



GPI *Atlantic*

Genuine Progress Index for Atlantic Canada / Indice de progrès véritable - Atlantique

MEASURING SUSTAINABLE DEVELOPMENT

APPLICATION OF THE GENUINE PROGRESS INDEX TO NOVA SCOTIA

WORKING TIME AND THE FUTURE OF
WORK IN CANADA
A NOVA SCOTIA GPI CASE STUDY

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April, 2004

ACKNOWLEDGEMENTS

GPI Atlantic is grateful to Health Canada for providing funding support for research on major sections of this report as part of a research program on the health impacts of economic change.

The author wishes to thank all those who directly helped with this report by providing detailed information upon request. This includes Anders Hayden, Juliet Schor, Andrew Harvey, Mike McCracken, Larry Haiven, Frank Reid, Andrew Heisz, Colin Dodds, and Laura Landon. Thanks also go out to Mary MacInnis, a Certified Accountant in Chester, Nova Scotia, who provided income tax simulations free of charge at her busiest time of year.

The reviewers of this report, who generously offered their time, patience, and expertise were Anders Hayden, Andrew Harvey, Juliet Schor, Mike McCracken, Andrew Heisz, and Arthur Donner. Their help and input has been invaluable.

During the research stage of this report the pioneering work of many individuals provided the inspiration needed to continue. These include Linda McQuaig, Juliet Schor, Anders Hayden, Frank Reid, Theodore Roszak, Simone Weil, Jim Stanford, Heather Menzies, and Barbara Ehrenreich. Their work and ideas were paramount in shaping and informing this study. The author would particularly like to acknowledge the work of the Advisory Group on Working Time and the Distribution of Work, headed by Arthur Donner, which provided strong evidence that work reduction and work hours redistribution can work in Canada and is worth trying.

Many thanks also go to Laura Landon, Anne Monette and Bill Turpin, who helped with technical difficulties and the final proofreading and formatting of the report.

Special thanks to Hans Messinger and Jacques Ouelette at Statistics Canada who helped provide GPI Atlantic with much needed data.

Finally, the author wishes to express personal gratitude for the sounding board provided by her partner in life, Michael Oddy. He was also unofficial research assistant, gofer, newspaper clipper, and caffeine provider.

Inspiration for the Nova Scotia Genuine Progress Index came from the ground-breaking work of Redefining Progress, which produced the first GPI in the United States in 1995. Though GPI Atlantic's methods differ in many ways, we share with the original GPI the attempt to build a more comprehensive and accurate measure of wellbeing than can be provided by market statistics alone.

Needless to say, any errors and all viewpoints and interpretations of the data are the sole responsibility of the authors and GPI Atlantic.

The GPI Work Hours Component has been reviewed in whole or in part by:

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EXECUTIVE SUMMARY

"Good nature is, of all moral qualities, the one the world needs most, and good nature is the result of ease and security, not of a life of arduous struggle. Modern methods of production have given us the possibility of ease and security for all; we have chosen, instead, to have overwork for some and starvation for the others.... [T]here is no reason to go on being foolish forever."

– Bertrand Russell¹

The nature of work has changed dramatically in the last half century, and these changes have had major consequences for the ways in which we configure our lives. While our conventional measures of progress chronicle the widely accepted benefits of these changes, including higher levels of income and consumption, they have less successfully documented the costs.

The 1990s, for example, saw an increased polarization of hours and the decline of the standard workweek. Larger numbers of Canadians worked longer hours and larger numbers were unable to get the hours they needed to make ends meet. In the economic growth statistics conventionally used to measure progress, long work hours are counted as a contribution to wellbeing because they usually translate into increased output. But there are economic, social, and environmental costs associated both with increased output and long work hours. Longer work hours may exacerbate stress, produce adverse health outcomes, and diminish our quality of life, while increased output may place excess demands on our natural resources. At the same time, unemployment and underemployment waste precious resources and also produce substantial social, human, health, and economic costs.

Other major changes in the nature of work, which also have major consequences for quality of life, include the sharp increase in female labour force participation, the growing importance of the service industries, and the rise of new categories of “contingent work.” These changes have increased time stresses for many dual-earner families and working mothers, and job insecurity for many temporary, contract, casual, and on-call employees.

