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## **Analytical Paper**

## **Analysis in Brief**

# Review of Non-residential Construction in 2005

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#### **Review of Non-residential Construction in 2005**

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#### **Review of Non-residential Construction in 2005**

#### Bechir Oueriemmi, Investment and Capital Stock Division

#### **Summary**

They're becoming a fixture on the skyline of many Canadian cities these days. Construction cranes, swarmed by dump trucks, scaffolding and power shovels, peck away like birds at building sites for high-rise office towers, shopping centres, hospitals, factories and warehouses.

The cranes are particularly predominant in Western Canada, thanks to huge investments in non-residential construction projects in Alberta and British Columbia. For the fifth year in a row, non-residential investment hit a record high in 2005, and the West can take a lot of the credit.

Non-residential investment—commercial, industrial and institutional projects—hit \$31.5 billion last year, up 8.7% from 2004. This was the strongest gain since 2002.

Of the \$2.5-billion increase in non-residential construction last year, office towers accounted for \$1.4 billion, more than one-half. Just two metropolitan areas—Vancouver and Calgary—accounted for nearly one-quarter of the jump in investment in office towers.

Nationally, investment in office tower construction soared 28.2% to \$6.2 billion, halting a two-year decline. But it wasn't the only bright spot. Investment in hospitals and health clinics was up at the national level for the fifth year in a row, rising in seven provinces.

Investment in warehouses jumped 14.6% to \$2.0 billion, likely the result of a strong performance by retailers and wholesalers, supported by consumer spending and international trade. Ontario was the leader in warehouse construction.

Western Canada spearheaded the growth in industrial investment. Alberta and British Columbia alone accounted for one-fifth of all investment in the nation's manufacturing plants last year. They also generated one-half the total gain last year in all investment in buildings associated with maintenance, such as repair shops.

This study examines investment in non-residential construction last year as well as trends since the turn of the millennium. Based on Statistics Canada data, it also focuses on the categories of projects that have influenced the development of the three main components, namely commercial, industrial and institutional.

#### What kind of buildings are we talking about?

Commercial buildings includes all buildings related to the tertiary such as commercial centres, service centres, office towers, but also convenience stores, gas stations, cinema complexes, banks, pharmacies, grocery stores, sports facilities, auto repairs centres, theatres, hotels, funeral homes, beauty salons, warehouses and transportation terminals.

**Industrial buildings** includes all buildings used for manufacturing and processing; for communications or other utilities; for agriculture or forestry; and for mining.

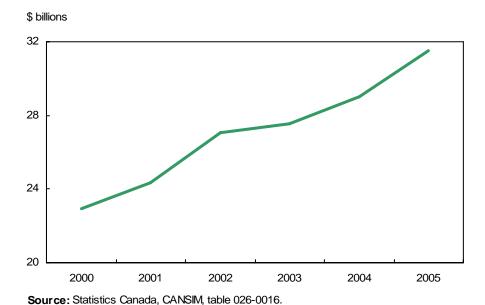
**Institutional buildings** includes buildings such as schools, universities, hospitals, health clinics, day care centres, churches, museums and nursing homes.

Investment in non-residential building construction excludes projects in the **engineering sector** such as dams, pipelines, oil rigs and sewage treatment and disposal plants.

#### Investment up in two of three components

Last year's record \$31.5 billion in non-residential investment nearly matched the Alberta government's total revenue, and comprised nearly 2.3% of Canada's gross domestic product. Investment rose in the commercial and industrial components, and declined only in the institutional component.

## Value of investments in non-residential construction hits all-time high



Commercial projects such as shopping centres, office buildings and cinema complexes, accounted for the lion's share of non-residential investment, about 55%. Investment totalled a record high \$17.5 billion, up 12.7%.

Industrial projects, such as factories, recorded the largest gain, 20.3%, to reach \$5.6 billion, also a record. Spending on institutional buildings such as hospitals, museums and schools slipped 4.7% to \$8.3 billion.

All provinces and territories posted increases in investment in non-residential buildings in 2005, except for Newfoundland and Labrador, Saskatchewan and Nunavut.

The largest gains occurred in Alberta, which saw booming conditions as a result of oil prices, and British Columbia, which saw rising trade with Asia and preparations for the 2010 Olympics, among other factors.

