,130 births in the province and 10,195 deaths, generating a net natural population increase of 3,935 persons. Due to the demographic profile, which includes the aging “baby boom” generation, the natural rate of population increase gradually declined in the 1990s. However, this has started to turn around and is expected to increase slowly in the future as the “echo boom” generation enters into the more fertile age cohort. Also, higher immigration rates and enhanced maternity policies under the Employment Insurance (EI) program are expected to contribute to a modest increase in the number of births in the province.

## ■ HIGHER INCOMES

One of the principal benefits of a growing economy is rising incomes. Higher incomes promote savings and investment, along with higher personal consumption and better living standards.

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

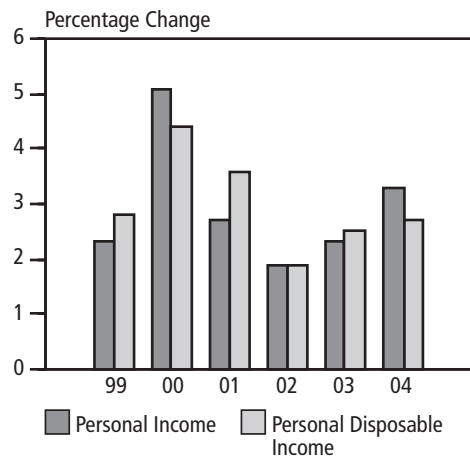
In 2005, the largest component of personal income, wages and salaries, is projected to increase 5.1% in Manitoba, much higher than the average annual growth for the preceding five years. Investment income is expected to increase by 4.4%, building on a 3.0% gain in 2004. Due to the poor growing conditions last season, net farm income is projected to fall significantly in 2005.

Despite the weakness in farm income, Manitoba’s per capita personal disposable income is forecast by the Conference Board of Canada to rise by 2.6% in 2005. In 2004, Manitoba ranked fifth-highest

*In 2005, Manitoba has the second-youngest population among provinces with a median age of 37.1, in contrast to a median age of 38.5 in Canada.*

Chart 28

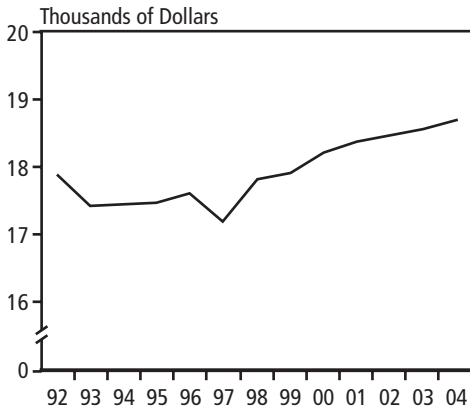
### Manitoba’s Personal Income Per Capita and Personal Disposable Income Per Capita, 1999 to 2004



Source: Statistics Canada

Chart 29

### Manitoba Real Personal Disposable Income Per Capita, 1992-2004



Source: Statistics Canada

in terms of personal disposable income per capita among provinces. Manitoba's per capita disposable income rose 2.8% that year (see Chart 28), just below the national increase of 2.9%.

In per capita terms, Manitoba's personal income is forecast to increase by 3.1% in 2005. In 2004, per capita personal income grew by 3.3%, equivalent to the national rate. Manitoba's per capita personal income grew by 16.0% between 1999 and 2004.

After accounting for inflation, "real" per capita personal disposable income has increased by 4.3% between 1999 and 2004. This contrasts with the 1990s, when Manitoba's real per capita personal disposable income declined (see Chart 29).

The gap between Canada and Manitoba's real per capita personal disposable income growth has been smaller between 1999 and 2004 compared to the 1990s. Manitoba has performed on par with, or better than, Canada in three of the last four years. The Conference Board of Canada forecasts Manitoba's real per capita personal disposable income growth to be above the national average in 2006 and 2007.

## ■ MANITOBA OUTLOOK

The Manitoba economy is expected to maintain fairly steady above-average growth in both 2006 and 2007. Manitoba Finance's survey of economic forecasters shows that real GDP in Manitoba is projected to increase by 2.9% in 2006 matching the rate estimated for 2005. In 2007, the economy is projected to grow by 2.6%.

The outlook for Manitoba follows the trend in both the Canadian and U.S. economic projections. Slower growth in 2007 is expected as higher interest rates dampen the housing market and consumer spending in general.

Economic forecast highlights noted by the private forecasters for Manitoba in 2006 include continued strength in construction, manufacturing and retail trade. In non-residential construction, several major projects' spending profiles peak in 2006. Housing demand is also expected to remain strong, as more homes will be built in 2006 compared to 2005. In manufacturing, construction will buoy demand for fabricated metal products, while strong demand for processed nickel is expected to be reflected in further gains for the primary metals industry. New orders for energy-efficient buses will help maintain sales for the transportation equipment manufacturers. Retail trade is also projected to remain strong as consumer spending continues to rise due to sustained income growth.

