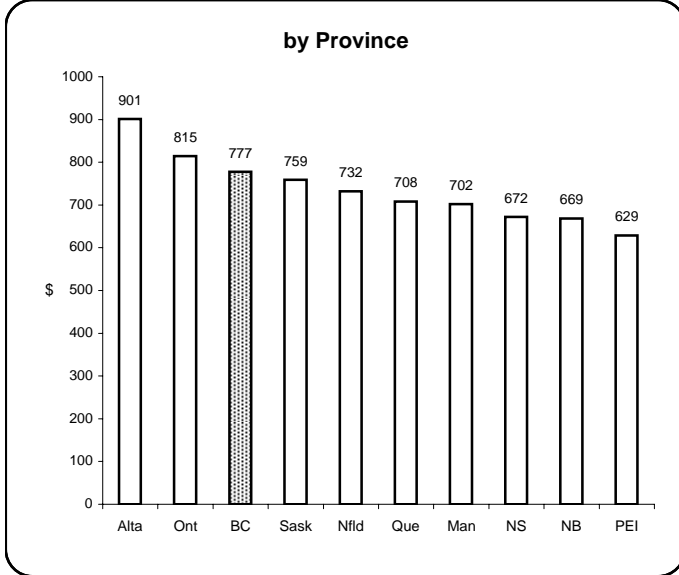
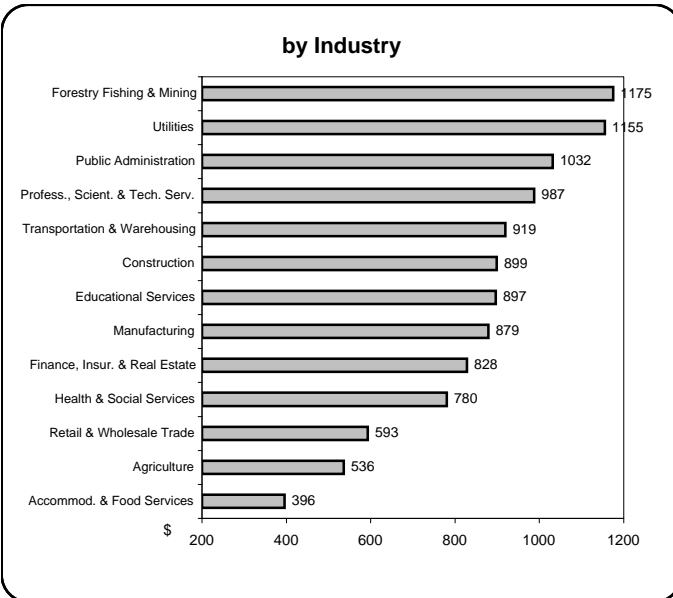
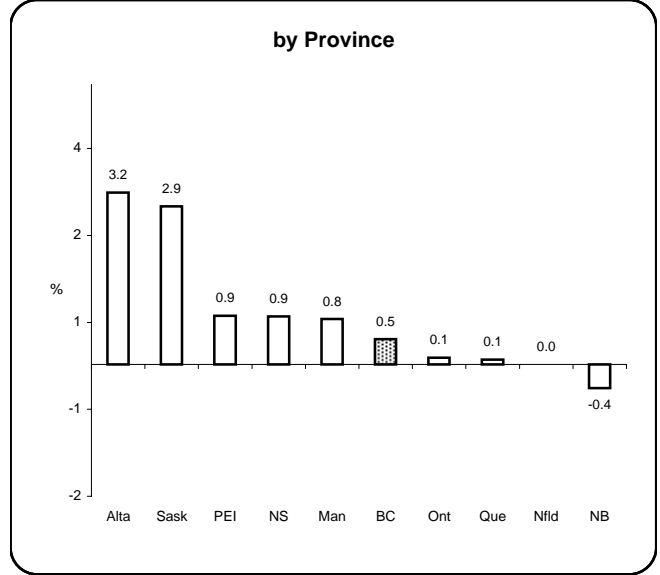


