

highlights

a weekly digest of recently released British Columbia statistics

Labour Force

- **British Columbia's unemployment rate increased half a percentage point in October, rising to 8.2% (seasonally adjusted).** The upward movement in the unemployment rate was mainly due to job losses. The number of people with jobs fell 0.7%, while the size of the labour force (those either working or looking for work) decreased 0.1%. Unemployment rates were up in most parts of the country, as the effects of a slowing economy, disruptions resulting from the September 11 terrorist attack, and pressures from other sources such as the countervailing duty on softwood lumber began to appear in the data. In BC, employment in manufacturing, which is dominated by the wood and paper industries, was down 4.6%, while the number of people with jobs in logging, fishing and mining plunged 6.7%. Other goods-producing industries are also feeling the pinch. Employment in agriculture dropped 3.1%, helping to pull the overall total for the goods industries down 2.5%. Service sector workers their own, posting only a modest decline (-0.2%) in employment, but the transportation and warehousing industry cut its workforce by 2.6%. The tourist-related accommodation and food service industry bounced back (+4.3%), recouping most of the job losses that occurred in August and September.

Contrary to expectations, Canadian job losses during the last month have not been as significant as the pundits had predicted they would be. BC and Saskatchewan (-0.2%) were the only provinces where employment declined. Nationally, the jobless rate was virtually unchanged (increasing 0.1 percentage points, to 7.3%) in October, as was the case in Saskatchewan and Quebec. Ontario's unemployment rate was un-

changed. Growth in the labour force, not job losses, accounted for the increase in unemployment rates that was seen in most parts of the country.

Source: Statistics Canada

- **Among the regions, employment in Vancouver Island/Coast continued to decline (-4.5%, 3-month moving average), marking the 16th consecutive month in which the number of people with jobs has fallen.** Employment was also down in Mainland/Southwest (-1.9%) and Northeast (-1.8%), but in both these regions, the downturn is of a more recent vintage. All other regions saw the number of people employed increase at rates ranging from +0.8% in Cariboo to +4.2% in Kootenay.

Source: Statistics Canada

The Economy

- **British Columbia's economy grew 3.9% last year, putting in its strongest performance since 1993, when it expanded 4.1%.** The economic growth was largely driven by domestic demand for goods and services, which rose 3.7% in 2000. Consumers (+3.5%) increased their spending substantially. Government spending on goods and services rose 2.6%, but investment in fixed capital declined (-7.3%), largely because less money (-18.0%) was spent on non-residential structures. Federal, provincial and local government purchases of machinery and equipment were up 26.0%, in real terms, from 1999.

Business investment (+7.2%) showed its first big increase since 1997. Investment in residential structures remained weak (-1.2%), but the decline was mild compared to the previous two years. Strong increases in spending on non-residential structures (+17.6%) and machinery

Did you know...

Canadians are seven times more likely to commit suicide than to be homicide victims.

and equipment (+8.0%) were more than enough to boost the total.

The province's trade deficit worsened, increasing to \$4.2 billion in 1997 dollars. British Columbia continued to see relatively strong export growth at both the international (+8.3%) and interprovincial (+3.8%) levels, but the gains were eroded by even stronger increases in imports from other countries (+9.3%) and provinces (+6.3%). BC's dependence on goods and services produced elsewhere in Canada is the reason for its large, and growing, trade deficit. The province's interprovincial trade deficit was \$9.0 billion last year. The international trade surplus (+\$4.9 billion) increased slightly in 2000.

Source: Statistics Canada

- **British Columbia's relatively strong growth last year catapulted the province from its position near the back of the pack to one closer to the middle.** Four provinces and two territories, led by NWT (+8.8%), Newfoundland (+5.6%) and Alberta (+5.6%) posted stronger increases. Canada's economy grew 4.6%. Yukon (+0.7%) and New Brunswick (+1.8%) had the most sluggish economies. *Source: Statistics Canada*
- **Oil and gas-related construction (+69.7%) and exploration and related mining service industries (+33.8%) were the star performers among the various industry groups for which data are published.** BC leather manufacturing (+30.0%), metal ore mining (+23.5%) and aerospace products (+23.4%) also posted strong gains. With notable exceptions such as fishing, hunting and trapping (-4.9%), seafood products (-3.7%) and various other food processing activities, most industries in the province expanded last year. *Source: Statistics Canada*
- **BC manufacturers surveyed in October presented a generally pessimistic outlook on their prospects for the last three months of the year.** More than half (56%) expected to see a change in orders received, with most (48%) of them anticipating that orders would decline. Just 8% were forecasting an increase. The balance of opinion (the difference between the percentage anticipating an increase and those expecting to see a decline) on finished product

