tel (250) 387-0327
fax (250) 387-0329

All issues since 97-01 are on our website:
http://www.bcstats.gov.bc.ca
a weekly digest of recently released British Columbia statistics

## Population

- BC's population increased 0.9\% between 1999 and 2000, as 24 of the 28 regional districts within the province experienced population growth. Among regional districts, the annual change in the population ranged from a high of $+2.5 \%$ in the Central Okanagan to a low of $-0.8 \%$ in the Mount Waddington region. The GVRD, BC's largest regional district, grew slightly faster than the provincial average, as the population increased $1.0 \%$ to just over two million.
Among the larger municipalities (those with a population of at least 10,000), the fastestgrowing cities were Kelowna (+3.2\%), Langford (+2.5\%), Parksville (+2.5\%) and Fort St. John (+2.4\%). The largest population declines occurred in Oak Bay (-1.3\%) and White Rock (-1.1\%).

Source: BC STATS

## Prices

- BC's year-over-year inflation rate jumped to $\mathbf{2 . 7 \%}$ in November. The last time the inflation rate was this high was in the summer of 1995. The brunt of the increase came from the energy sector, where the inflation rate (+18.8\%) remained in the high teens, marking the fifteenth consecutive month of double-digit price increases. Excluding energy, the all-items consumer price index (CPI) would have been $1.5 \%$ higher than in November 1999. This was also well above the levels seen since the mid-1990s.
While energy costs were a big factor, the CPI was also affected by higher food prices, which have begun to creep up at the same time that shelter costs are picking up speed after a long period of decline. Until very ecently, falling or stagnant food and shelter costs had
helped alleviate the inflationary pressure of soaring oil and gas prices.
Food prices rose ( $+0.6 \%$ ) for the first time this year in November. The cost of groceries increased modestly ( $+0.2 \%$ ), despite sharply higher prices for fresh vegetables ( $+7.4 \%$ ) and vegetable preparations ( $+5.3 \%$ ). Restaurant-goers paid $1.5 \%$ more for their meals than they did a year ago. Shelter costs were up $2.6 \%$, as BC residents paid $13.4 \%$ more for utilities and saw smaller increases in the cost of rented ( $+0.7 \%$ ) and owned ( $+1.1 \%$ ) accommodation. The transportation index $(+6.4 \%)$ also reflected the effect of higher prices at the pump. Price increases for other goods and services ranged from $1.3 \%$ for alcohol and tobacco products to $2.7 \%$ for health and personal care.

Source: Statistics Canada

- Despite the recent spike, BC residents have been relatively sheltered compared to other Canadians. BC's 2.7\% inflation rate was among the lowest in the country. Prices were also up $2.7 \%$ in Quebec, Manitoba and Yukon, and increased 2.1\% in NWT. Alberta (+4.4\%) was the region that was hardest hit. Canada's inflation rate was $3.2 \%$ last month. Among metropolitan areas, residents of Victoria and Quebec City fared best, seeing prices rise just $2.4 \%$. The inflation rate in Vancouver was $3.1 \%$. Calgary's $4.5 \%$ inflation rate was the highest in the country. Source: Statistics Canada
- The cost of new housing in BC's two biggest cities continued to decline in November. Vancouver's New Housing Price Index (NHPI) was down $0.5 \%$ from a year earlier. Builders in Victoria received 3.0\% less for new housing than they had in 1999. Nationally, the NHPI increased $2.4 \%$, as prices rose in all but four of the 21 urban centres surveyed.

Source: Statistics Canada

## The Economy

- The number of consumer bankruptcies in the province was up again in October. Consumer bankruptcies have increased at double-digit rates during five of the last six months. There were 858 bankruptcies in October, compared to 724 in the same month last year. BC's $18.5 \%$ increase was well above the national average (+5.9\%).
Leaky condos have undoubtedly contributed to the rise in consumer bankruptcies in the province, but the extent to which they have influenced the bankruptcy figures is unknown. Consumer bankruptcies in the province have been rising steadily, and the average number of bankruptcies each month has more than doubled since 1993. Nationally, consumer bankruptcies also increased during the mid1990s, but have been trending down since 1998. The number of consumer bankruptcies in all of Canada is currently about $40 \%$ higher than in 1993.