## Earnings & Employment Trends ♦ November 2008

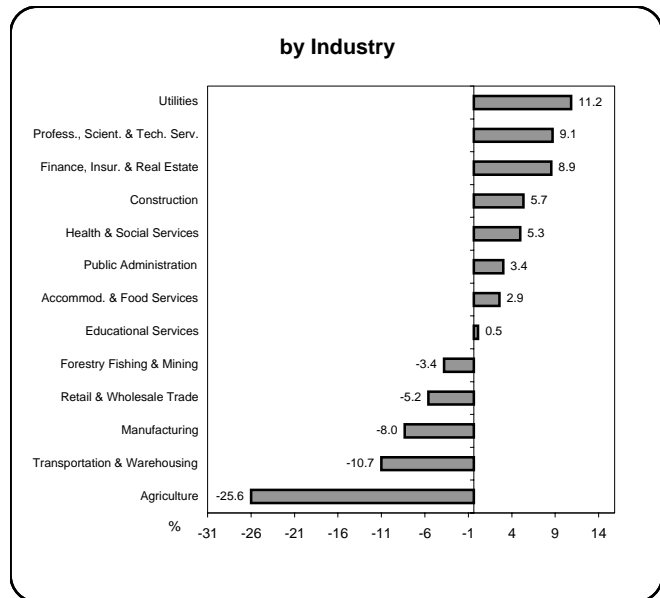
**Average Weekly Wage Rate\* - November 2008**



**Employment Growth\* - November 2008**



\* Latest 12 month average



\* Month over same month previous year (unadjusted)

Prepared by: BC Stats

Source: Statistics Canada Labour Force Survey

**Feature Article: Real Wages in BC over the Past Decade**

## Real Wages in BC over the Past Decade

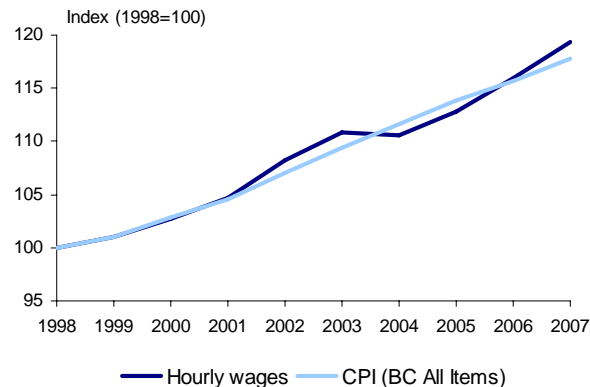
In the last decade, there have been a number of changes that may have altered the wages of BC's labour force, including communications and information technologies that are ever more prevalent, increasing international trade, and demographic trends influencing the proportion of workers retiring. As well, the higher valued Canadian dollar until recently may have exerted downward pressure on wage rates in many industries, such as manufacturing, while the historically low unemployment rate in BC would tend to increase wage rates. Although an analysis of these factors is outside the scope of this article, the changes that may have resulted will be looked at using data from the Labour Force Survey from 1998 to 2007 to answer questions such as: How have average hourly wages changed in the past ten years? Have men and women experienced equal increases in wages? How are younger workers faring relative to older workers? What changes have there been among occupations and industries and the distribution of wages? Unless otherwise noted all comparisons are in constant 2007 dollars, are for employees only and therefore exclude the self-employed. Survey participants are asked to report their usual wage/salary for their main job, including tips and commissions, before taxes and other deductions.

### Earnings Growth in BC

Average hourly earnings unadjusted for inflation increased in eight of the nine years between 1998 and 2007, with an average annual increase of 2.0% per year for a net increase of 19.3%. During this time period the Consumer Price Index (CPI) for BC increased annually an average of 1.8% per year with an overall

increase of 17.8%. Hence, wages were increasing slightly faster than inflation.