inventories was +36, the highest it has been in more than two years. However, relatively little change in production is anticipated during the last quarter of 2001. While 21% of manufacturers expected increases, 22% were forecasting that their production would decline. Canadian manufacturers overall had similar views about production (with a balance of -2), but were somewhat less gloomy in their expectations on new orders (-25) and inventory levels (+16).

Source: Statistics Canada

- **The volume of lumber shipped from BC sawmills declined 7.6% between July and August.** Shipments from mills in Ontario (-8.8%) and Alberta (-3.3%) also fell substantially. Overall, the volume of lumber shipped from mills in Canada was down 3.5%. A 19.3% countervailing duty on softwood lumber exports to the US was announced in mid-August, and this undoubtedly contributed to the decline. The full effect of the duty may not be felt for some months. *Source: Statistics Canada*

Homicides

- **British Columbia's homicide rate dropped to its lowest level since the mid-1960s last year, falling to 2.09 homicides for every 100,000 people living in the province.** The homicide rate in BC had averaged 3.12 during the decade from 1990 to 1999, and peaked at 4.38 in 1974. Despite the decline, the rate remained well above the national average of 1.76. Last year, a total of 85 people were killed in BC, down from 110 in 1999, when the province had the dubious distinction of having the highest homicide rate in the country (excluding the territories). Manitoba (2.61) and Saskatchewan (2.54) had the highest homicide rates in 2000. *Source: SC, Catalogue 85-002-XPE*
- **Seventy-one Canadians died in gang-related incidents last year, about half of which were drug-related.** Gang-related murders accounted for 12.5% of all homicides, still a relatively small percentage of the total. However, gang killings are a growing problem. In 1991, they accounted for just 2.8% of all homicide incidents, and the percentage has increased in almost every year. *Source: SC, Catalogue 85-002-XPE*

Source: SC, Catalogue 85-002-XPE

highlights, Issue 01-44

November 2, 2001

International Trade in High Technology Goods and Services

At the dawn of the 21st century, "high technology" has become a buzz phrase of which everyone is aware and about which everyone seems to be concerned. Governments are eager to attract high technology firms and fear falling behind in a new technologically driven world. This emphasis on high technology has necessitated the development of measures to monitor the growth and evolution of the high technology sector. An important aspect of this sector is international trade, as reflected in the high volume of two-way trade.

The domestic market for high technology goods does not have sufficient volume to achieve the economies of scale needed to remain competitive. Therefore, access to international markets is extremely important as it allows BC producers of high technology goods to focus on market niches.

At the same time, BC manufacturers do not produce enough of some types of high technology equipment to satisfy the domestic demand and as a result, large volumes of goods are imported into the province. It is interesting to note that a major consumer of high technology imports is the high technology sector itself.

High technology goods referred to in this article are based on a list developed by the U.S. Bureau of the Census and modified by Statistics Canada to fit Canadian conditions. For more information, please see the 2001 edition of *Profile of the British Columbia High Technology Sector*.¹

Exports of high technology goods continue to grow

Exports of high technology commodities from British Columbia were valued at \$946.8 million in 2000, up 15.7% from 1999. Exports of goods in the high technology sector outpaced growth of exports overall (+13.2%). Almost three percent of all BC goods exports were comprised of high technology goods.

The strong growth was due largely to two burgeoning commodity groups,² material design goods and opto-electronics, which leapfrogged over aerospace and computer integrated manufacturing to become, respectively, the second and third largest high technology commodity exporters in British Columbia. Computers and telecommunications equipment retained its rank at the top despite

International trade helps high technology in BC prosper as it provides a larger market that allows for economies of scale.

Exports of high tech commodities have been climbing for four straight years.

¹ The entire publication from which this article is adapted can be found on the web at: www.bcstats.gov.bc.ca/data/bus_stat/hi_tech/HighTechProfile2001.pdf

² For information on high technology commodity groups, see Appendix B of: *Profile of the British Columbia High Technology Sector, 2001 Edition*, BC Stats and BC Information, Science and Technology Agency.