The full benefits and costs of these and other changes in the nature of work are not fully captured in our current measures of progress, which ignore major aspects of human capital on which the economic system rests, including education, skills, and human health. In 1995 the World Bank started to include estimates of human capital in its measures of national wealth, with its first rough estimates indicating that 59% of the wealth in developed countries was found in their human and social capital. Natural resources accounted for 25% of wealth, and manufactured capital for just 16%.²

A sound economic system that properly values work must also value the human, natural, and social capital on which all work is based. For instance, GDP-based measures of progress count any increase in work hours as a contribution to economic growth and prosperity, but these

¹ Russell, Bertrand. 1935. *In Praise of Idleness*. George Allen and Unwin Ltd. London. p. 29.

² Cited in Crittenden, Ann. 2001. *The Price of Motherhood*. Henry Holt and Company. New York. p. 71. Original source is World Bank. 1995. *Monitoring Environmental Progress*. Washington D.C.

measures ignore the adverse effects that excess work hours can have on human health and family structure. In fact, the GDP counts medical and drug spending on chronic health problems associated with work stress as a contribution to economic growth instead of as a cost to the economy.

The hours that people work are a key indicator of overall quality of life. Therefore work-hours is one of 22 core components of the Nova Scotia Genuine Progress Index (GPI). The key indicators of genuine progress for the work hours component of the GPI are listed below. In order for Canadians to achieve genuine progress in the arena of paid work, we need:

- A decline in work hours for those who already have full-time work, who are working overtime, and who are working excessively long hours.
- A decline in hours polarization, unemployment, and underemployment.
- An increase in work that contributes to positive human development and quality of life.
- An increase in the types of work that are socially and environmentally benign and a corresponding decrease in work that is damaging to communities and the environment.
- An increase in job security and a corresponding decline in "non-standard" work which is characterized by low pay, insecurity, lack of benefits, and lack of worker autonomy.

Current trends show a decline in genuine progress in all indicators in the 1990s, with some improvement since 1996/97, but still an overall decline in the last 25 years.

In this three-part report, paid work is examined not only for its contribution to income and growth, as in most standard economic analyses, but from a broader perspective of “genuine progress” and human wellbeing.

Part 1 investigates the quantitative trends in paid work hours over the last several decades, particularly in Nova Scotia. For comparative purposes, trends are also considered for Canada as a whole, and in some cases for the United States and Europe.³ Part 1 also considers trends in types of work (i.e. part-time, full-time, shift work, casual etc.) and trends that have been taking place within the domain of work itself.

Part 2 examines costs associated with these trends in work that are invisible in our current system of accounting. For instance, what are the costs associated with unemployment and underemployment? What are the health costs associated with long work hours? Is the changing nature of work taking a toll on family life or community life, and if so, how might these costs be assessed?

Part 3 presents the perceived benefits of shorter work time, as well as obstacles to shorter work time from the perspective of employees, employers, and unions. Various forms of new work arrangements are discussed, with working examples provided to demonstrate ways in which paid work could practically be reconfigured in our lives to take human wellbeing and quality of life into account. The job creation potential of reduced work time and reduced overtime will also be explored, with special attention paid to Nova Scotia. Finally, Part 3 explores ways in which

³ International comparisons have been made with great caution, because the data sources vary considerably, as do definitions and survey questions.

genuine progress could be made in the area of paid work. Policy recommendations that flow from the evidence are discussed, as well as the areas where more data are required.

1. TRENDS IN WORK HOURS AND THE CHANGING NATURE OF WORK:

"The paradox of our times is that many Canadians today work long hours while many others have no work at all."