Source: Industry Canada data

- Business bankruptcies in the province were up 10.4\% in October, compared to the same month of 1999. The number of Canadian businesses fliing bankruptcy papers increased $15.3 \%$ from twelve months earlier. In total, 891 businesses in Canada, including 85 in BC, officially folded in October. Source: Industry Canada
- The number of new motor vehicles sold in the province fell $3.8 \%$ (seasonally adjusted) between September and October. Motor vehicle sales were down across the country, declining $12.4 \%$ nationally. BC's $3.8 \%$ drop was modest compared to other provinces, where the number of vehicles sold fell at rates ranging from $-6.1 \%$ in PEI to $-19.9 \%$ in Saskatchewan.

Source: Statistics Canada

## Police Resources

- Women are making inroads when it comes to fighting crime. The number of female police officers in Canada doubled during the 1990s. As of last June, 13.7\% of Canada's 56,020 police officers were women. They made up less than one percent of the force in 1965. There were 1,176 female officers in BC, accounting for $17.5 \%$ of the 6,708 strong force, more than in any other province. Ontario
(14.2\%) had the second highest percentage of female officers; Newfoundland (9.6\%) had the lowest. Most $(4,592)$ of the police officers in BC were employed by the RCMP. Another 2,116 worked for municipal police forces.Source: SC, Catalogue 85-225-XIE
- Total spending on police operations in BC reached $\$ 548$ million, or $\$ 136$ per capita in 1999. BC's per capita spending was below the national average of $\$ 169$ per person. Excluding the north, Ontario and Quebec were the regions with the highest per capita expenditures on police activities. Each of them spent $\$ 187$ per person on policing last year. Newfoundland (\$105) and PEI (\$107) had the lowest per capita expenditures in the country.

Source: SC, Catalogue 85-225-XIE

## Crime

- Weapons were used in a third of the violent incidents reported to the police in Canada last year. The most commonly reported weapon was a knife (used in $6.0 \%$ of violent crimes), blunt instrument (4.8\%) or firearm (3.8\%). Another $17.8 \%$ of violent crimes involved weapons such as poison or motor vehicles, or others that were not specifically identified. Firearms were the weapon of choice for perpetrators of homicides (33.3\%), kidnappings/hostage takings (16.2\%) and robberies (20.1\%) but were not the most common weapon used in the commission of other violent crimes. Victims of all types of assault were more likely to face someone who was armed with a blunt instrument or knife. One in four murder victims succumbed to a knife wound.

Source: SC, Catalogue 85-205-XIE

- Last year, 9,900 incidents of impaired driving were reported in British Columbia. Of this total, 7,753 resulted in charges being laid against a driver of a vehicle, boat or aircraft. Three out of every four criminal code traffic offences were related to impaired driving. Impaired driving led to 18 deaths and 104 incidents causing bodily harm. Six times as many men $(6,169)$ as women $(1,009)$ were charged with impaired driving in BC last year. Source: SC, Catalogue 85-205-XIE


## Evolution of the

## British Columbia

 labour forceContact: Dan Schrier / (250) 387-0360
Originally published in October 2000 issue, Business Indicators. Annual subscription: \$60 + GST

The structure of the labour force has undergone dramatic change over the last half century in most of the western world. British Columbia has been no exception to this phenomenon. These changes have arisen from a variety of factors, including demographic, economic and social forces.

By far the most significant factor has been the social transformation wherein the proportion of women entering the labour force has increased dramatically over the last 50 years. The meteoric rise in female labour force participation rates has far outweighed a corresponding downward trend in male participation rates. This downward trend has occurred due to a combination of factors, including better pensions and early retirement incentives that have reduced the participation rate for men in the older age groups. However, these reasons do not explain the overall downward trend for males completely, since participation rates for males in younger age groups have also fallen. There are many reasons for the decline in these rates, ranging from economic cycles and structural changes in the economy such as the shift from male-dominated resource extraction industries to more service-oriented jobs, to social changes such as increasing enrolment rates in post-secondary education programs.