### Manitoba Outlook at a Glance

	2005	2006f	2007f
	(Percentage Change Except as Noted)		
Gross Domestic Product			
Real	2.9	2.9	2.6
Nominal	5.1	4.6	3.7
Employment	0.6	1.0	1.0
Unemployment Rate (%)	4.8	4.6	4.7
CPI	2.7	1.8	1.7

f - Forecast

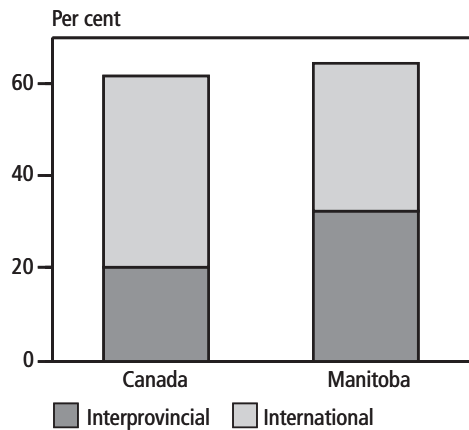
Sources: 2005: Statistics Canada and Manitoba Bureau of Statistics (GDP are projected)  
2006 and 2007: Manitoba Finance, survey of economic forecasters

Manitoba's nominal GDP is projected to increase by 4.6% in 2006 and by 3.7% in 2007. This compares with projected national growth of 5.5% in 2006 and 4.3% in 2007. The factors driving nominal GDP growth in both Canada and Manitoba are strong growth in corporate profits and rising employment income. The higher rate in Canada also reflects continued strong performance in Alberta and Saskatchewan's oil and gas industry.

Manitoba's employment is expected to grow by 1.0% in each of 2006 and 2007. The unemployment rate is projected to decline to 4.6% this year and edge up to 4.7% in 2007.

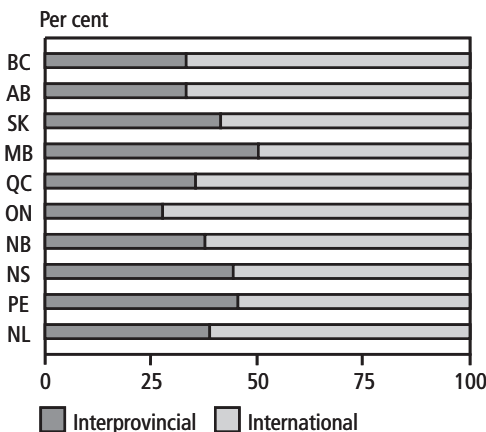
With expectations of lower energy prices in the near term, Manitoba consumer price inflation is expected to slow to 1.8% in 2006, down from 2.7% in 2005. In 2007, inflation is expected to decline further to 1.7%.

**Chart 30**  
**Ratio of Exports to Gross Domestic Product, Canada and Manitoba, 2004**



Source: Statistics Canada

**Chart 31**  
**Ratio of Interprovincial to International Exports, By Province, 2004**



Source: Statistics Canada

## ■ THE MANITOBA ECONOMY: STRENGTH IN DIVERSITY

Manitoba's economy continues to be recognized as one of the most diversified in Canada. Reports by Dominion Bond Rating Service, Moody's Investors Services, Standard and Poor's, and RBC Financial Group all cite economic diversity as one of the province's major economic strengths.

Diversity provides long-term stability, as periodic weakness in some industries are balanced by good growth in others. No one industry dominates the province's economy. Manitoba has almost an equal number of industries in all size categories: small, medium and large. Statistics Canada data show that Manitoba's economy is among the most stable in terms of growth performance among all provinces over the past five years.

Even within the current industrial structures there is growing diversity, providing Manitoba business with a stable environment in which to flourish. Developments in traditional industries are providing opportunities for Manitoba businesses to expand into new markets, and bring new products to existing markets. 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 is one of Canada's most export-oriented provinces. As Chart 30 indicates, total exports as a per cent of GDP were 64.3% in 2005, ahead of the 61.7% national average. Manitoba's exports are evenly split between interprovincial and international exports, the most evenly balanced among provinces (see Chart 31). In contrast, the average Canadian provincial ratio of foreign to domestic exports is 2:1.

Manitoba businesses have taken advantage of the province's central geographical location to maximize opportunities for interprovincial trade. This high volume of interprovincial commerce has been recognized as an important contributing factor in

maintaining stable economic growth. Having an even balance between domestic and international trade has helped Manitoba's export industries remain competitive in the face of a rising Canadian dollar, and has helped the province avoid sharp declines in exports recorded in some other provinces that are more dependent on international exports.