– Advisory Group on Working Time and the Distribution of Work⁴

Within the last century, hours of paid work have gone through three phases: reduction (1900-1960), stabilization (1960-present), and polarization (1980-present).⁵ The first 60 years of the 1900s saw dramatic reductions in paid work hours with standard weekly hours falling in Canada from about 60 hours in 1900 to 40 hours in 1957.⁶ By the 1960s, 70% of full-time workers worked “standard” hours (40 hours a week), and many who thought the downward trend had momentum foresaw a 32-hour week on the horizon.⁷ Instead, standard hours have not changed much in the last 40 years. For all Nova Scotian and Canadian employees (both full-time and part-time), average weekly work hours decreased by only 2.5 hours and 2 hours respectively, or just 5%, in the 25-year period from 1976 to 2001.⁸ By contrast, between 1901 and 1941 weekly work hours in Canada dropped by 11 hours or 18%. Between 1941 and 1961, there was an additional 18% decline in just 20 years.⁹ The 5% decline in work hours evident over the last quarter century suggests work hours in Canada are stabilizing, a trend mirrored in many industrialized countries

The sharp decline in standard work hours over the first 60 years of the 1900s has been attributed to skyrocketing levels of productivity, due to technological advances, and subsequent increases in real earnings. Between 1950 and 1970 alone, the GDP in industrialized countries, including Canada, grew 2.5 times and industrial production almost tripled. The general stability of the workweek since the 1970s in particular is related to the fact that the wages of full-time, full-year workers have stagnated since that time, so that workers have no potential wage gains to exchange

⁴ Advisory Group on Working Time and the Distribution of Work. 1994. *Report for the Advisory Group on Working Time and the Distribution of Work*. Human Resources Development Canada. Hull. p. 15.

⁵ Morissette, Rene and Deborah Sunter. 1994. *What is Happening to Weekly Hours Worked in Canada?* Statistics Canada. Household Surveys Division. Analytical Research Branch. Ottawa. p. 4.1.

⁶ In the United States the average workweek was 58.4 hours in 1901. By 1948 it had dropped to 41.6 hours. Between 1948 and 1977 work hours hardly changed. The average workweek by the end of the 1970s was 41.3 hours. Taken from White, Michael. 1987. *Working Hours. Assessing the Potential for Reduction*. International Labour Organization. Geneva. p. 4.

⁷ Morissette and Sunter, 1994, op. cit., p. 4.2.

⁸ Statistics Canada's Labour Force Survey collects information on a monthly basis about hours of work. Respondents are asked how many hours they *usually* worked and how many hours they *actually* worked during the reference week (which is generally the week prior to the administration of the survey). “Usual hours” are defined as normal paid or contract hours, excluding overtime hours, vacations, and sick days. “Actual hours” are the number of hours actually worked in the reference week and include paid and unpaid overtime, vacation, sick days, and days lost due to labour disputes.

⁹ Calculations are derived by the author but data are obtained from Sheridan, Mike, Deborah Sunter and Brent Diverty. 1996. “The Changing Workweek: Trends in Weekly Hours of Work.” *Canadian Economic Observer*. Statistics Canada. Catalogue No. 11-010-XPB. Ottawa. p. 3.3.

for added leisure. In addition, Canadians have been investing more time and money in education and are therefore less willing to trade wage gains for shorter hours when they do enter the labour market. The apparent stabilization of weekly work hours is also related to the fact that workers may have chosen non-wage benefits such as paid holidays, health and dental care packages, and pension plans over shorter workweeks during this period. There was also little incentive on the part of employers to further reduce the standard workweek since, according to one analysis, "further reductions were unlikely to yield a proportionate increase in productivity." Because of this, employers were not likely to reduce work hours without a proportionate reduction in wages, a move workers would probably oppose.¹⁰

Declining average weekly work hours have also been linked to the growth of service industries that have shorter average working hours; the continued decline in agricultural employment, with its very long work hours; and the changing composition of the workforce, particularly the increased labour force participation of women and youth, and the rapid expansion of part-time work.¹¹

However, quantifying the *average* number of paid work hours alone paints a very incomplete picture of what is actually taking place and says nothing about trends taking place within those averages. Nor does it reveal growing disparities among different groups of workers. In other words, a steady or declining average may be hiding or masking other trends. In the following sections some of these hidden trends will be outlined.