The reasons for trends in labour force participation vary by age as well as by gender. The economic cycle affects participation in all age groups to some extent, but it is particularly influential for those aged 15 to 19. In times of recession or poor economic performance, participation for this age group in the labour force is low, whereas in boom times, more people aged 15 to 19 are in the labour force. This is likely due to the fact that in poor economic times, the first people laid off will be those with less experience, as well as those who are working only part-time, which is more likely the case with this age group. Also, there are less likely to be new hires, which means that young people just entering the work force are less likely to get a job.

Figure 1
People with less than high school educatior have been dropping out of the labour forct


## Source: Labour Force Survey

Another factor that has affected participation in the labour force is the trend toward increased student enrolment. Over the last 25 years, the full-time student enrolment rate for men aged 20 to 24 has doubled and the rate for women of the same age has tripled, surpassing male enrolment rates. This has had a significant effect on labour force participation rates in this age group. Participation rates have declined dramatically for men aged 20 to 24 , particularly in the last 10 years. Female participation rates for this age group increased rapidly until 1990, before starting to fall again. Much of this increase is due to cohort effects where the later cohorts have entered this age group in an era when female participation in the labour force has been encouraged far more than was the case for earlier cohorts. Around 1984, participation rates for females aged 20 to 24 began to experience similar movements to the corresponding male rates for the same age group. This is also around the time when school enrolment rates began to take off. The increase in student enrolment can likely
be attributed to more than one factor, including poor job markets during weak economic times, as well as an increasing demand for a highly educated workforce in a technical world where computers have become commonplace in many diverse workplaces. Figure 1 shows that, even in the last 10 years, participation rates have declined significantly for people with less than a high school education, while those who have a post-secondary certificate or diploma, or a university degree, have held steady at about 77 percent participation. This is probably a result of fewer opportunities for those who do not have the advanced training necessary to succeed in today's technical workplace.

The group aged 25 to 44 represents the bulk of the labour force. This group has by far the highest labour force participation rates of any age/gender group. For males, participation rates have been declining over the last 25 years. The decline is likely due to a combination of factors, including an increased incidence of "stay-athome" dads, an increase in educational enrolment as men stay in school longer to get more advanced degrees, and possibly some discouraged workers as men working in the resource sectors find their jobs disappearing and can't find other employment with the same level of remuneration. Conversely, the participation rates of females in this age group increased dramatically through the seventies and eighties before reaching a plateau in the nineties. It is likely that female rates of this age/gender group will not experience much further growth, although there has been an upward trend in the number of women in this age group who are single, either because they have never married, or because they have been separated or divorced from their spouses. Single women tend to have higher participation rates due to either having fewer family responsibilities, or simply out of necessity, which means if this trend continues, there is room for even higher participation rates for this group.

For the age group 45 to 64, the male and female participation rates have been going in opposite directions over the last 25 years. Rates for males have been trending downward, particularly for those between 55 and 64. This is likely due to improved pension plans and the option
for early retirement. It is likely that participation rates for men in this age group will remain fairly flat for the foreseeable future. For women, participation rates have undergone a dramatic increase over the last 25 years. Most of the increase in participation rates in this age/gender group can be attributed to cohort effects. Young women who were the pioneers with regard to women entering the labour force have moved through this age group as well as those women who followed in their steps. As they aged, each cohort increased their rate of participation. The result was an increasing participation rate for the older age groups as well. The forecast is for a slight increase over time as later cohorts who have had greater labour force participation than earlier cohorts continue to enter this age group. The increase will be nowhere near the level experienced in the eighties, since cohort differences are dissipating.

There have been other changes in the labour force that have had less to do with demographics and more to do with economics. For instance, corporate downsizing and efficiency improvements have forced people into career changes, and often the new career offers much less pay than the former. This has resulted in families with more than one wage earner and sometimes the traditional breadwinner has found themself out of work while their spouse or other family members take up the slack. This can be seen in Figure 2, which shows that participation rates have been declining for the head of the family, while rates for the remainder of the family have been increasing significantly.

## Infol ine Report:

## Figure 2

Participation rates for the head of the family have been declining, while rates for other family members have been rising


## Source: Labour Force Survey

The loss of traditional avenues of employment has also led to a significant increase in selfemployment, as can be seen in Figure 3. Figure 4 shows that the incidence of part time employment has also been increasing, particularly for men. These are all signs that the labour force continues to evolve and will likely undergo more change in the future.