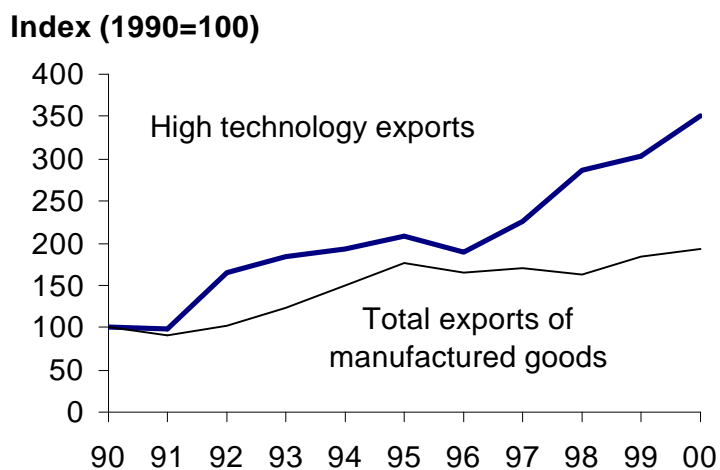
posting a decline for the second straight year. This group has slipped from having a 39% share of BC high technology exports in 1998 to only 22% in 2000.

BC high technology exports by commodity group—2000

	\$ million	% change
Computers and Telecommunications	212.2	-8.0
Material Design	178.6	90.0
Opto-Electronics	166.3	82.6
Computer Integrated Manufacturing	127.2	9.1
Aerospace	110.2	-14.6
Life Sciences	79.5	7.6
Electronics	65.2	-16.2
Weapons and Nuclear	6.6	149.9
Biotechnology	1.0	-57.5
Total	946.8	15.7

Over the last decade the pace of growth in high technology exports has appreciably exceeded that of exports of manufactured goods in total. Between 1991 and 2000, exports of high technology commodities have grown at an annual average rate³ of 15.1%, well above that of total manufactured commodities (+8.7%). This high rate of growth has resulted in a 350% expansion in the value of high technology exports from BC from 1990 to 2000.

High technology goods exports have grown faster than total goods exports

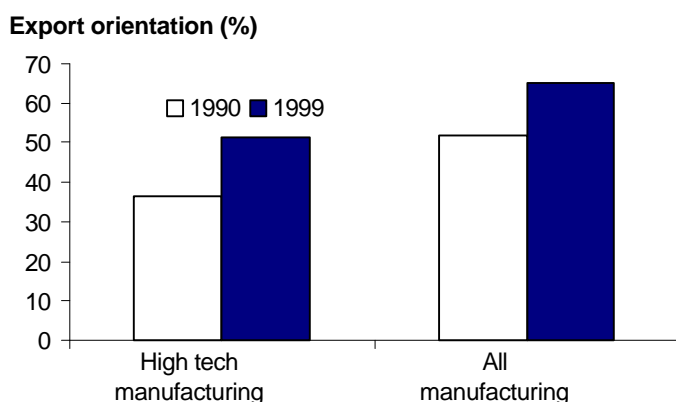


³ Compound rate.

Despite the greater rate of growth in exports of high technology goods compared to all manufactured commodities, a relatively smaller portion of their total shipments are exported. Approximately 66% of all processed goods in BC were exported in 2000, compared to only 54% of high technology goods. However, the greater pace of growth of high tech exports means the gap is closing. While the percentage of all goods produced that are exported has increased substantially since 1990 (a 14 percentage point jump overall), the proportion of high technology goods that is slated for export has climbed even more (a 17 percentage point rise).

Manufacturers of high tech commodities export less of their outputs compared to other BC manufacturers.

A smaller portion of high technology products are exported compared to total manufacturing



United States is the destination of most BC high tech exports

The United States receives by far the largest share of BC exports of high technology goods, significantly higher than its share of total BC exports. In 2000, BC manufacturers of high technology commodities exported \$797.7 million of their products to the United States, accounting for 84% of the total value of high technology exports. By comparison, the share of total exports of goods manufactured in BC shipped to the United States was 66%. After the US, the next most important destination for BC produced high technology commodities was Japan, with only 3% of the total value (\$28.9 million).

In 2000, BC exported more than 27 times the value of high technology goods to the US than to Japan, the next most important destination for BC high technology exports.

