

Labour Force Statistics ♦ February 2003

HIGHLIGHTS

- **B.C. employment increased by 11,700 in February.** Even though there was an increase in employment, the unemployment rate remained unchanged at 8.2 per cent due to an increase in labour force participation.
- **B.C. employment gains in February were shared equally between the goods and services producing sectors.** February employment in the goods producing sector is the highest it has ever been, with construction being the only industry that experienced a decline. The service-producing sector experienced some losses in late 2002 and is currently at the same level as June 2002.
- **Men experienced an employment increase of 7,000 in February, with the increase in full-time employment outweighing a decline in part-time employment.** Women experienced an employment increase of 4,700, with the increase in part-time outweighing the decline in full-time. Overall, full-time employment rose by 11,800 and part-time employment declined by 100.
- **Canadian seasonally-adjusted employment increased by 55,200 in February.** Employment increased in all provinces except Saskatchewan and Manitoba, which saw slight declines. Ontario had the largest net gain in employment (up 28,400) followed by B.C. However in percentage terms, Newfoundland lead the country with a 7 per cent increase, followed by B.C. (6 per cent) and Ontario (5 per cent).

Selected Statistics (SA)*	Feb. 2003	Jan. 2003	Feb. 2002
B.C. Unemployment Rate	8.2%	8.2%	8.7%
Canada Unemployment Rate	7.4%	7.4%	7.8%
B.C. Help Wanted Index - (1996=100)	85.1	85.5	95.2
B.C. Employment - Change from prev. mo.	0.6%	-0.2%	-
B.C. Labour Force - Change from prev. mo.	0.6%	-0.4%	-
B.C. Labour Force Participation Rate	65.1%	64.8%	64.1%

* Unless otherwise indicated, all labour force variables are seasonally adjusted.

Labour Force Statistics is a joint compilation and review by BC STATS of the Ministry of Management Services and the Accountability Branch of the Ministry of Advanced Education reflecting the results of the monthly Labour Force Survey conducted by Statistics Canada. For more information, call BC STATS (250) 387-0327 or the Accountability Branch (250) 952-6776.

B.C.'s Experienced Labour Force by Occupation - Highlights of the 2001 Census -

Introduction . . . On February 11, 2003, data from the 2001 Census regarding the experienced labour force was released by Statistics Canada. This data included characteristics by occupation, age, sex, province and city. The experienced labour force consists of persons who were employed or unemployed during the week prior to Census Day (May 15, 2001), but had worked (for pay or in self-employment) at some point since January 1, 2000.

This article looks at the experienced labour force by occupation, using the Standard Occupational Classification (SOC), and makes some comparisons between the 1991 and 2001 Census. We will highlight the occupations with the most employees (for men and for women), followed by a look at the occupations with the largest percentage increases and decreases since 1991. Occupations with the highest proportion of older workers are noted, as well as changes in the ratio of younger to older workers. Lastly we will look at the new detailed occupational classifications under the National Occupational Classification for Statistics, (NOC-S) 2001, which provide more detail about computer occupations.

Largest Occupations . . . The SOC identifies 142 minor group occupations (i.e. at the 3 digit SOC level). The largest minor group occupation for men in B.C. in 2001 was motor vehicle and transit drivers (the largest component being truck drivers). For women, the largest minor group occupations were general office clerical and childcare and home support workers. See Figure 1 for a list of the 15 largest minor group occupations for men and women in 2001.

Growth in B.C. Labour Force . . . Overall, the total experienced labour force in B.C. grew from 1,721,690 in 1991 to 2,014,600 in 2001, a 17.0 per cent increase. In 2001, women represented 47.0 per cent of the experienced labour force, up from 44.7 per cent in 1991. Above average growth in the experienced labour force was seen in 63 minor group occupations. Of those, 26 occupations grew by more than 50 per cent. Between 1991 and 2001, 37 occupations decreased in size.

Figure 1: Largest Minor Group Occupations in B.C. for Men and Women, 2001

<i>Occupation</i>	<i>Men</i>
Motor vehicle and transit drivers	52,445
Computer and information systems professionals	34,290
Retail salespersons and sales clerks	32,565
Managers in retail trade	29,125
Cleaners	28,985
Labourers in processing, manufact. & utilities	23,410
Carpenters and cabinetmakers	22,960
Primary production labourers	20,765
Auditors, accountants & investment professionals	20,705
Chefs and cooks	20,700
Longshore workers and material handlers	20,395
Machinery & transportation equip. mechanics	19,870
Motor vehicle mechanics	19,710
Senior management occupations	18,690
Other sales and related occupations	18,025
<i>Occupation</i>	<i>Women</i>
Clerical occupations, general office skills	54,300
Child care and home support workers	54,300
Retail salespersons and sales clerks	50,250
Secretaries, recorders and transcriptionists	41,330
Secondary & elementary school teachers & counsellors	36,085
Finance and insurance clerks	33,970
Administrative and regulatory occupations	32,150
Occupations in food and beverage service	31,965
Cashiers	30,635
Cleaners	28,835
Food counter attendants, kitchen helpers	27,435
Nurse supervisors and registered nurses	26,040
Finance & insurance administrative occupations	24,220
Assisting occup. in support of health services	24,065
Managers in retail trade	21,150