Figure 3
Both men and women have been moving into self-employment


Figure 4
The percentage of the employed labour forc working part-time has been increasing, especially for men


Source: Labour Force Survey

## What does the future hold?

With the changing nature of the labour force, it is important for policy purposes to have an idea of what the future will look like. Policies that work with today's labour force may be detrimental in tomorrow's labour force. One important component of the labour force that needs to be forecast is the participation rate.

Figure 5

## BC Labour Force Participation Rates Will Decline Even if Group Rates Remain at Current Levels



BC Stats
As shown above, there is significant variance in participation rates by age and gender. The complex reasons for the trends within these age/gender groupings make forecasting an overall rate a complicated exercise. One cannot simply look to the past to forecast what will happen in the future when it comes to labour force participation rates. Whereas the increase in emale participation was the main factor driving the change in the overall rate over the last half century, the demographics of an ageing population will likely be responsible for the direction the rate will take over at least the next 25 years. Figure 5 shows that even if the individual age/gender group rates are kept constant at
their 1999 values, the overall male, female and total rates will continue to decline. ${ }^{1}$

This is because participation rates decline with age and as the population ages and more people move into the older age groups, the proportion of the population 15 and over who are no longer in the labour force will grow correspondingly. This will become particularly acute as the "baby boom" generation starts to retire.

BC Stats has developed a model that attempts to forecast labour force participation rates for British Columbia.

The British Columbia Labour Force Participation Rate Model ${ }^{2}$ combines economic, social and demographic factors that affect labour force participation. Participation rates are modelled for specific age and gender groups to capture the purely demographic effects. For most age/gender groupings, statistical regression was employed to develop equations that can be used to forecast participation rates. In recognition of the different factors that affect different age and gender groups, the equation for each group has a unique structure. The separate age/gender equations are applied to a population projection by those same age/gender groupings to obtain the labour force figures for those groups. These figures are summed to get the male, female and total labour force figures, from which the overall participation rates are then calculated.

[^0]Figure 6

## BC Labour Force Participation Rates Overall Projection



BC Stats
Figure 6 displays the actual labour force participation rate data to 1999, with forecast values from 2000 to 2026. The forecast is for labour force participation rates to fall over time, with the gap between male and female rates continuing to shrink, albeit at a diminishing rate. The main reason for the participation rate decline is the demographic effect of an ageing population and the fact that the participation rates for older age
groups, particularly the 65 and over group, are substantially lower than rates for younger groups.

The consequences of participation rates declining in this manner are serious. This could lead to severe labour shortages in the future, which in turn will drive up wages. The wage hikes could put upward pressure on inflation, which in turn could lead to substantial interest rate hikes in order to quell the inflation.

However, the likelihood of this scenario is questionable. If wages were to increase substantially, it is likely that more people would be drawn back into the labour force. There would be more opportunities for part-time work, which may also attract more people into the labour force. In addition, there could be legislative changes, such as raising the retirement age, which could lead to increases in labour force participation rates in some age groups. Early retirement may no longer be an option and many older people will be forced to keep working. What all this suggests is that there is likely to be another major structural change in the nature of labour force participation rates sometime within the next 10 to 20 years. For this reason, it is probably best to use the results of this analysis for only the short-term. The scenario described in Figure 6 may track well for the next five to ten years, but after that, there will likely be renewed growth in labour force participation.

## Deepen your knowledge of the economy and society you work and compete in.

Subscribe to the periodical section of our Internet site to access Earnings and Employment Trends and ten other monthly and quarterly releases. The price for complete access over the course of a year is only $\$ 100$. We also offer a separate electronic subscription service to Major Projects Inventory - a quarterly guide to construction projects planned, underway or recently completed in British Columbia. If you prefer, we offer paper-based subscriptions at prices that reflect our increased costs, delivered by regular mail. Reproduced here is just the article from the Second Quarter 2000 issue of Earnings and Employment Trends. To see a sample of a complete issue, or samples of our other periodicals, use the Reports \& Publications tab at the top of our home page, then click on Samples of Our Priced Statistical Bulletins.
Different periodicals feature highlights, articles, charts, data tables and definitions. Get the whole story. Subscribe today.