The US led the way in export growth in 2000, with an additional \$116.4 million worth of high technology goods heading south compared to 1999, which translates to a growth rate of 17.1%. The continued depreciation of Canada's dollar relative to US currency is one factor that makes BC's products attractive to American customers. Another reason for the strong growth in high technology exports to the US is the robust economic climate in that country. The US is just coming out of the longest run of peacetime economic expansion in history.

BC high technology exports by destination—2000

	\$ million	% change
USA	797.7	17.1
Pacific Rim	63.7	-9.5
European Union	54.8	46.1
Rest of the world	30.6	5.7
Total	946.8	15.7

Japan rebounded as an export destination for BC products in 2000, with the value of exports to that country almost quadrupling over the 1999 figure. Despite the tremendous growth in exports to that country, exports to the Pacific Rim as a whole fell for the third straight year, dropping 9.5% to \$63.7 million. Exports to Hong Kong and the People's Republic of China were halved, while exports to Taiwan were only a quarter of the value compared to 1999. By contrast total BC exports to both China (+24.6%) and Taiwan (+12.7%) grew substantially in 2000.

High technology exports to the European Union from BC rose 46.1% in 2000 on the strength of an extraordinary tenfold increase in exports to Italy, from \$2.1 million in 1999 to \$21.5 million in 2000. As a result, Italy surpassed the United Kingdom as the most important destination in the European Union for exports of BC high technology commodities. A large portion of this increase is due to a one-time contract with an Italian firm for helicopter engines, for helicopters that were being built for the Federal government of Canada. This could mean that exports in 2001 will be much lower. However, a memorandum of understanding signed recently between Canada and Italy designed to increase trade and investment between the two countries, including sectors such as Information Technology and health, may help maintain the higher export numbers.

High tech exports to Italy were substantially higher in 2000 compared to earlier years.

Mode of transport

By far the majority of BC high technology exports are transported by either land or air, with only a minor percentage (3.4%) shipped by sea. The destination of the exports is a significant determinant of the mode of transport. Since the United States is the destination for the bulk of high tech exports and air transport is more expensive on average, land (i.e., rail or truck) is the most popular mode of transport (55.1%). Almost two-thirds of exports to the US travel by land, and almost all the remainder are shipped by air.

The destination of exports generally determines the mode of transport, which is why, with the United States as the most popular destination, most high tech goods exported from BC travel by land.

**BC high technology exports
by region and mode of transport—2000**

Region	Mode of transport	\$ millions	% of total high tech exports
United States	Land	516.8	54.6%
	Sea	1.6	0.2%
	Air	279.3	29.5%
	<i>Total</i>	<i>797.7</i>	<i>84.3%</i>
All other countries	Land	4.9	0.5%
	Sea	30.9	3.3%
	Air	113.3	12.0%
	<i>Total</i>	<i>149.1</i>	<i>15.7%</i>
Total	Land	521.7	55.1%
	Sea	32.5	3.4%
	Air	392.6	41.5%
	<i>Total</i>	<i>946.8</i>	<i>100.0%</i>

For all other countries excluding the US, air cargo is the most frequent mode of transport, accounting for nearly 76% of the total exports. Another 21% are shipped by sea, and 3% by land.⁴

High technology imports are also on the rise

In 2000, imports of high technology commodities to BC grew at almost the same rate as exports from BC (+15.9%). There were \$3.5 billion dollars worth of high tech goods imported into BC in 2000, over three and a half times the value of that exported from the province.

⁴ The apparently implausible shipments of products by land to overseas destinations is explained by the fact that the goods may leave BC by either truck or rail to points of departure in the United States where they are loaded onto ships or planes for the remainder of their journey.

As with exports, computer and telecommunication goods lead the way as the most important import, but whereas exports of these commodities fell by 8.0% in 2000, imports were 35.7% higher than in 1999 eclipsing a billion dollars for the first time in 5 years. Aerospace ranked second in imports at \$0.8 billion and together with computer and telecommunication commodities, these two groups comprise over half of all high technology imports into BC.