The diversification of the economy into increased value-added production is best illustrated by the change in the export shares among major industries. In particular, manufacturing, which in 1996 accounted for about 57% of Manitoba's foreign merchandise exports, has grown steadily to account for over 65% of foreign exports in 2005. New product lines in areas such as furniture, prepared meats, potato products, industrial chemicals, plastic products, pharmaceuticals, printing and publishing goods and energy-efficient transit buses have increased dramatically.

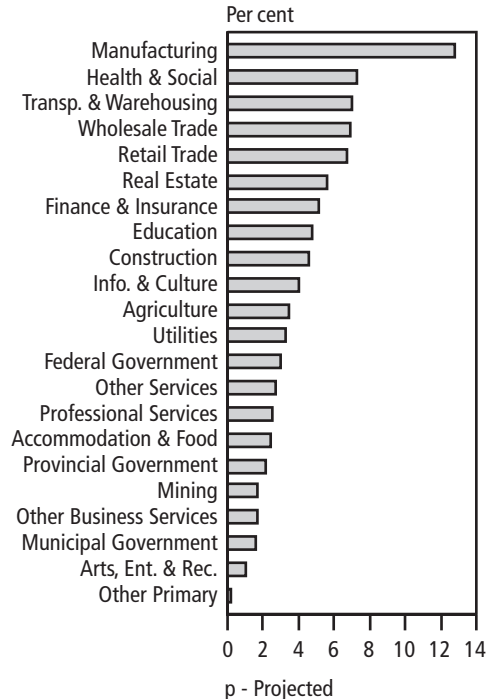
As noted above, Manitoba's industry profile is broadly based, which helps manage the risk associated with a downturn in any particular industry (see Chart 32). Manufacturing is Manitoba's largest sector, accounting for 12.8% of total GDP. Manitoba is home to Canada's largest furniture plant and to Motor Coach Industries and New Flyer Industries, making it the largest producer of intercity and urban buses in North America. Manitoba is also a major location for the manufacture of aerospace equipment, machinery and processed food.

Primary industries have historically played an important role in Manitoba's economic growth and development. Agriculture, mining and other primary industries directly contribute about 5.4% to provincial GDP. Manitoba's agriculture sector has diversified significantly over the past several years, and now produces a broader range of crops and livestock varieties.

**“[Manitoba] has become a significantly diversified economy over time, with a number of key sectors driving its performance.”**

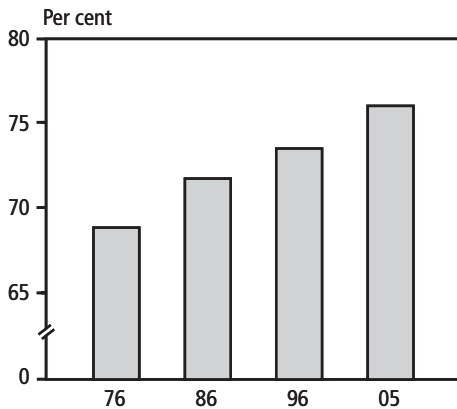
**RBC Financial Group  
Provincial Outlook  
January 2006**

**Chart 32  
Shares of Manitoba Gross  
Domestic Product, 2005p**



Source: Manitoba Bureau of  
Statistics

**Chart 33**  
**Manitoba Service Industries**  
**Share of Total Employment**



Source: Statistics Canada

**“Manitoba has a relatively stable economy, supported by one of Canada’s most diversified business mixes, declining dependence on primary sectors, below-average dependence on foreign trade, and one of the lowest unemployment rates in the country.”**

**Dominion Bond Rating Service  
 Credit Rating Report  
 May 2005**

Manitoba’s service sector encompasses a wide range of private and public sector activity. Service industries accounted for approximately 74% of Manitoba’s economy in 2005, higher than the Canadian average. The service sector accounts for about 76% of jobs in the province (see Chart 33).

Relative to most provinces, Manitoba’s service sector is large – a factor which provides added stability to the Manitoba economy. Service sector industries tend to be less susceptible to fluctuations through the business cycle than most goods-producing industries. The province is home to many major service sector operations, including the head offices of two of Canada’s major financial corporations – Great West Life and Investors Group – as well as CanWest Global Communications, Wawanesa Insurance, the Canadian Wheat Board, the International Institute for Sustainable Development, Cargill and Ducks Unlimited. Winnipeg is also a major centre for several other service industries, including transportation and storage industries, business call centres, health care, education and wholesale and retail trade.