Polarization

"Hours polarization" refers to a decline in the proportion of workers working standard hours, coupled with increases in the proportions working long and short hours.¹² In Canada, hours polarization has been accompanied by a growing inequality in both employment opportunities and earnings. According to the Advisory Group on Working Time and Distribution of Work: "Hours of work are increasing for some full-time workers while, for others, only part-time work is available. This increased labour market polarization raises the stakes of winning and losing in the employment lottery."¹³

By 2001, only 59% of paid workers in Canada put in 35-40 hours per week, down from 66% in 1976. In Nova Scotia the percentage of workers working standard hours fell from 65% in 1976 to only 57% in 2001. The proportion working standard workweeks reached its low point in 1996, when only 55% of paid workers in Canada and 52% in Nova Scotia worked a standard week of 35-40 hours. The overall drop, especially between 1976 and 1996, was largely due to the sharp reduction in the hours worked by youth, which in turn was related to increasing numbers working part-time while undertaking post-secondary education. In this time period, the

¹⁰ Sunter, Deborah and Rene Morissette. 1994. "The Hours People Work." *Canadian Economic Observer*. Statistics Canada. Catalogue no. 11-010. Ottawa. pp. 4.5-4.6.

¹¹ Benimadhu, Prem. 1987. *Hours of Work: Trends and Attitudes in Canada*. Conference Board of Canada. Ottawa. p. 4.

¹² According to Morissette and Sunter (1994), most of the decline in the standard workweek in Canada took place between 1981 and 1993, coinciding with the last two recessions. p. 14.

¹³ Advisory Group on Working Time and Distribution of Work. 1994. *Report for the Advisory Group on Working Time and the Distribution of Work*. Human Resources Development Canada. Hull. p. 15.

proportion of 15 to 24-year-olds working less than 35 hours/week more than doubled in Canada, from 26% in 1976 to 54% in 1996.¹⁴ In Nova Scotia the trend was similar, but even more pronounced. In 1976, 24.6% of young Nova Scotians worked less than 35 hours a week. By 1996 this proportion had more than doubled to 58.7%. By 2001, 51.4% were working short hours, indicating that more young people have found full-time work in recent years.¹⁵

Actual hours data, which include overtime, vacations, and sick days, indicate that in 2001, 31% of all workers in Canada put in less than 35 hours a week, up from 28% in 1976. The proportion working less than 30 hours increased from 16% in 1976 to 21% in 2001. This reflects sharp increases both in female employment, where the proportion of part-time work is nearly three times as high as among men, and in the percentage of youth working part-time.

In Nova Scotia in 2001, 31% of all workers clocked less than 35 hours a week, up slightly from 29% in 1976. Within this group, however, the proportion working less than 30 hours a week increased sharply from 16% in 1976 to more than 20% in 2001. Short hours were most prevalent among employed women in Nova Scotia. In 1976 27.3% of employed women worked less than 30 hours a week compared with 29% in 2001. Roughly two out of every five employed Nova Scotian women worked less than 35 hours a week both in 2001 and in 1976. In 2001 one in five employed Nova Scotian men worked less than 35 hours a week – relatively unchanged from 25 years earlier.¹⁶

At the same time, the incidence of long work hours was increasing. Again using data on actual hours worked, in 1976 one-quarter of all Canadian workers in full-time jobs worked 41 hours or more. In 2001 nearly one-third were working 41 hours or more, a proportion that has remained relatively unchanged since the mid-1990s.

In Nova Scotia the proportion of full-time employed working long hours (50 hours or more) increased sharply between 1976 and 2001 from 12.7% to 16.4%. In 1976 roughly one in five full-time workers in Nova Scotia clocked more than 41 hours a week. By 2001 nearly one in three workers was doing so. Full-time employed men in Nova Scotia saw a 35% increase in long work hours during this time period. In 2001 22.4% of full-time employed men worked 50 hours or more a week, up from 16.6% in 1976. In this same time period there was also a very substantial increase in the proportion of full-time employed women in Nova Scotia who were working more than 41 hours per week, up from 12.2% in 1976 to 20.3% in 2001. Among full-time employed women, 4.5% worked 50 or more hours a week in 1976 compared with 8.4% in 2001.¹⁷

¹⁴ Sunter and Morissette, 1994, op. cit., p. 4.3. The trend description and analysis provided in this section are based on this article by Sunter and Morissette, but the figures cited here and elsewhere in this report text are not identical to the figures cited by Sunter and Morissette. Instead, the numbers cited here are derived from the revised data for usual hours available in Statistics Canada's *Labour Force Historical Review*. Every five years or so, all Statistics Canada data are revised based on new census population information. Bowlby, Jeff. Statistics Canada. Head of Analysis for *The Labour Force Survey*. Personal communication. July 30, 2003.