BC high technology imports by commodity group—2000

	\$ million	% change
Computers and Telecommunications	1,100.6	35.7
Aerospace	807.8	3.1
Life Sciences	690.9	0.1
Computer Integrated Manufacturing	450.1	11.6
Electronics	204.8	33.2
Material Design	109.6	68.0
Opto-Electronics	64.3	64.3
Weapons and Nuclear	58.7	3.3
Biotechnology	52.7	2.6
Total	3,539.4	15.9

The United States is the source of the majority (56.9%) of BC imports of high tech goods valued at over \$2 billion in 2000. The next most significant origin of BC imports is the United Kingdom at a quarter of a billion dollars, or one eighth of that of the US. Nevertheless, the distribution of imports is much more diverse than that of exports where the US is far and away the single most important destination.

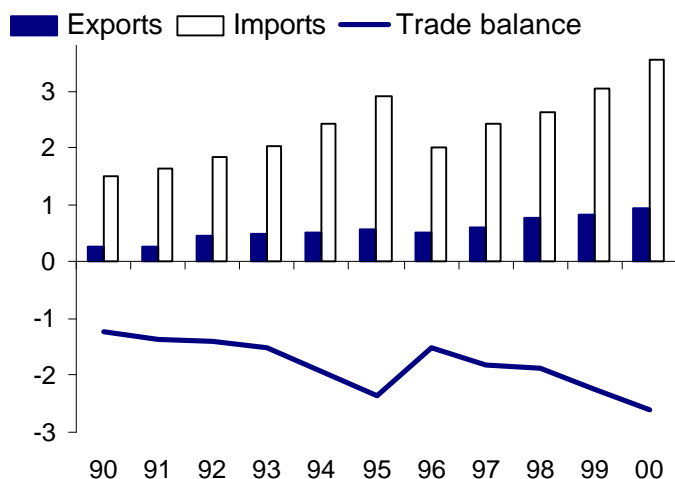
The balance of trade

BC's imports of high technology commodities are far greater than the value of exports, and as a result, the province runs a trade deficit in these goods. Although high tech exports have grown at a faster rate than imports over the last decade, the absolute growth in imports has exceeded that of exports, which means the trade imbalance has continued to expand.

BC has a trade deficit in high technology goods as imports far exceed exports.

High technology trade deficit continues to grow

Value (\$ billions)



In 2000, the trade deficit in high technology commodities grew to about \$2.6 billion, an increase of almost 16% over 1999. Roughly half of BC's trade deficit in high technology commodities is with the US (\$1.2 billion). The trade deficit with Pacific Rim countries grew over 41% in 2000 to \$415.5 million accounting for about a third of the total increase. Although BC's trade deficit with the European Union grew more slowly (+2%), it is still significantly larger at \$628.2 million.

BC's trade deficit in high technology commodities with the United States is more than that of the European Union and Pacific Rim countries combined.

The only high tech commodity groups for which BC has a trade surplus are opto-electronics and material design. These categories include some of the most technologically advanced goods, such as lasers, fibre-optics, superconductors, and advanced polymers. That BC exports more of these leading-edge commodities than it imports supports the contention that BC's research and development activities are a vital part of the manufacturing activities in the province.

BC balance of trade in high technology goods by commodity group—2000

	\$ millions
Opto-Electronics	102.0
Material Design	69.0
Biotechnology	-51.7
Weapons and Nuclear	-52.1
Electronics	-139.6
Computer Integrated Manufacturing	-322.9
Life Sciences	-611.4
Aerospace	-697.6
Computers and Telecommunications	-888.4
Total	-2,592.6

Export of high technology services

Service exports are generally more difficult to measure compared to exports of goods. Some service exports take place when BC-based professionals, such as engineers or software programmers work for a period of time outside the province. Service exports also occur when, for example, an engineering firm produces a study in its BC office for an overseas client or when a software developer creates a new program which is "shipped" on-line to a client in another country.

Over the last couple of decades, worldwide trade in services has increased significantly as technical innovations have widened the scope of the service sector and advances in transportation and communications have decreased the distance between countries in an economic sense. The proliferation of e-mail, the Internet, and other forms of information technology has made it easier to conduct business with clients from around the world. Moreover, decreases in the cost of travel, and an increased number of overseas offices have made it more economical—and practical—for companies to send employees overseas to conduct business.

Service exports continue to grow

Although there are four broad groups of service industries in the high technology sector, only two of them derive a significant part of their revenues from exports. In 1998,⁵ exports of services from computer and related services and engineering services amounted to \$638 million, approximately 83% of the value of all high technology goods exports. This is compared to 1991⁶ when services exports were about one third the value of goods exports.