Manitoba anchors the northern end of the mid-continent trade corridor that connects Canada to the Central U.S. and Mexico. The main lines of the two national railways and three railway lines to the U.S. meet in Winnipeg. This, coupled with major air and road transport links, has spawned a large cargo and freight transportation sector. Manitoba is home to a dozen of the country’s 100 largest truckers. Three of the ten largest employers in the country’s for-hire trucking industry have headquarters in Winnipeg. The province has about five percent of the national trucking business. The international border crossing at Emerson is the second-busiest in Western Canada.

Research and innovation have been pivotal in promoting the diversification and diffusion of new technologies and processes that have strengthened industry in the province. A number of major research establishments are located in Manitoba including the National Microbiology Laboratory, the National

Research Council's Institute for Biodiagnostics, the Food Development Centre, the Canadian Centre for Agri-Food Research in Medicine, Agriculture and Agri-Food Canada's Cereal Research Centre and several private life sciences companies. The life sciences research infrastructure in Manitoba is set to grow further in 2006 as the \$31 million Richardson Centre for Functional Foods and Nutraceuticals will open in the spring. As well, construction of the new \$25 million Siemens Institute for Advanced Medicine will begin in 2006, adjacent to the Health Sciences Centre in Winnipeg.

The merits of a diversified economic structure are clear. Diversification of Manitoba's economy provides a stabilizing mechanism during challenging economic conditions; provides an opportunity to expand into development of new goods and services and provides an opportunity to expand into new markets domestically and globally.

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**“Manitoba’s diversified economy runs the gamut of key Canadian industries, including mining, hydro, grain, agri-food, manufacturing, services and life sciences. This diversification helps to moderate economic swings, making the province a steady performer.”**

Scotiabank Group  
Provincial Pulse  
February 2006

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**MANITOBA ECONOMIC STATISTICS, 2001 TO 2005**

	2001	2002	2003	2004	2005
	(Millions of Dollars)				
<b>SECTORS</b>					
Farm Cash Receipts	3,701	3,848	3,574	3,893	3,736
Crops	1,519	1,913	1,704	1,779	1,281
Livestock	1,800	1,716	1,561	1,665	1,760
Direct Payments	382	219	308	459	694
Manufacturing Shipments	11,344	11,220	11,377	12,528	12,970
Mining	1,020	1,001	1,050	1,428	1,500*
Electric Power Sales	1,458	1,361	1,282	1,434	1,797
Export Sales	596	472	380	488	818
Housing Starts (no. of units)	2,963	3,617	4,206	4,440	4,731
Retail Trade	9,878	10,570	10,953	11,692	12,443
<b>FOREIGN EXPORTS</b>					
Total Exports	9,576	9,404	9,194	9,538	9,887
U.S.	7,518	7,605	6,986	7,155	7,535
<b>GROSS DOMESTIC PRODUCT</b>					
Nominal	35,129	36,625	37,746	40,006	42,029
Real	33,066	33,723	34,366	35,217	36,233
<b>BASE RATE WAGE SETTLEMENTS (%)</b>					
Public	2.5	4.6	3.1	3.2	3.0
Private	2.5	1.3	0.6	1.4	2.5
Total	2.5	4.0	2.9	2.6	2.9
<b>INVESTMENT</b>					
Total	5,803	6,013	6,163	6,698	6,963
Private	4,442	4,649	4,721	5,082	5,193
Public	1,361	1,363	1,442	1,617	1,770
Non-residential	4,784	4,876	4,906	5,181	5,371
Housing	1,019	1,137	1,257	1,518	1,592
<b>POPULATION</b>					
July 1 (000's)	1,151	1,156	1,162	1,170	1,178
<b>LABOUR MARKET</b>					
Labour Force (000's)	583.7	597.8	600.3	608.9	609.4
Employment (000's)	554.3	567.2	570.3	576.6	580.3
Participation Rate (%)	67.8	69.0	68.7	69.1	68.6
Unemployment Rate (%)	5.1	5.1	5.0	5.3	4.8
<b>CONSUMER PRICE INDEX</b>					
(Index, 1992=100)	121.2	123.1	125.3	127.8	131.2
<b>BANKRUPTCIES</b>					
Business	300	249	243	178	149
Farm	19	41	28	27	26
Personal	2,493	2,437	2,609	2,339	2,507