Following a dip in 2004 hourly earnings outpaced inflation from 2006 onwards



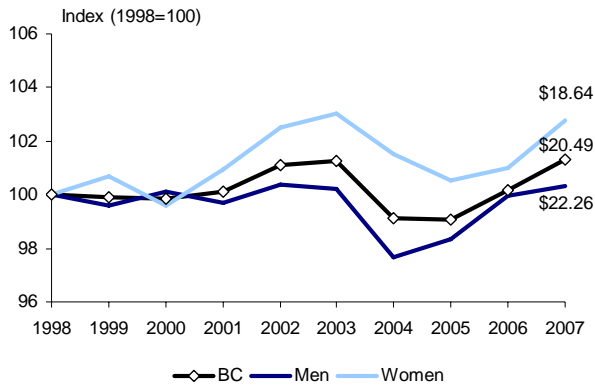
Source: Statistics Canada, Labour Force Survey and Table 326-0021  
Consumer Price Index (CPI)

The CPI is often used as a reference for wage settlements so we would expect increases in hourly earnings to follow the CPI. However, there was a succession of upward and downward movements in the average earnings of British Columbians expressed in constant 2007 dollars. In real terms, average hourly earnings increased by just 1.3% over the 1998 to 2007 period.

### Changes in Earnings among Men and Women

Earnings among women increased by 2.8% between 1998 and 2007, compared with 0.3% for men; however, despite the ratio of earnings for women to men increasing slightly, the constant dollar earnings of women in 2007 were still significantly lower.

Average hourly earnings growth was higher among women than men



Source: Statistics Canada, Labour Force Survey

Differences in Earnings Growth by Age

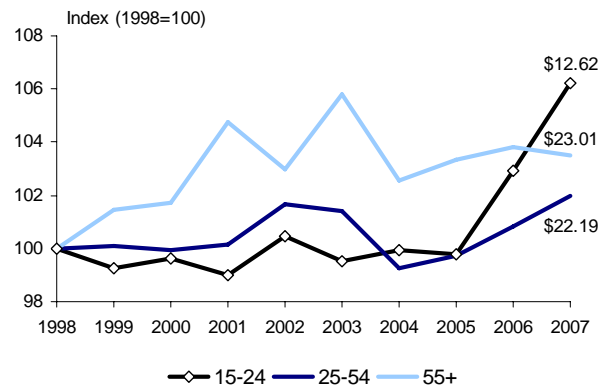
The earnings growth of BC's youth (those aged 15 to 24) was below that of prime-aged workers (those aged 25 to 54) and older workers (those aged 55 and over) for much of the last decade. BC's unemployment rate remained stable through to 2004 (between 7.1% and 8.8%) and then fell in each consecutive year to a low of 4.2% in 2007. During this latter period, labour shortages have been the norm in many industries.

While from 1998 to 2006 older workers consistently had higher growth in earnings compared to the other groups, the growth in earnings among BC's youth accelerated above both the prime-aged and older labour force's earnings growth in 2006 and 2007, respectively. In 2007, earnings of those aged 15 to 24 were 6.2% higher than in 1998, compared to 2.0% among those aged 25 to 54 and 3.5% for those aged 55 and over.

As can be expected, despite the increase in the growth of wages in this period, the wages of workers still reflect the number of years of work experience, among other factors, and increase with age. In 2007, older workers had a wage premium of 3.7% compared with prime-

aged workers and an 82.3% premium over the wages of youth workers.

Growth in average hourly earnings was highest for BC's youth



Source: Statistics Canada, Labour Force Survey

Occupational Groups with Largest Changes in Wages

Between 1998 and 2007 management occupations experienced the largest increase in average hourly wages (+13.4%), followed by those in the natural and applied sciences (+7.0%), and occupations in art, culture, recreation and sport (+6.4%). There was a substantial decrease in wages for processing, manufacturing and utilities occupations (-7.1%), while decreases for trades, transport and equipment operators (-3.2%), and sales and service occupations (-1.1%) were more moderate.