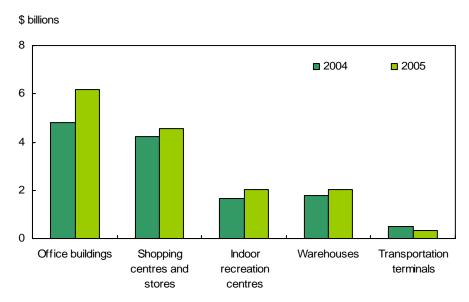
#### Commercial component: All provinces and territories recorded gains

The \$17.5 billion invested in commercial buildings last year was a fifth consecutive record high. All provinces and territories posted gains.

The driving factor of the increase was investment in office towers, which accounted for more than one-half the rise in all investments in non-residential building construction.

However, investment was also strong in indoor recreation centres, shopping centres, stores and warehouses; all of these subgroups posted growth.

#### Office buildings were key factor in commercial sector



**Source:** Statistics Canada, special tabulation, Investment and Capital Stock Division.

#### Office buildings: A rebound

Demand for office buildings surged following a soft performance in this sector from 2000 to 2004. Lower vacancy rates and higher rents for office space across the country encouraged businesses to invest in the construction of office buildings.

Investment in office towers grew by 28.2% to \$6.2 billion in 2005. Of the total \$2.5-billion increase in non-residential construction last year, office towers accounted for \$1.4 billion, or 56%. This halted two consecutive annual declines in office investment.

In Western Canada, the metropolitan areas of Calgary and Vancouver posted strong gains.

In Calgary, investment in office tower construction soared 58.1% to \$497 million, largely the result of demand for office space by businesses in the energy sector.

In Vancouver, investment shot up 45.1% to \$458 million. This performance can be partly attributed to good economic growth, increased commercial transactions with Asia and low vacancy rates. Another likely factor was strong demand from a growing number of organizations and businesses (notably telecommunications and consulting firms) serving the 2010 Olympics.

East of the Prairies, several factors contributed to gains in spending on office buildings. Vacancy rates declined sharply in the major centres and rents were up, leading to strong gains in such investment in Toronto, Halifax, Québec and Montréal.

Table 1 Value of investment in office building construction in the major metropolitan areas, 2000 to 2005

	2000	2001	2002	2003	2004	2005	2004 to 2005
			% change				
Halifax	81	67	32	22	36	139	286.9
Québec	172	113	140	73	73	123	67.6
Montréal	662	722	790	461	386	435	12.7
Ottawa-Gatineau	364	617	481	600	620	513	-17.2
Toronto	1,620	1,407	1,329	1,267	1,349	1,576	16.9
Calgary	367	350	362	405	314	497	58.1
Vancouver	489	452	475	462	316	458	45.1
Total Canada	5,120	5,013	5,248	4,921	4,814	6,173	28.2

**Source :** Statistics Canada, special tabulation, Investment and Capital Stock Division.

#### Investment up in shopping centres, stores, indoor recreation centres

Investment in shopping centres and stores was up 7.3%, reaching a record high \$4.5 billion in 2005. This marked the fifth consecutive annual increase.

Among the major contributing factors were strong profits for wholesalers and retailers, record retail sales and sustained employment growth.

Six provinces—Newfoundland and Labrador, Nova Scotia, Quebec, Manitoba, Alberta and British Columbia—saw higher investment in shopping centre construction in 2005.

In Quebec, spending on shopping centres jumped 10.0% to \$1.1 billion.

In Alberta, a 13.5% rise in shopping centre construction resulted in a total investment of \$706 million. The province's population boom in recent years was clearly a factor. Alberta's population increased at more than five times the national average during the last three months of 2005, as record numbers of people flocked to the booming province mainly from other regions of Canada.

In British Columbia, spending on shopping centres also rose 10.0%, bringing the total to \$576 million last year.

In Ontario, however, investment in shopping centres edged down 1.4% from 2004, to \$1.60 billion. This decline followed on the heels of three successive strong increases that culminated in a record \$1.63 billion in investment in 2004.

At the same time, investment in indoor recreation centres nationally climbed 22.7% to \$2.0 billion last year. This was the sixth consecutive rise in such investment across the country.

At the provincial level, the largest increases in investment in indoor recreation centres occurred in Ontario, Quebec, British Columbia, and Alberta.

#### Record high investment in warehouses

More retail sales generally mean more wholesale activity as well. In both cases, greater volume generally means more distribution and more storage. In 2005, investment in warehouses rose 14.6% over 2004 to a record high \$2.0 billion.

This can be attributed to the strong performance of retailers and wholesalers supported by consumer demand and growth in international trade.

Ontario led the pack in investment in warehouse construction last year, with \$875 million an increase of 28.7%.

In addition, investment in Alberta rose 41.2% to \$439 million, and in British Columbia, it surged 26.0% to \$338 million.