Figure 2 shows the minor group occupations (with experienced labour force of over 4,000) that experienced the greatest change in percentage terms between 1991 and 2001. The minor group occupation, which saw the fastest growth in experienced labour force in B.C. was computer and information systems professionals (up 189 per cent). Technology appears to have had a major impact both in terms of large percentage gains and decreases. Growth was seen in computer professionals, life science professionals and electrical/electrician assemblers

(areas where technology tended to create new work), while declines were seen in a number of machine operator occupations (areas where technology tended to displace jobs). Health occupations, including optometrists, chiropractors and other (107.7 per cent) therapy and assessment professionals (100.9 per cent), life science professionals (85.4 per cent) and pharmacists, dietitians and nutritionists (68.7 per cent), saw strong growth, although nurse supervisors and registered nurses decreased in size.

Figure 2: Selected Large Minor Group Occupations in B.C. with the Greatest Percentage Change between 1991 to 2001			
	<i>Increase</i>		<i>Decrease</i>
All occupations	17.0%	Machinery & transportation equipment mechanics (except motor vehicle)	-1.0%
Computer & information systems professionals	189.2%	Agriculture & horticulture workers	-1.3%
Auditors, accountants & investment professionals	116.4%	Other elemental service occupations	-3.0%
Optometrists, chiropractors & other health diagnosing and treating professionals	107.7%	Nurse supervisors & registered nurses	-5.8%
Customer service & related information clerks (includes call center representatives)	105.0%	Recording, scheduling & distributing occupations	-6.2%
Human resources & business service professionals	102.4%	Supervisors, processing occupations	-7.2%
Therapy & assessment professionals (includes physiotherapists)	100.0%	Machining, metalworking, woodworking & related machine operators	-9.5%
Life science professionals	85.4%	Machine operators & related workers in pulp & paper production & wood processing	-12.7%
Legislators & senior management	83.3%	Other occupations in protective service	-14.5%
Other attendants in travel, accommodation & recreation	82.6%	Secretaries, recorders & transcriptionists	-15.2%
Athletes, coaches, referees & related occupations	78.5%	Upholsterers, tailors, shoe repairers, jewellers & related occupations	-17.3%
Other occupations in personal service	74.3%	Logging & forestry workers	-17.6%
Photographers, graphic arts technicians & technical occupations in motion pictures, broadcasting & the performing arts	72.7%	Insurance & real estate sales occupations & buyers	-20.8%
Mechanical, electrical & electronics assemblers	72.3%	Machine operators & related workers in food, beverage & tobacco processing	-25.7%
Pharmacists, dietitians & nutritionists	68.7%	Finance & insurance clerks	-27.0%
Administrative & regulatory occupations	67.1%	Printing machine operators & related occupations	-27.7%
Paralegals, social services workers & occupations in education & religion	65.9%	Trades helpers & labourers	-30.0%
Creative & performing artists	60.4%	Office equipment operators	-34.8%
Policy & program officers, researchers & consultants	60.4%	Clerical supervisors	-41.3%
Writing, translating & public relations professionals	60.0%	Public works & other labourers	-46.5%

Occupations by Age Group . . . Figure 3 shows unit group occupations (i.e. at the 4-digit SOC level) in 2001 that had a high proportion of workers aged 55 or older. A number of occupations, including judges (54 per cent), metallurgical engineers (34 per cent), specialist physicians (30 per cent), university professors (30 per cent) and fire-chiefs (30 per cent), had above average proportions of workers aged 55 and older, mainly due to the level of education and experience required. Other occupations including farmers (46 per cent), shoe repairers (38 per cent) and grain elevator operators (33 per cent) reflect an aging workforce in occupations which have decreased in size and added few new young workers.

Figure 3: B.C. Unit Group Occupations with the Largest Proportion of Workers Aged 55 and Older, 2001

	<i>% of Total</i>
All occupations - British Columbia	13%
Judges	54%
Farmers and farm managers	46%
Property administrators	41%
Shoe repairers and shoemakers	38%
Supervisors, textile processing	37%
Metallurgical & materials engineers	34%
Grain elevator operators	33%
Specialist physicians	30%
Legislators	30%
Psychologists	30%
Fishing masters and officers	30%
University professors	30%
Fire chiefs & senior fire-fighting officers	30%
Real estate agents and salespersons	30%
Harvesting labourers	29%
Ministers of religion	28%
Oil and solid fuel heating mechanics	28%
Physicists and astronomers	27%
Accommodation service managers	27%
Painters, sculptors & other visual artists	27%
Water well drillers	27%
Senior managers - Goods production, utilities, transportation and construction	27%
Archivists	27%
Program officers unique to government	26%
Writers	26%
Bus drivers & other transit operators	26%

Four-digit SOC unit group classification level

The Ageing of the Labour Force . . . Looking closer at occupations with a large proportion of older workers, we can also compare the ratio of younger workers aged 20 to 34 to older workers aged 55 and older, and the changes that have taken place between 1991 and 2001. The 20-24 age group represents young workers who have recently entered the work force, and will likely be in the work force for some time. The group 55 and older, represent the older workers who will likely leave the work force within the next 7 to 15 years. Changes in the ratio of younger workers to older workers gives an indication as to which occupations are ageing the fastest, and may also indicate occupations where relative opportunities for future new workers may be strong.