¹⁵ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

¹⁶ Idem.

¹⁷ Idem.

In Nova Scotia, Statistics Canada data indicate that employed men over 45 years of age have experienced a marked polarization in their hours of work over the last 25-year period. The decline of the standard workweek, particularly between 1976 and 1996, has been accompanied by an increase in both short and long hours for this demographic group. In 2001, 10.5% of employed men over 45 years of age were working short hours (1-34 hours), compared to 6% in 1976. Similarly, 23% of full-time employed men over 45 were working long hours (50 hours or more) in 2001, up from 16% in 1976. In 1976, 26.4% of full-time employed men over 45 were working more than 41 hours per week compared with nearly 38% in 2001. Again, all these data are based on *actual* hours worked, which include overtime, vacations, and sick days.

For Nova Scotian men over 55 years of age the shift was even more dramatic. The proportion of men in this age group working standard workweeks (35-40 hours) dropped nearly 12 percentage points from 1976 to 2001 (from 62.9% to 51.2%), while hours grew more polarized. In 2001, nearly 18.8% of employed men in this age group were working short hours, compared to just 10.6% in 1976. As well, 20.3% of full-time employed men in this age group were working long hours in 2001, up from 13.9% in 1976. In 1976, 23.4% of full-time employed men aged 55 and over were working more than 41 hours a week compared with 33.4% in 2001.

Again using data on actual hours worked, employed Nova Scotian women between 25 and 44 years of age have also seen a decline in the standard workweek (35-40 hours), from 63.4% of employed women in 1976 to 58.7% in 2001. Among these women, there was a shift towards shorter work hours (1-34 hours/week) from 28% in 1976 to 31% in 2001. Among full-time employed women in Nova Scotia in this age group, the incidence of long hours (50 or more) also increased from 4.6% to 8% in this time period. In 1976, 12.3% of this group worked more than 41 hours a week compared with 20% in 2001.

Nova Scotian women 55 years and over have seen an even more dramatic drop in the standard workweek, and a particularly large shift to short hours. The proportion of women 55 years and over working a standard week fell from 58.6% in 1976 to 45.9% in 2001. This shift was accompanied by sharp increases in the proportion of older women working short hours and long hours. Between 1976 and 2001, the incidence of short hours (less than 35 hours/week) increased from 30.2% to 44.8% while the incidence of long hours (50 and over) among full-time employed women in this older age group also increased, from 6.4% to 10.4%. In 1976, 13.8% of full-time employed women 55 and over worked more than 41 hours a week compared with nearly 22% in 2001. As noted, all these data refer to actual hours worked.

More young people were in school in 1995 than a decade earlier, and this number continues to grow. The rising costs of university tuition and other educational expenses are pushing more of these students into the labour market. In 1976, the employment rate for full-time students in Canada was 26%.¹⁸ By 2001 it had increased to 38%. Similarly, 33% of full-time students in Nova Scotia were employed in 2001, up from 22% in 1976. Full-time students tend to work part-time to balance their work/school responsibilities, thereby contributing to the increase in the proportion of employees working short hours. However, according to Statistics Canada, short workweeks have become more common among both student and non-student groups. For

¹⁸ Statistics Canada defines the "employment rate" as the number of persons employed expressed as a percentage of the population. In this case, the population refers to full-time students 15-24 years old. In other words, 26% of full-time students were employed in 1976.

example, in 1995, three out of 10 employed youths who had left school worked a short workweek – triple the proportion of school leavers working short workweeks in 1976.¹⁹

Again using *actual* hours data, short hours (1-34 hours per week) and standard hours (35-40 hours per week) moved in opposite directions between 1976 and 2001 for youth in Nova Scotia, with short hours increasing at the expense of standard hours. In 1976, 38% of youth worked less than 35 hours per week. This increased to 54% in 2001. By contrast, in 2001, only 27% of 15-24 year old Nova Scotians worked a standard workweek, down from 41% in 1976.