Among men and women, the three occupational groupings experiencing the largest increases mirrored the overall population, while results were mixed among the age groups. For those aged 55 years and over the occupational categories that exhibited the largest increase in earnings were management (+16.0%), health (+15.1%), and business finance and administrative (+6.4%). While management occupations (+10.5%) again ranked the highest for those 25 to 54 years of

age, natural and applied sciences (+7.4%) and art, culture, recreation, and sport (+7.3%) were among the highest. Increases among youth were quite different compared to older workers with occupations in art, culture, recreation and sport topping the list (+18.5%), followed by social science, education, government service and religion (+14.8%) and natural and applied sciences (+13.4%). Youth and older workers generally work in dissimilar occupations, which may explain some variation in occupational groups experiencing the most changes. For example, youth are typically in lower management occupations that generally have lower wage rates compared to the upper management occupations filled by older workers.

#### Management occupations had the largest gains in average hourly earnings between 1998 and 2007

Average Hourly Wage Rate by Occupational Group (2007 \$)			
	1998	2007	% Chg
Management occupations	25.77	29.21	13.4%
Natural and applied sciences and related occupations	26.17	27.99	7.0%
Occupations in art, culture, recreation and sport	20.07	21.36	6.4%
Health occupations	24.92	25.70	3.1%
Occupations unique to primary industry	18.10	18.50	2.2%
Occupations in social science, education, government service and religion	25.70	26.00	1.2%
Business, finance and administrative occupations	19.47	19.49	0.1%
Sales and service occupations	14.50	14.34	-1.1%
Trades, transport and equipment operators and related occupations	22.29	21.58	-3.2%
Occupations unique to processing, manufacturing and utilities	20.00	18.58	-7.1%

Source: Statistics Canada, Labour Force Survey

#### Industries Experiencing Most Wage Growth

Between 1998 and 2007, the services-producing sector experienced earnings gains of 2.5%, while earnings for the goods-producing sector declined by 2.0%. The three industries with the most wage growth were all from the services-producing sector, including the business, building and other support services industry (+12.5%), followed closely by public administration (+10.3%) and professional, scientific and technical services (+9.3%). The industries to experience the largest fall in earnings were both from the goods-producing sector – manufacturing (-3.1%) and utilities (-2.6%).

#### Earnings increased among most service-producing industries and a decline in the goods-producing sector was spurred by manufacturing

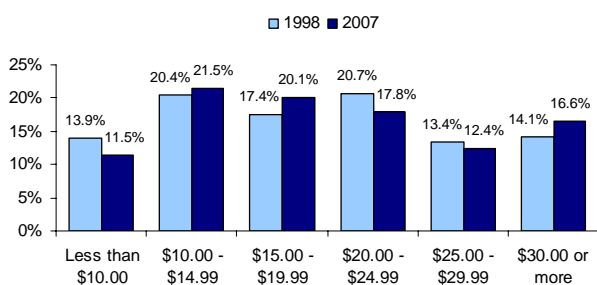
Average Hourly Wage Rate by Industry (2007 \$)			
	1998	2007	% Chg
Business, building and other support services	14.24	16.02	12.5%
Public administration	24.66	27.21	10.3%
Professional, scientific and technical services	23.12	25.26	9.3%
Other services	16.71	18.12	8.4%
Finance, insurance, real estate and leasing	20.34	21.01	3.3%
Agriculture	14.18	14.48	2.1%
Forestry, fishing, mining, oil and gas	25.00	25.42	1.7%
Health care and social assistance	22.12	22.50	1.7%
Information, culture and recreation	20.74	20.97	1.1%
Accommodation and food services	12.27	12.40	1.0%
Trade	15.99	16.16	1.0%
Transportation and warehousing	21.99	21.93	-0.3%
Construction	21.93	21.84	-0.4%
Educational services	26.15	25.87	-1.1%
Utilities	29.69	28.91	-2.6%
Manufacturing	22.31	21.61	-3.1%

Source: Statistics Canada, Labour Force Survey

## Changes in the Distribution of Wages

The proportion of low-paid employment (less than \$10 per hour<sup>1</sup>) declined by 2.4 percentage points between 1998 and 2007, while the proportion of jobs paying from \$10 to \$19.99 increased by 3.8 percentage points. This suggests that BC's historically low unemployment rate may have influenced the wage distribution and pushed lower paying jobs into a higher wage category. However, jobs paying from \$20 to \$29.99 an hour declined by 3.9 percentage points, while the number of jobs at the top of the wage distribution increased by 2.5 percentage points.