\* Estimated

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



2001	2002	2003	2004	2005	
(Annual Percentage Change)					
17.5	4.0	-7.1	8.9	-4.0	<b>SECTORS</b>
15.8	25.9	-10.9	4.4	-28.0	Farm Cash Receipts
16.0	-4.6	-9.0	6.0	5.7	Crops
33.1	-42.7	40.7	48.9	51.2	Livestock
-0.8	-1.1	1.4	10.1	3.5	Direct Payments
-17.3	-1.9	4.9	36.0	5.0*	Manufacturing Shipments
12.6	-6.6	-5.8	11.9	25.3	Mining
31.4	-20.8	-19.4	28.3	67.5	Electric Power Sales
15.7	22.1	16.3	5.6	6.6	Export Sales
5.8	7.0	3.6	6.7	6.4	Housing Starts (no. of units)
					Retail Trade
					<b>FOREIGN EXPORTS</b>
10.3	-1.8	-2.2	3.7	3.7	Total Exports
7.8	1.2	-8.1	2.4	5.3	U.S.
					<b>GROSS DOMESTIC PRODUCT</b>
3.2	4.3	3.1	6.0	5.1	Nominal
0.8	2.0	1.9	2.5	2.9	Real
					<b>BASE RATE WAGE SETTLEMENTS (%)</b>
-	-	-	-	-	Public
-	-	-	-	-	Private
-	-	-	-	-	Total
					<b>INVESTMENT</b>
5.1	3.6	2.5	8.7	3.9	Total
5.5	4.7	1.5	7.7	2.2	Private
3.9	0.2	5.8	12.1	9.5	Public
3.8	1.9	0.6	5.6	3.7	Non-residential
11.8	11.6	10.5	20.8	4.9	Housing
					<b>POPULATION</b>
0.3	0.4	0.5	0.7	0.6	July 1 (000's)
					<b>LABOUR MARKET</b>
0.4	2.4	0.4	1.4	0.1	Labour Force (000's)
0.4	2.3	0.5	1.1	0.6	Employment (000's)
-	-	-	-	-	Participation Rate (%)
-	-	-	-	-	Unemployment Rate (%)
					<b>CONSUMER PRICE INDEX</b>
2.6	1.6	1.8	2.0	2.7	(Index, 1992=100)
					<b>BANKRUPTCIES</b>
18.6	-17.0	-2.4	-26.7	-16.3	Business
5.6	115.8	-31.7	-3.6	-3.7	Farm
0.7	-2.2	7.1	-10.3	7.2	Personal

## ■ Appendix: RESEARCH AND INNOVATION

Innovation is a fundamental catalyst in the process of economic growth and development. Research is at the heart of the innovation process, since research leads to the knowledge which eventually permits the development of new and enhanced materials, products, processes or services. It is these innovations that lead to economic growth and development.

Research and development (R&D) creates the knowledge and expertise that ultimately lead to innovations. The discovery and application of research knowledge is necessary if an economy is to compete and prosper. Those jurisdictions 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 will lose competitive advantage and societies will not realize the full social benefits that innovation can bring: higher productivity, rising incomes, a cleaner environment and sustainable development, improvements to personal health and wellness, and so forth.

R&D cannot occur without a supportive environment. 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 in developing a skilled workforce for knowledge-based industries will continue to grow.

### Manitoba's Research Environment

One of the principal measures of R&D effort is the ratio of R&D expenditure relative to GDP. In Manitoba, the current level of gross expenditure on research and development was estimated to be equal to about 1.2% of GDP in 2003, about the same ratio as in 2002. On a per capita basis, gross domestic spending on R&D in Manitoba was \$383 per person.

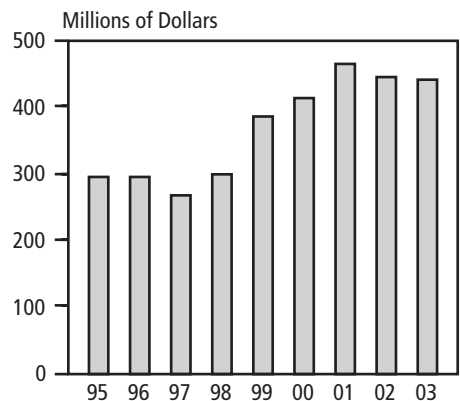
Statistics Canada estimates that total gross expenditure on R&D in Manitoba in 2003 was \$443 million, just below the 2002 level (see Chart 34).

Approximately 3,600 personnel are engaged in R&D activities in Manitoba, and about 80% of them work in higher education and private businesses.

Industry is an important component of the Manitoba R&D environment. Over 200 Manitoba businesses and 1,340 personnel were involved in R&D programs across a variety of economic sectors. Firms invested \$131 million in Manitoba R&D activities in 2003, about 30% of the total spending on R&D in the province.