As indicated above, women and youth account for a disproportionate number of short-hours workers. By contrast, those working longer hours represent a more diverse cross-section of workers (Table ES1).

The existing literature on the subject has pointed to a number of factors that have contributed to hours polarization in Canada. These include the following:

- Growth in part-time jobs exceeded the growth in full-time jobs in the 1990s, contributing to the growth in short hours.²⁰
- The increase in long work hours, particularly between 1976 and 1997, could be partially due to the fact that between 1989 and 1997, self-employment accounted for nearly 80% of net employment gain in Canada, and the self-employed tend to work long hours.
- The growth of moonlighting contributed to long hours.
- Growth in school attendance coupled with growth in part-time jobs held by students contributed to the growth in short hours.
- There has been a marked shift toward service industries where hours are polarizing and where shorter hours are more prevalent.
- Industries where hours are decreasing tend to be characterized by a relatively unskilled work force receiving low wages.
- The adoption of "lean production" and "just-in-time" methods by employers means they need to be able to adjust quickly to changes in demand for product, and therefore may use either more overtime hours among existing employees or hire more temporary contract workers (who tend to work short hours) to meet fluctuations in demand. In either case, the new production methods militate against the standard workweek and tend to favour a polarization of hours.
- Trade globalization and increasing competition with cheap labour countries has forced many firms to shed full-time employees in an effort to reduce costs and to replace them with part-time, contingent workers.

Table ES1. Who Works Long Hours in Canada?

¹⁹ Sheridan, Sunter and Diverty, 1996, op. cit., p. 3.6.

²⁰ Manser, Marilyn E. and Garnett Picot. 1999. "Self-employment in Canada and the United States." *Perspectives*. Vol. 11, no. 3. Statistics Canada. Catalogue no. 75-001-XPE. Minister of Industry. Ottawa. p. 43.

	Comments
Men and women with university degrees	The proportion of Canadian university-educated men working long hours rose from 25% in 1976 to 32% in 1995. For Canadian women with degrees, it increased from 13% to 18%.
Managers in white and blue-collar occupations (men and women)	Between 1985 and 1995, there was an 8.3% decrease in the proportion of managers working standard hours in Canada, and a corresponding 8.2% increase in the proportion working more than 40 hours/week.
Blue-collar jobs that pay overtime	It is often more cost efficient for employers to pay overtime than to hire and train new workers. Due to ceilings on Employment Insurance, Canada Pension Plan, and Workers Compensation Board contributions, employers' fixed costs increase less by scheduling existing employees to work overtime than by hiring new employees.
White collar jobs with a high level of responsibility	There is an increasingly competitive employment market in this area. Therefore, salaried employees are often expected to put in substantial hours of unpaid overtime. In addition, downsizing has led to layoffs in this area, which in turn have led to an increasing incidence of job insecurity, so that many employees are afraid to refuse overtime as they are forced to take on the work of laid off co-workers.
Service sector	While many service sector jobs are associated with part-time, temporary, and casual work, long work hours are prevalent for: <ul style="list-style-type: none"> • women in business services and education • men working in transportation, storage and communications, business services, educational services, and public administration
Goods-producing sector	In general, longer hours are more prevalent for both men and women in the goods-producing sector than in the service sector.
Multiple-job holders (moonlighters)	Multiple-job holders tend to have long work hours since they are working more than one job. This group has grown as a proportion of overall employment since the mid-1970s.
Workers in low-skilled, low-paying jobs	The Advisory Group on Working Time and the Distribution of Work pointed out that a "cluster" of workers in low-paying jobs, usually women, are typically forced to work long hours just to make ends meet. ²¹
Self-employed	The self-employed were three times as likely as paid employees to work more than 40 hours a week in 1995. This group has also increased in the last decade. Between 1976 and 1998 self-employment doubled in Canada. In fact, nearly 80% of jobs created in the first eight years of the 1990s were created in the self-employment sector. ²²

Sources: Statistics Canada. 1997. *Labour Force Update: Hours of Work*. Vol. 1, no. 2. Minister of Industry. Ottawa. pp. 14-16; Advisory Group on Working Time and the Distribution of Work, 1994, op. cit., pp. 18-19.