Quebec posted a substantial decline in investments in warehouses last year following successive increases from 2000 to 2004. Investment there tumbled 36.9% to \$197 million.

#### Transportation terminals: Declines in 3 provinces

Nationally, investment in transportation terminals last year amounted to \$313 million, down 36.0% from 2004. Historically, Ontario, Quebec and British Columbia have accounted for most of this type of investment because of their huge airports.

Last year, the value of investment for transportation terminals fell more than 50% in both Quebec and British Columbia, as major airport renovations and expansion projects wrapped up.

In 2005, Ontario posted investment of \$133 million, down 19.3%, the third decrease in a row. This reduction can partly be explained by the fact that substantial amounts were spent in 2001 and 2002 to expand airports in Ontario.

#### Institutional buildings: Hospitals and health clinics top \$3 billion

Total investment in the institutional component slipped last year despite continued stellar growth in the health field.

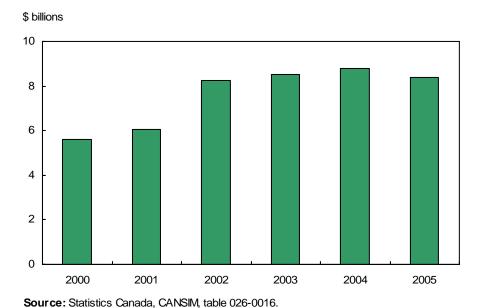
Investment in hospitals and health clinics topped \$3 billion for the first time last year, rising 7.4% from 2004, the fifth consecutive increase.

Seven provinces saw gains. In British Columbia, which recorded the strongest increase, investment more than doubled (+118.4%) to \$392 million, an all-time high. Alberta posted a 21.0% increase to \$367 million.

Following consecutive gains from 2000 to 2004, substantial investment declines occurred in Manitoba, down 50.7% to \$71 million; Nunavut, down 65.0% to \$32 million; and Ontario, down 2.1% decline to \$1.5 billion.

Offsetting the gain in the hospitals and health clinics were declines in spending on educational institutions, and in investment for day care centres and homes for the elderly.

# Despite decline in 2005, investments in institutional projects remained high



#### **Educational institutions: Effects of double cohort in Ontario**

Investment in educational institutions fell 13.2% across the country in 2005 to about \$3.3 billion. One of the factors was the double cohort in Ontario.

Ontario's double cohort was a major factor in the rising university enrolment rate. In 2002/2003, two cohorts of students graduated from Ontario secondary schools at the same time because of the elimination of Grade 13 Ontario Academic Courses (OAC) from the Ontario curriculum.

Grade 12 and Grade 13 OAC students entered university simultaneously and increased the number of enrolments in 2003/2004, especially for 18-year-old students.

From 2002 to 2004, the average investment in educational institutions in Ontario was \$1.6 billion, as the province faced both the needs created by the double cohort and demand related directly to population growth. Last year, however, following the transition, Ontario posted a substantial 12.5% decline to \$1.4 billion.

In addition to Ontario, Alberta and Quebec posted sizeable retreats.

The only provinces to report more investment in educational institutions last year were Nova Scotia, New Brunswick and Manitoba. In Manitoba, the value of investment in educational institutions increased 42% to \$125 million.

#### Industrial investment: West spearheads growth

The strong 20.3% gain in investment in the industrial component last year was largely attributable to manufacturing and maintenance construction. Investment in manufacturing plants rose 13.0% to \$2.7 billion, while spending on buildings associated with maintenance surged 50.4% to \$1.8 billion.

Two western provinces spearheaded the growth. Alberta and British Columbia alone accounted for 20.0% of all investment in the country's manufacturing plants in 2005. They accounted for three-quarters of the gain in such investment over 2004, that is, \$219 million of the total \$310-million increase.

This strong performance was driven by the energy sector, particularly construction of buildings associated with heavy equipment maintenance, and by vigorous export sales, particularly to China. As well, Canadian plants were operating at full capacity.

Competitive pressure and rising energy costs affected many manufacturers in Eastern and Central Canada. In Ontario, for example, investment in manufacturing plants slipped 0.6% last year to \$1.2 billion.

Table 2 Investment in manufacturing plants and maintenance buildings, selected provinces and Canada, 2004 and 2005

	Ma	nufacturing	plants	Maintenance buildings			
	2004	2005	2004 to 2005	2004	2005	2004 to 2005	
	\$ millions		% change	\$ m	illions	% change	
Quebec	599	658	9.8	138	186	34.6	
Ontario	1,245	1,238	-0.6	590	774	31.2	
Alberta	200	368	83.5	93	258	178.0	
British Columbia	119	171	43.7	221	344	55.7	
Canada	2,382	2,692	13.0	1,190	1,790	50.4	

Source: Statistics Canada, special tabulation, Investment and Capital Stock Division.