Research and innovation in Manitoba spans a broad range of industries, including medicine, pharmaceuticals, agriculture and agri-food, aerospace products and other transportation equipment. The list of firms undertaking research in the province include Apotex,

**Chart 34**  
**Gross Expenditure on R&D in Manitoba**



Source: Statistics Canada

Biovail Corporation, Cangene Corporation, Buhler Versatile Industries, Glaxosmithkline Inc., Cargill, Monsanto Canada, Brett-Young Seeds, Vansco Electronics, 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 over 40 life sciences companies. About 30 R&D establishments undertake research activities in various biotechnology fields like health and agriculture. One in ten of Canada's biotechnology companies currently undertake research in Manitoba, and over 4,000 persons are employed by the life sciences industry in the province. Two major companies active in this field, Cangene Corporation and Biovail Corporation, are completing major expansions in Manitoba this year.

Manitoba is also home to a number of major public research and development facilities. These include the University of Manitoba, the St. Boniface General Hospital Research Centre, the National Microbiology Laboratory, the National Centre for Foreign Animal Disease, the National Research Council's Institute for Biodiagnostics, the Industrial Technology Centre, TRILabs, the Food Development Centre, the Canadian Centre for Agri-Food Research in Medicine, Agriculture and Agri-Food Canada's Cereal Research Centre, Canadian International Grains Institute and the Prairie Agricultural Machinery Institute.

The \$31 million Richardson Centre for Functional Foods and Nutraceuticals will focus on products derived from crops important to the Prairie region, including oats, wheat, buckwheat, canola, flax and hemp. Major funding partners to date include Western Economic Diversification, the Province of Manitoba, CIBC, Agricore United, the Manitoba Rural Adaptation Council, the Richardson family and other private sector investors. The new building will be a unique facility where researchers from different disciplines as well as industry partners will work together to develop functional foods and nutraceuticals based on scientific evidence for their efficacy and safety. The 55,000 square foot facility will be fully operational by spring of 2006.

Construction on the new Siemens Institute for Advanced Medicine will begin in spring 2006. The Institute will focus on developing technological advancements in neurosciences, infectious diseases, medical informatics/simulation, advanced imaging and new advanced surgical technologies. The \$25 million facility will be built adjacent to the Health Sciences Centre in Winnipeg.

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 \$120 million for 2003/04, down slightly from the previous year.

The federal government's expenditures on R&D in Manitoba are equal to 2.4% of the national total. This is well below Manitoba's share of population. The province of Manitoba has encouraged the federal government to increase funding to Manitoba's R&D sector and to ameliorate the funding deficiency.

The federal government supports science activities performed by federal departments and agencies, universities, businesses or other organizations. Federal departments and agencies conducting research in Manitoba include Agriculture Canada, Environment Canada, Fisheries and Oceans, Health Canada and the National Research Council. About half of the federal expenditures on R&D in Manitoba are for work carried out by these departments and agencies, while an 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. Manitoba's direct expenditures on R&D include internal departmental spending, support to business enterprises, R&D support to universities and health care organizations and support through the activities of the Industrial Technology Centre.

In 2004/05, direct expenditure on R&D by the provincial government is estimated at \$26.9 million, up 14.6% from 2003/04 (see Chart 35). 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 businesses and other parties.

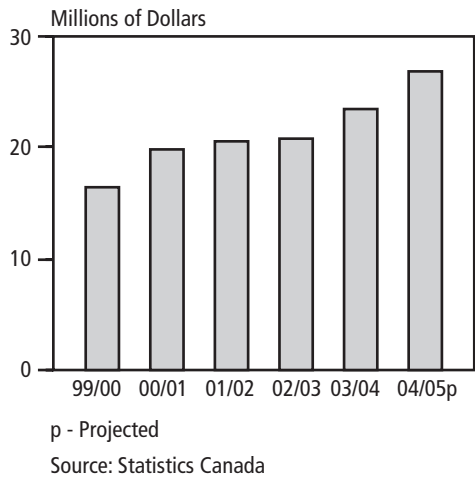
Manitoba's Research and Development Tax Credit encourages private sector R&D activity in Manitoba. The Tax Credit program was established in 1992 and provides firms undertaking R&D in the province with substantial support for R&D investment through a non-refundable credit for qualifying R&D expenditures. Budget 2005 boosted the credit rate by 33%, to 20% of eligible expenditures from 15% (see "Manitoba R&D Tax Credit", page 48).

Manitoba partners with the federal government 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 and the Canadian Institutes of Health Research Regional Partnerships Program. In 2005/06 MRIF leveraged \$12.2 million from these and other public and private sources.

In 2005/06, numerous projects were funded through the MRIF. The MRIF supported various research projects in several areas, including infectious diseases, microelectronics and genomics. The table "Manitoba Research and Innovation Fund Support, 2005/06" on page 43 provides a list of some of the projects funded last year.