Average Hourly Wage Rate Distribution (2007 \$)



Source: Statistics Canada, Labour Force Survey, Custom Tabulation

The net result of changes in the distribution is that although there were relatively more jobs paying \$10.00 to \$19.99 and \$30.00 or more, there were fewer at \$20.00 to \$29.99 in 2007 than in 1998. The disparity may be highlighted by the sizeable increases at the top of the wage distribution that may have been influenced by occupations experiencing the greatest increases and the highest average hourly wages -

<sup>1</sup> In a series of incremental increases between 1998 and 2001, the minimum wage in British Columbia increased from \$7.00 to \$8.00 per hour. Although BC's official minimum wage is \$8.00, in November 2001, the province introduced a special wage of \$6.00 for inexperienced workers with fewer than 500 hours of paid employment with one or more employers prior to November 2001.

management, natural and applied sciences, and health.

## Changes in the Wage Distribution amongst Occupations

The majority of the increase in wages for management occupations occurred at the top of the wage distribution with an increase in the proportion of jobs paying at least \$30.00 per hour of just under 11 percentage points. Other notable increases include natural and applied science (+9.1), health (+7.4), and art, culture, recreation and sport (+6.5) occupations, while the only occupational group to experience a decrease in this wage category was primary industry (-0.7). The occupations experiencing the most increase at the top of the wage distribution also reflect the occupations that had the largest increase in average earnings, suggesting that increases in earnings are not equally distributed.

On the other end of the wage distribution, the only occupational group to experience an increase in the proportion of workers receiving less than \$10.00 per hour was occupations unique to processing, manufacturing and utilities (+4.1 percentage points). Furthermore, this group had the largest percentage increase in the number of jobs paying less than \$20.00 (+5.4). The result, as mentioned earlier, is this occupational group also experienced the largest drop in real wages between 1998 and 2007. Furthermore, all of the occupations that did not experience a large increase at the top of the wage distribution, except social science, education, government and religion, instead had the largest increase in hourly wages between \$10.00 and \$19.99. Primary industry was the only occupational group with an increase in the proportion of wage earners paid between \$20.00 and \$29.99 an hour (+3.8).

Average Hourly Wage Rate Distribution (2007 \$) by Occupational Group							
	Year	Less than \$10.00	\$10.00-\$14.99	\$15.00-\$19.99	\$20.00-\$24.99	\$25.00-\$29.99	\$30.00 or more
Management occupations	1998	4.3%	14.7%	15.8%	18.8%	15.4%	31.0%
	2007	2.3%	9.4%	15.7%	15.1%	15.6%	41.9%
Business, finance and administrative occupations	1998	7.8%	21.8%	26.6%	26.2%	8.9%	8.8%
	2007	5.4%	23.5%	29.6%	22.5%	9.4%	9.5%
Natural and applied sciences and related occupations	1998	2.5%	9.2%	14.5%	19.4%	23.6%	30.7%
	2007	1.5%	6.1%	13.8%	18.4%	20.4%	39.8%
Health occupations	1998	1.3%	6.2%	13.4%	31.5%	20.0%	27.6%
	2007	0.9%	7.4%	18.8%	26.0%	11.9%	35.0%
Occupations in social science, education, government service and religion	1998	4.9%	10.3%	16.2%	21.1%	16.5%	31.1%
	2007	3.6%	10.0%	17.3%	19.5%	17.0%	32.5%
Occupations in art, culture, recreation and sport	1998	10.2%	22.2%	21.8%	24.3%	10.2%	11.3%
	2007	5.3%	17.5%	24.9%	21.1%	13.4%	17.7%
Sales and service occupations	1998	33.8%	30.9%	14.9%	12.1%	4.4%	3.9%
	2007	29.0%	35.8%	16.8%	10.2%	3.9%	4.3%
Trades, transport and equipment operators and related occupations	1998	5.9%	14.6%	14.3%	26.2%	24.5%	14.4%
	2007	4.0%	16.0%	19.8%	23.3%	21.9%	14.9%
Occupations unique to primary industry	1998	20.7%	25.8%	13.5%	17.6%	14.5%	8.0%
	2007	13.1%	22.5%	21.3%	18.5%	17.3%	7.3%
Occupations unique to processing, manufacturing and utilities	1998	7.5%	23.8%	18.8%	22.4%	20.6%	6.9%
	2007	11.6%	24.3%	23.7%	16.0%	16.9%	7.3%