From 2000 to 2004, Alberta and British Columbia generated, on average, one-quarter of all investment in the construction of maintenance buildings. In 2005, these two provinces posted close to one-half of the \$288 million total gains in this type of investment. Such buildings consist mainly of garages and repair shops, and sometimes equipment warehouses that are also used for maintenance.

Investment in maintenance buildings was also heavy in three other provinces: Ontario, up 31.2% to \$774 million; Quebec, up 34.6% to \$186 million; and Nova Scotia, up 118.3% to \$75 million.

#### **Data sources**

Data on <u>Investment in Non-residential Building Construction</u> come from the Building Permits Survey of municipalities, which collects information on construction intentions. These data don't include engineering construction.

Work put-in-place patterns are assigned to each type of structure (industrial, commercial and institutional). These work patterns are used to distribute the value of building permits according to project length. Work put-in-place patterns differ according to the value of the construction project; a project worth several million dollars will usually take longer to complete than will a project of a few hundred thousand dollars.

Additional data from the Survey of Private and Public Investment are used to create these investment series. Investment in non-residential building construction data is benchmarked to Statistics Canada's System of National Accounts of non-residential building investment series.

Table 3 Value of investment in non-residential building construction, by building type, province and territories, 2005

	Building type								
	Ind	ustrial	Insti	tutional	Commercial				
	2005	2004 to 2005	2005	2004 to 2005	2005	2004 to 2005			
	\$ million s	% change	\$ millions	% change	\$ millions	% change			
Newfoundland and Labrador	43	-15.5	92	-15.0	191 <sup>1</sup>	12.1			
Prince Édward Island	26	37.0	25	32.7	67	18.8			
Nova Scotia	141	118.4	330 <sup>1</sup>	15.1	482 <sup>1</sup>	15.7			
New Brunswick	82	8.8	201 <sup>1</sup>	67.5	318	7.2			
Quebec	1,222	9.9	1,352	-9.0	2,843 <sup>1</sup>	1.4			
Ontario	2,275 <sup>1</sup>	6.2	3,912	-10.5	7,297 <sup>1</sup>	10.7			
Manitoba	164	30.2	263	-29.1	560	16.3			
Saskatchewan	109	-20.4	170	-26.7	439 <sup>1</sup>	17.2			
Alberta	859 <sup>1</sup>	88.9	986 <sup>1</sup>	3.3	2,849 <sup>1</sup>	25.9			
British Columbia	643 <sup>1</sup>	42.7	959	44.0	2,289 <sup>1</sup>	17.4			
Yukon	1	21.4	18	91.8	70 <sup>1</sup>	54.2			
Northwest Territories	20	91.4	13	-63.4	141 <sup>1</sup>	24.1			
Nunavut	1	587.2	50	61.4	11	21.8			
Canada	5,586	20.3	8,372	-4.7	17,557 <sup>1</sup>	12.7			

1. Record high.

**Source:** Statistics Canada, CANSIM, table 026-0016.

Table 4 Value of investment in non-residential building construction, by province and territories, 2000 to 2005

	2000	2001	2002	2003	2004	2005	2004–2005
		% Change					
Newfoundland and Labrador	364	296	318	399	330	326	-1.2
Prince Édward Island	99	111	158	112	94	118	25.2
Nova Scotia	535	623	566	615	767	952 <sup>1</sup>	24.1
New Brunswick	311	363	441	481	493	602 <sup>1</sup>	22.1
Quebec	4,805	4,833	5,343	5,360	5,400	5,417 <sup>1</sup>	0.3
Ontario	9,496	10,623	11,858	12,475	13,103	13,484 <sup>1</sup>	2.9
Manitoba	836	765	860	963	979	987	0.9
Saskatchewan	844	796	773	718	744	718	-3.4
Alberta	2,887	3,163	3,613	3,492	3,672	4,694 <sup>1</sup>	27.9
British Columbia	2,642	2,626	2,897	2,777	3,066	3,890 <sup>1</sup>	26.9
Yukon	36	52	45	42	56	89 <sup>1</sup>	60.0
Northwest Territories	35	66	144	67	160	174 <sup>1</sup>	8.7
Nunavut	36	46	49	71	140	63	-55.3
Canada	22,925	24,362	27,065	27,572	29,003	31,515 <sup>1</sup>	8.7

1. Record high.

Source: Statistics Canada, CANSIM, table 026-0016.