**Chart 35**  
**Provincial Government Expenditure on R&D 1999/2000 - 2004/2005p**



**Manitoba Research and Innovation  
Fund Support, 2005/06**

**Funding**  
(Thousands of Dollars)

Research Laboratory for Epidemiology .....	125
CIHR Strategic Training Program.....	100
Richardson Centre for Functional Foods and Nutraceuticals.....	2,375
Manitoba Centre for Health Policy Endowed Child Health Chair .....	400
Manitoba Regional Materials and Surface Characterization Facility.....	1,484
Program in Systems Biology.....	1,233
Lipids and Atherosclerosis Research Lab .....	99
Wireless Sensor Network Lab .....	89
Manitoba Research Centre for mRNA Splicing .....	96
Gene Expression Analysis of Cardiac Hypertrophy .....	100
Remote Sensing of Marine Biological Hotspots in the Canadian Arctic .....	100
Electron Cooler Trap - Quantum Electrodynamics .....	98
Laboratory for Liquid Crystal/Nanoparticle Composite Materials .....	100
Protein Biochemistry Lab .....	100
Ultra-Side Band Microwave Imaging Lab .....	100
Core Facility for the Analyses of Natural Health Products .....	100
Parasite Vaccine Development Lab .....	100
Field Laboratory for the Study of Retrofitted Landfill Leachate Removal Systems.....	100
Patch Clamp with Imaging by Fluorescence Resonance Energy Transfer .....	100
Stable Isotope Ratio Mass Spectrometer.....	125
Diabetes and Obesity Lifestyle Intervention Initiative (DOLI) .....	266
Regional Partnerships Program.....	724
Other Projects .....	1,163
<b>Total Projects Funding.....</b>	<b><u><u>\$9,278</u></u></b>

Source: Department of Energy, Science and Technology

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. In 2005/06, the Health Research Initiative provided \$2.0 million to support operating costs for five health research centres in Manitoba.

The province provided support grants of \$2.0 million in 2005/06 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 Energy, Science and Technology on health matters referred to the MHRC. The Council operates funding programs including awards to post-doctoral and graduates students, Ph.D dissertation awards, and operating and establishment grants.

The MCHP is a research unit in the University of Manitoba's Faculty of Medicine. About 50 staff work at the Centre. The MCHP provides 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 spin-off benefits for local companies and non-profit institutions.

In 2005/06, Manitoba Network of Centres of Excellence research programs received support totaling \$600,000 through the MCEF. Grants were provided to research programs such as the Vaccines and Immunotherapeutics, Arctic Net, Intelligent Sensing for Innovative Structures Canada, the Canadian Arthritis Network and Sustainable Forest Management.

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 allocated \$2.5 million in funding for research and development aimed at enhancing diversification, improved techniques, value-added opportunities and export capabilities in the province's large agri-food sector.

The province supports a special operating agency, the Food Development Centre in Portage la Prairie, to undertake R&D and related services to bring new Manitoba food products to market. The Centre provides support to clients in product development, food processing and packaging, and shelf life testing. The Centre completed a \$13.6 million renovation and expansion in 2005, further supporting the diversification of the agri-food 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) Manitoba 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 groups and

governments. Although the provincial governments provide some financial support to the Institute, 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. Facilities and services include a calibration laboratory, noise and vibration analysis, mechanical testing, advanced document examination and administrative support for product development and related activities. ITC operates a Virtual Reality Centre, which allows businesses to realistically simulate new products before they are built. Industrial clients can use the virtual technology to design any product with computer images that show how two-dimensional models will actually look and feel in a three-dimensional world.

Manitoba is home to one of five TRILabs applied research laboratories. Sponsored by a private-public sectors partnership and funded in part by the Department of Energy, Science and Technology, it is Canada's largest not-for-profit information and communications technology research consortium. The Winnipeg office specializes in the area of data networking - research aimed at improving the speed, reliability and efficiency of the communications network - and health.

Manitoba Hydro commits approximately \$5 million per annum to a research and development program to assist in providing higher system reliability, lower electricity rates, increased safety of the system infrastructure and improved customer 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.

In 2005, Manitoba Hydro announced that it will provide financial support for two new Natural Sciences and Engineering Research Council of Canada Industrial Research Chairs in the Faculty of Engineering at the University of Manitoba. The corporation will contribute 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 is also supporting 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, performs innovative research and development in high voltage DC 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.

### **A New Biotechnology Facility**

To keep up with demand for qualified professionals in Manitoba's burgeoning pharmaceuticals industry, Red River College opened its new \$2 million biotechnology training facility in January 2006. The facility includes three laboratories plus two production rooms. Five new training programs in biopharmaceuticals development and processing are being instituted at the College to teach the skills necessary for applied research and production in the life sciences sector.