Source: Statistics Canada, Labour Force Survey, Custom Tabulation

### Changes in the Distribution of Wages for Selected Industries

Among those at the top of the wage distribution, the only industry that had a sizeable drop in the proportion of workers earning more than \$30.00 per hour was utilities (-8.5 percentage points), while educational services was the only other industry to experience a decline in this wage category (-1.6 percentage points). Workers in public administration fared the best out of all industries (+12.6 percentage points), followed by professional, scientific and technical services (+6.4), and health care (+5.5).

Manufacturing was the only industry with an increase in workers with earnings below \$10.00

per hour (+1.3 percentage points), and the industry with the largest reduction in workers being paid between \$20.00 and \$29.99 per hour (-11.7). It is then not surprising that manufacturing had the largest decrease in average wages in the period examined.

Decreases in the proportion of workers making less than \$10.00 an hour ranged from 0.3 to 11.8 percentage points among all industries. Three industries decreased the proportion of workers making less than \$10.00 an hour between 4.7 and 11.8 percentage points - business building and other support services, other services, and finance, insurance, real estate and leasing. For each of these industries increases were evident in each of the other broad categories, with the

majority of the increase generally between \$10.00 and \$19.99, except for other services

where the increase was more heavily concentrated in the next highest category.

Average Hourly Wage Rate Distribution (2007 \$) by Selected Industries							
	Year	Less than \$10.00	\$10.00-\$14.99	\$15.00-\$19.99	\$20.00-\$24.99	\$25.00-\$29.99	\$30.00 or more
Forestry, fishing, mining, oil and gas	1998	4.1%	8.7%	12.0%	22.4%	31.7%	21.2%
	2007	1.8%	6.4%	15.0%	21.6%	32.3%	22.9%
Utilities	1998	*	*	*	16.4%	24.5%	46.4%
	2007	*	*	*	27.2%	19.4%	37.9%
Construction	1998	5.5%	14.8%	18.0%	28.1%	19.6%	14.0%
	2007	2.3%	14.9%	24.4%	22.4%	20.9%	15.2%
Manufacturing	1998	6.0%	17.3%	15.6%	23.2%	23.3%	14.6%
	2007	7.2%	18.4%	21.5%	16.7%	18.1%	18.2%
Trade	1998	27.4%	30.6%	14.2%	14.4%	7.4%	6.1%
	2007	24.2%	32.3%	17.3%	12.0%	6.9%	7.3%
Transportation and warehousing	1998	5.2%	10.9%	20.0%	33.7%	17.6%	12.7%
	2007	4.9%	16.8%	18.2%	29.0%	14.7%	16.4%
Finance, insurance, real estate and leasing	1998	10.0%	24.3%	23.6%	18.2%	8.2%	15.6%
	2007	5.3%	24.1%	26.2%	17.5%	9.8%	17.0%
Professional, scientific and technical services	1998	6.1%	15.8%	22.7%	21.4%	13.0%	20.9%
	2007	2.2%	14.6%	19.3%	21.2%	15.4%	27.3%
Business, building and other support services	1998	26.3%	44.1%	14.7%	7.3%	3.8%	3.8%
	2007	14.6%	39.1%	24.9%	9.7%	5.6%	6.2%
Educational services	1998	4.2%	7.4%	16.8%	25.7%	14.0%	32.0%
	2007	3.6%	8.6%	17.3%	24.9%	15.3%	30.3%
Health care and social assistance	1998	3.7%	12.0%	25.2%	28.8%	13.1%	17.2%
	2007	3.0%	13.0%	29.5%	21.8%	10.1%	22.7%
Information, culture and recreation	1998	13.3%	23.9%	14.7%	17.6%	13.6%	16.9%
	2007	11.5%	21.0%	19.4%	17.1%	12.2%	18.8%
Accommodation and food services	1998	*	37.9%	12.7%	4.5%	2.4%	*
	2007	36.7%	40.8%	14.2%	4.1%	2.6%	1.7%
Other services	1998	21.3%	30.2%	18.3%	14.4%	9.4%	6.4%
	2007	12.5%	29.6%	19.9%	18.5%	11.3%	8.1%
Public administration	1998	2.6%	5.0%	17.3%	32.6%	20.7%	21.9%
	2007	1.7%	4.0%	11.5%	27.9%	20.4%	34.5%