Figure 4 presents those occupations with a high percentage of older workers in the experienced labour force in 2001, and which have also experienced a large drop in the ratio of young workers to older workers between 1991 and 2001.

A number of skilled trades occupations, including millwrights, machinists, gas fitters and bricklayers, saw both an above average proportion of workers aged 55 and older in 2001, and notable drops in the proportion of younger to older workers. This was also the case for both university professors and college/vocational instructors. Registered nursing assistants and registered nurses (RNs) both saw a steep decline in ratio of younger to older workers. In 1991 there was 3.4 younger RNs for every RN aged 55+, but by 2001 this had fallen to 1.3 to 1.

Figure 4: Occupations that Experienced Significant Aging in the B.C. Experienced Labour Force between 1991 and 2001

	<i>Experienced Labour Force Total 2001</i>	<i>Proportion Aged 55+ in 2001</i>	<i>Number of 20-34 year olds to one 55+ year old in 1991</i>	<i>Number of 20-34 year olds to one 55+ year old in 2001</i>
All occupations	2,014,600	12.7%	3.7	2.4
University professors	1,505	29.8%	1.0	0.5
Physicists and astronomers	310	27.4%	4.8	1.0
Architects	2,350	23.4%	2.0	0.9
Upholsterers	835	22.8%	2.4	0.7
Machinists and machining and tooling inspectors	3,760	20.7%	3.1	1.3
Construction millwrights and industrial mechanics	7,145	19.9%	1.8	0.6
Gas fitters	955	19.9%	3.8	1.2
Bookkeepers	19,775	19.2%	2.2	1.0
Secretaries (except legal and medical)	29,435	19.2%	3.8	1.0
Industrial instrument technicians and mechanics	940	19.1%	6.9	1.0
College and other vocational instructors	11,990	18.7%	2.2	1.0
Bricklayers	1,365	18.7%	2.2	1.2
Geological and mineral technologists and technicians	920	17.9%	5.9	1.3
Civil engineering technologists & technicians & construction estimators	3,100	17.4%	2.5	1.2
Dental technicians and laboratory bench workers	1,180	16.5%	13.5	1.2
Registered nursing assistants	5,690	16.1%	2.7	1.1
Lawyers	8,690	15.7%	3.3	1.4
Truck drivers	31,530	15.5%	3.6	1.7
Registered nurses	26,890	15.1%	3.4	1.3
School and guidance counsellors	2,830	14.1%	3.5	1.3
Secondary school teachers	20,585	13.2%	2.9	2.0
Refrigeration and air conditioning mechanics	1,425	9.1%	5.4	3.2

Four-digit SOC unit group classification level

New Occupations . . . Statistics Canada's revised occupational classification system is called the National Occupational Classification for Statistics (NOC-S) 2001. It expands upon the Standard Occupational Classification 1991 system. The NOC-S 2001 is a minor revision of 1991 SOC that addresses the need for increased attention to occupations in computer and information technology. Note that the 2001 Census was coded in both NOC-S 2001 and SOC 1991, to allow some comparisons with previous Census surveys. Because of the extensive revision to occupations in computer and information technology, it was necessary to create two new minor groups: *C07 Com-*

puter and Information Professionals and *C18 Technical Occupations in Computer and Information Systems*. Together they contain eight new unit group occupations. Also C047 Computer Engineers (except software engineers) was created under minor group *C04 Other Engineers*. Figure 5 shows the experienced labour force in these new occupations for 2001. The largest occupation, computer programmers and interactive media developers accounted for over one quarter of these workers. A larger than average percentage of workers in these occupations were found in Vancouver Census Metro Area.

Figure 5: B.C. Experienced Labour Force in Computer and Information Technology Occupations

	<i>2001</i>	<i>Proportion found in Vancouver Metro</i>
All occupations	2,014,600	52.1%
Computer and Information Technology Occupations	45,570	74.7%
C047 Computer engineers (except software engineers)	2,845	84.0%
C071 Information systems analysts and consultants	9,700	70.5%
C072 Database analysts and data administrators	1,635	64.5%
C073 Software engineers	4,195	86.1%
C074 Computer programmers & interactive media developers	11,330	77.7%
C075 Web designers and developers	4,195	71.2%
C181 Computer and network operators and web technicians	6,145	69.5%
C182 User support technicians	4,570	73.3%
C183 Systems testing technicians	955	80.6%

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