## University of Manitoba

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

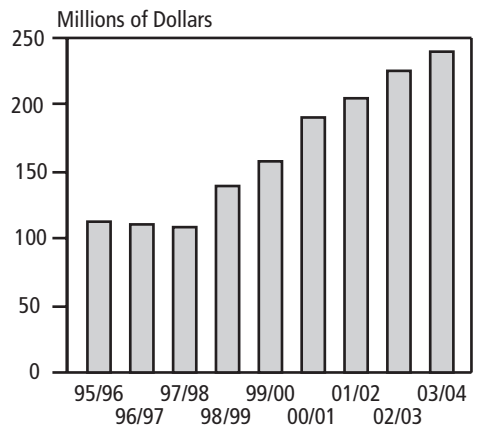
In Canada, higher education institutions account for about one-third of the R&D work performed. In Manitoba, the role of higher education is even more important as higher education (including related institutes, clinics and research stations) accounts for more than half of the R&D activity.

Statistics Canada estimates that R&D expenditure by Manitoba's higher education sector in 2003/04 was a record-high \$238.7 million, up from \$224.5 million in 2002/03 (see Chart 36). Natural sciences and engineering accounted for approximately 43% of this total, health sciences for 35%, while social sciences accounted for the remaining 22%.

The University of Manitoba is one of Canada's major research universities. The University has enrollment of 28,000 students with more than 3,800 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 12 of 19 networks created under this program, which include the University as the network leader of Intelligent Sensing for Innovative Structures Canada, the national network focussing on "smart" civil infrastructure.

**Chart 36**  
**R&D Expenditure in Manitoba**  
**Higher Education,**  
**1995/96 - 2003/04**



Source: Statistics Canada



## University of Manitoba

### National Centres Of Excellence Participation:

- Intelligent Sensing for Innovative Structures (Leader)
- advanced food and materials
- allergy, genes and environment
- arctic research
- arthritis research
- automobile design and engineering
- mathematics of information technology
- prion (BSE) research
- stroke research
- sustainable forest management
- vaccines and immunotherapeutics
- water research

The University of Manitoba has established 36 Canada Research Chairs to ensure its leadership role in areas of established excellence. The research programs of these chairs focus on such important fields as nanoscale physics, genetic modelling, cancer therapy development and population health research. The University's life sciences research activities are further strengthened through active partnerships with several major provincial medical research organizations, including CancerCare Manitoba, the Health Sciences Centre, St. Boniface General Hospital Research Centre, the Manitoba Institute of Child Health and the Canadian Science Centre for Human and Animal Health.

In September 2005, the University opened its new Engineering and Information Technology Complex. New laboratories and equipment will help build on all current areas of research expertise - including advanced manufacturing, advanced materials, biomedical engineering, civil infrastructure, electrical power systems and information technology/communications - and create new research opportunities. In addition to building innovative links between the engineering and computer science disciplines, the complex will strengthen research collaboration with industry.

SMARTpark, the research and innovation park located at the University of Manitoba, continues to grow with the completion of the Richardson Centre for Functional Foods and Nutraceuticals in early 2006 and the new 42,000 square foot One Research Road multi-tenant facility, which has become the new home to Monsanto Canada's corporate headquarters. SMARTpark brings together industry and the University to promote R&D and the development of knowledge-based industry. One of the key features of the park is its proximity and access to the extensive resources of the University of Manitoba. Currently, about 18 companies with more than 800 people work at the SMARTpark facilities.

## Manitoba R&D Tax Credit

In Budget 2005, Manitoba boosted the credit rate for the province's non-refundable Corporation Income Tax credit for scientific research and experimental development undertaken in Manitoba by a third, from 15% to 20%.

The incentive, introduced in 1992, is tied to the criteria used to determine 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 broadly targeted insofar as both incentives are activity based and apply to all sectors and industries. Both current expenditures, which include remuneration of persons engaged in research and the cost of materials and prescribed capital expenditures (which includes the cost of machinery and equipment) are eligible expenses for purposes of Manitoba R&D tax credit amounts.

From the inception of the Manitoba R&D tax credit through to the 2004 taxation year (latest year for which data is available), firms conducting R&D in Manitoba claimed \$105.2 million in provincial tax credits.

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

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 2006 income tax rates.

### After-Tax Cost of \$100 R&D Expenditure, 2006

	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	<u>16.00</u>	<u>28.00</u>
Deductible Amount	64.00	52.00
<b>Tax Savings:</b>		
Manitoba	9.28	2.34
Federal	<u>14.16</u>	<u>6.82</u>
<b>Net after-tax cost</b>	<b>40.56</b>	<b>42.84</b>