BC's high tech service industries continue to increase their share of high tech exports.

BC high technology service exports—1998

	Revenues	Exports	
	\$ million	\$ million	% change
Computer services	1,820	456	92.4
Engineering services	1,202	182	-51.5
Total	3,022	638	4.3

In 1998, the engineering services industries reversed the large gains of a year earlier when exports more than doubled, such that they were almost back at their 1996 levels. However, the growth in exports of computer services more than offset this decline, almost doubling from a year earlier to \$456 million. As a result, total service exports posted a moderate increase of 4.3% overall.

⁵ 1998 is the most recent year for which services export data is available.

⁶ The first year for which services export data is available.

 **fax** transmission information service from **BC STATS**

 **Email** transmission information service from **BC STATS**

 also on the **Internet** at www.bcstats.gov.bc.ca

BC at a glance . . .

POPULATION (thousands)	Jul 1/01	% change on one year ago
BC	4,095.9	0.9
Canada	31,081.9	1.0
GDP and INCOME	1999	% change on one year ago
<i>(BC - at market prices)</i>		
Gross Domestic Product (GDP) (\$ millions)	118,783	4.2
GDP (\$ 1992 millions)	104,323	2.1
GDP (\$ 1992 per Capita)	25,899	1.3
Personal Disposable Income (\$ 1992 per Capita)	16,700	0.0
TRADE (\$ millions)		
Manufacturing Shipments (seas. adj.) Aug	2,833	-7.5
Merchandise Exports (raw) Aug	2,532	-10.6
Retail Sales (seasonally adjusted) Aug	3,182	5.5
CONSUMER PRICE INDEX	Sep '01	% change on one year ago
<i>(all items - 1992=100)</i>		
BC	116.7	2.1
Canada	117.4	2.6
LABOUR FORCE (thousands)	Oct '01	% change on one year ago
<i>(seasonally adjusted)</i>		
Labour Force - BC	2,093	-1.3
Employed - BC	1,921	-2.0
Unemployed - BC	172	7.1
		Oct '00
Unemployment Rate - BC (percent)	8.2	7.6
Unemployment Rate - Canada (percent)	7.3	6.9
INTEREST RATES (percent)	Oct 31/01	Nov 1/00
Prime Business Rate	4.50	7.50
Conventional Mortgages - 1 year	4.90	7.90
- 5 year	6.90	8.25
US/CANADA EXCHANGE RATE	Oct 31/01	Nov 1/00
<i>(avg. noon spot rate) Cdn \$</i>	1.5867	1.5265
<i>US \$ (reciprocal of the closing rate)</i>	0.6294	0.6519
AVERAGE WEEKLY WAGE RATE	Oct '01	% change on one year ago
<i>(industrial aggregate - dollars)</i>		
BC	643.68	-0.7
Canada	637.02	2.3

SOURCES:

Population, Gross Domestic Product, Trade, Prices, Labour Force, Wage Rate } Statistics Canada
 Interest Rates, Exchange Rates: Bank of Canada Weekly Financial Statistics
 For latest Weekly Financial Statistics see www.bankofcanada.ca

Canadian Importers Database

what? The Canadian Importers Database provides lists of companies importing goods into Canada, by product and by city. This new offering from Industry Canada is worth a look. But it is difficult to find so key in the link below and be sure to bookmark it.

why? Import substitution occurs when a domestic firm supplies domestic needs that were formerly met by importing products into the country. This creates jobs, investment and profits in the domestic economy.

opportunity! The Importers Database is only one side of the equation. BC STATS publishes a directory of BC manufacturers on line at <http://www.made-in-bc.ca>. That's the other side. Given the beleaguered Canadian dollar, costly border delays, and the strong likelihood of lower transportation costs, there may well be opportunities for would-be or existing British Columbia based manufacturing/processing firms. Opportunity also for matchmakers, wholesalers, shippers, and others with a nose for business.

where?

http://strategis.ic.gc.ca/sc_mrkti/cid/engdoc/index.html

The link above should be enabled in your browser if you are viewing the email or web copy of Infoline. It is repeated on two lines below for fax clients.

http://strategis.ic.gc.ca/sc_mrkti/cid/engdoc/index.html

Good hunting!

Released this week by BC STATS

- No subscription releases

Next week

- Labour Force Statistics, October 2001