\* = Suppressed data; Data for agriculture and accommodation and food services were suppressed on either end of the distribution for one or both years making comparisons untenable

Source: Statistics Canada, Labour Force Survey, Custom Tabulation

The professional, scientific and technical services industry also experienced a decrease in the proportion of workers making less than \$10.00 an hour (-3.9 percentage points);

however, this industry not only had decreases in the proportion of workers making less than \$10.00, but also in the \$10.00 to \$19.99 range, resulting in a shift toward the higher end of the

wage distribution. Construction experienced the general decline in workers making less than \$10.00 (-3.3 percentage points) as well. On the other hand, labour shortages in the construction industry have produced a preponderance of new entrants with lower than average skill levels, and as a result most of the increase in wages was in the \$15.00 to \$19.99 range and relatively fewer workers made between \$20.00 and \$29.99.

Trade (wholesale and retail trade industries) was less often paying below \$10.00 an hour in 2007 (-3.2 percentage points) and instead more often paid workers between \$10.00 and \$19.99 (+4.9).

Although workers in the health care and social assistance industry did not experience a large change in average hourly earnings, there was a splitting of the \$20.00 to \$29.99 category, with approximately half of the change in employment (-10.0 percentage points) shifting into the next higher and lower categories.

### Summary

Between 1998 and 2007, BC's labour force has experienced a number of changes in the average hourly wage and the distribution of wages among occupations and industries. Besides the global trends towards communications and information technologies, increasing international trade flows, and the strong forces the aging of the population is having on the composition of the workforce there have been a number of other factors at play in BC that may have altered the employment income landscape. Labour shortages due to BC's historically low unemployment rate have affected industries and occupations in different ways. Some sectors increased wages to attract new workers, while others were able to decrease wages because of the relative

inexperience of new entrants into typically higher skilled occupations. Not to be discounted though is the growth in earnings of youth, which outpaced growth for the prime-aged workforce and older workers. Furthermore, despite still having a wage gap compared to men, the growth in earnings for women outpaced that of men more than nine fold.

### Notes:

Average hourly wage rates in this article are from Statistics Canada's monthly Labour Force Survey. Information is collected on the usual wages or salary of employees in their main job. Survey participants are asked to report their usual wage/salary for their main job, including tips and commissions, before taxes and other deductions. Wages/salary are calculated in conjunction with usual paid work hours per week and include full and part-time workers aged 15 years and over.

Hourly earnings in constant 2007 dollars were calculated using the Consumer Price Index (all items) for BC. The CPI is an indicator of changes in consumer prices experienced by the population. It is obtained by comparing through time, the cost of a fixed basket of goods purchased by consumers. Since the basket contains goods of unchanging or equivalent quantity and quality, the index reflects only pure price change. For example, it measures the cost today to purchase exactly the same grocery cart of goods that were purchased in some previous year. It does not reveal, nor is it intended to reveal, the change in the average dollars spent on groceries today compared to yesterday.