For more information, contact:
Kris Ovens Tel: (250) 387-0359 FAX: (250) 387-0380 or e-Mail Kris.Ovens@gems7.gov.bc.ca
also on the Internet at http://www.bcstats.gov.bc.ca

| BCat a $\mathrm{Bance} .^{\text {a }}$ |  |  |
| :---: | :---: | :---: |
| POPULATION (thousands) | Jul 1/00 | \% change on one year ago |
|  |  |  |
| BC | $\begin{array}{r} 4,063.8 \\ 30,750.1 \end{array}$ | 0.90.8 |
| Canada |  |  |
| GDP and INCOME |  | \% change on one vear ago |
| (BC - at market prices) | 1999 |  |
| Gross Domestic Product (GDP) (\$ millions) | 118,783 | 4.2 |
| GDP (\$ 1992 millions) | $\begin{gathered} 104,323 \\ 25,899 \end{gathered}$ | 2.1 |
| GDP (\$ 1992 per Capita) |  | 1.3 |
| Personal Disposable Income (\$ 1992 per Capita) | 16,700 | 0.0 |
| TRADE (\$ millions) |  |  |
| Manufacturing Shipments (seas. adj.) Sep | $\begin{aligned} & 3,124 \\ & 2,783 \\ & 3,016 \end{aligned}$ | -3.09.7 |
| Merchandise Exports (raw) Sep |  |  |
| Retail Sales (seasonally adjusted) Sep |  | 5.7 |
| CONSUMER PRICE INDEX |  | \% change on one year ago |
| (all items - 1992=100) | Nov '00 |  |
| BC | $\begin{aligned} & 114.5 \\ & 115.0 \end{aligned}$ | 2.7 |
| Canada |  | 3.2\% change onone vear ado |
| LABOUR FORCE (thousands) |  |  |
| (seasonally adjusted) | Nov '00 | one vear ago |
| Labour Force - BC | $\begin{array}{r} 2,111 \\ 1,964 \\ 147 \end{array}$ | 1.4 |
| Employed - BC |  | 2.5 |
| Unemployed - BC |  | -11.2 |
|  |  | Nov '99 |
| Unemployment Rate - BC (percent) | 7.0 | 8.0 |
| Unemployment Rate - Canada (percent) | $\begin{array}{r} 6.9 \\ \text { Dec } 13 / 00 \\ \hline \end{array}$ | 6.9 |
| INTEREST RATES (percent) |  | Dec 1/99 |
| Prime Business Rate | 7.50 | 6.50 |
| Conventional Mortgages - 1 year | $\begin{aligned} & 7.70 \\ & 7.95 \end{aligned}$ | 7.35 |
| - 5 year |  | 8.25 |
| US/CANADA EXCHANGE RATE | Dec 13/00 | Dec 1/99 |
| (avg. noon spot rate) Cdn \$ <br> US \$ (reciprocal of the closing rate) | $\begin{aligned} & 1.5207 \\ & 0.6571 \end{aligned}$ |  |
| AVERAGE WEEKLY WAGE RATE |  | \% change on one year ago |
| (industrial aggregate - dollars) | Nov '00 |  |
| BC | $\begin{aligned} & 643.16 \\ & 622.49 \end{aligned}$ | 2.2 |
| Canada |  | 3.4 |
| SOURCES: |  |  |
| $\left.\begin{array}{l}\text { Population, Gross Domestic Product, Trade, } \\ \text { Prices, Labour Force, Wage Rate } \\ \text { Interest Rates, Exchange Rates: Bank of Canada Weekly Financial Statistics } \\ \text { For latest Weekly Financial Statistics see www.bank-banque-canada.ca/english/wfsgen.htm }\end{array}\right\}$Statistics <br> Canada |  |  |


| Released this week by BC STATS |
| :--- |
| - Consumer Price Index, November 2000 |
| Next week |
| - Migration Highlights, Third Quarter 2000 |
| - Immigration Highlights, Third Quarter 2000 |


[^0]:    ${ }^{1}$ The forecast is based on BC Stats' population forecast 5/00.
    ${ }^{2}$ See Schrier, D. (June 2000), British Columbia Labour Force Participation Rate Model, Population Section, BC Stats, Ministry of Finance and Corporate Relations.