²¹ Advisory Group on Working Time and the Distribution of Work, 1994, op. cit., pp. 18-19.

²² Of the 775,000 total net job growth (1990-1998), nearly 600,000 were in the self-employment sector. From Lin, Zhengxi, Garnett Picot and Janice Yates. 1999. *The Entry and Exit Dynamics of Self-Employment in Canada*. Research Paper Series. Analytical Studies Branch. Statistics Canada. No. 134. Minister of Industry. Ottawa. p. 1.

Polarization may not only be occurring between different groups of workers. In many cases, the same individuals might be working very long hours during some periods, and be unemployed or underemployed during others. It is clear from this summary that the apparent stability of *average* work hours in recent decades conceals growing disparities among different groups of workers.

Total Work Hours and Increased Work Effort

The apparent stability of *individual* work hours in the last 40 years, however, also conceals the fact that *households* are actually putting in much longer hours than before. In 2000, both partners worked in 65.6% of two-partner families in Canada.²³ In 1967 (the first year data on dual earner families were available) just over 30% of all two-partner families had both partners working. This, combined with the fact that total household work hours have not markedly diminished since the turn of the century, means that dual-earner couples with children are working longer total (paid plus unpaid) hours today than their counterparts did 100 years ago. Total average work hours per week for couples with children increased substantially in Canada between 1900 and 2000 from about 111 hours in 1900 to 137 hours in 2000.²⁴ Total work hours for *full-time* employed parents in 2000 are even higher at 145 hours. This increase in total (paid plus unpaid) work hours is primarily due to the fact that married women with children only entered the paid workforce in large numbers after the Second World War.

Using Statistics Canada's special tabulations on usual work hours prepared for GPI Atlantic from the Labour Force Survey (work-estimate data), between 1976 and 2002 the average employed married father in Nova Scotia worked slightly longer than his non-parent counterpart. For example, in 2002, employed married fathers worked 42.7 hours per week while their non-parent counterparts worked 41.7 hours. Employed married mothers, on the other hand, tend to work fewer hours for pay than their non-parent counterparts, though they put in considerably longer unpaid household work hours. In Canada overall the general pattern is similar, though married men and women both with and without children in Nova Scotia tend to work slightly longer paid work hours than their counterparts in the rest of Canada. Nova Scotian fathers are putting in about two hours per week less in paid work time than 25 years ago, while mothers are working about an hour longer.

The Labour Force Survey data on usual hours worked show that in 2002, couples between 25 and 44 years of age without children in Canada worked a combined week of 77.2 hours for pay.

²³ Statistics Canada. 2002b. *Income in Canada, 2000*. Catalogue no. 75-202-X1E. Table 9.2. Minister of Industry. Ottawa. p. 125.

²⁴ Female unpaid work (1900): From historical studies cited by Schor, Juliet B. 1991. *The Overworked American: The Unexpected Decline of Leisure*. Harper Collins. New York. p. 200, footnotes 5 and 6; Female paid work (1900): Historical data confirm that married women did not enter the paid workforce in any significant numbers until after WWII; Female paid and unpaid work (2000): Based on Statistics Canada's General Social Survey (Time use data). Fast, Janet, Judith Frederick, Nancy Zukewich and Sandra Franke. 2001. "The Time of Our Lives." In *Canadian Social Trends*. Statistics Canada. Catalogue no. 11-008. p. 22. The figures would be higher for full-time employed single mothers – approximately 44 hours paid work/week and 30.8 hours unpaid work/week; Male paid work (1900): Benimadhu, Prem. 1987. *Hours of Work: Trends and Attitudes in Canada*. Conference Board of Canada. Ottawa. p. viii; Male paid and unpaid work (2000): Based on Statistics Canada's General Social Survey (Time use data). Fast et al. 2001. "The Time of Our Lives." In *Canadian Social Trends*. Statistics Canada. Catalogue no. 11-008. p. 22.

In Nova Scotia in that same year they worked 78.2 hours. By contrast, couples in that age group with children worked 75.1 hours per week in Canada overall and 76.1 hours in Nova Scotia.

By contrast, when we consider only the full-time employed parents between 25 and 44 years of age we find that their combined usual paid workweek increases to 81.2 hours in Canada and 82.6 hours in Nova Scotia in 2002. Their non-parent full-time counterparts were employed 80.7 and 81.8 hours respectively.

On average, therefore, couples in Nova Scotia are working somewhat longer hours than the Canadian average. Generally, paid work hours for dual-earner couples without children increased up until 1996, while they remained relatively stable for those with children during those 20 years. Since 1996, combined usual paid work hours for both groups have steadily declined. Usual paid work hours for couples with children in 2002 were about two hours a week less than they had been in 1976. For those without children, hours returned to 1976 levels.

Time-use data collected from Statistic's Canada's 1998 General Social Survey (GSS) indicated that full-time dual earner parents in Canada work a total of 87.4 paid hours per week when both their workloads are combined – an increase of 2.0 hours per week of paid work since 1992. The discrepancy between the GSS time-use data and the Labour Force Survey data is partly due to the fact that the former includes work-related activities, like commuting time, work-related travel, and paid work breaks. When unpaid work hours are added, the total rises to 144.6 combined paid and unpaid hours weekly.

Lone parent mothers, aged 25-44, who were employed full-time, did slightly more combined paid and unpaid work (75 hours a week) than their married counterparts, and they had the least amount of free time of any demographic group.

The equation of increased work hours with higher levels of affluence may be misleading. Evidence from the U.S. shows that most of those working longer hours in that country are just trying to maintain their existing standard of living on dwindling real incomes, and that smaller relative increases in real earnings have been purchased with relatively larger increases in hours worked.

In Canada between 1980 and 2001 the average disposable income of dual-earner parents increased by 14%. In Nova Scotia it increased by 8.1%.²⁵

During roughly this same period (1981-2000), the average actual combined annual paid work hours of dual-earner parents with children increased by 6% in Canada and by 4% in Nova Scotia. When we include 2001 data, the increase is 3.4% and 3.1% respectively.²⁶ In other words, in 2000, Canadian parents were actually working 206 more hours per year for pay, equivalent to 26 more work days, than they did in 1981 (based on an 8-hour work day). Nova Scotian parents

²⁵ Statistics Canada. *Average After-tax Income in 2001 Constant dollars, Canada, 1980-2001*. CANSIM II Table 202-0603.

²⁶ Actual work hours data were used here because vacation time must be considered when hours are annualized. Actual hours also capture paid and unpaid overtime.

were working 141 additional hours, or 18 more 8-hour days, for pay in 2000 than they did in 1981.²⁷

Between 1981 and 2000, therefore, Canadian working parents increased their work effort by the equivalent of just over five weeks a year and Nova Scotian parents by 3.5 weeks a year, based on a 40-hour workweek. When we include 2001 data, Canadian couples with children worked the equivalent of 15 more work days per year in 2001 than they did in 1981, and their Nova Scotian counterparts worked an average of 14 work days more per year (equal to about three additional 40-hour workweeks). As the data indicate, average work hours declined slightly for this segment of the population between 2000 and 2001.

When the earnings and hours data are combined, it is clear that a substantial portion of the increased earnings were purchased with additional hours. As noted, working parents in Canada had, on average, 14% more disposable income in 2001 than they did in 1980. In Nova Scotia, average disposable income rose by 8.1% in the same time period. Simultaneously, work hours increased by 3.4% in Canada and by 3.1% in Nova Scotia. Therefore, based on these data, it would appear that 24% of the increase in disposable income in Canada and nearly 40% of the increase in Nova Scotia were bought with increased work effort.

Data also indicate that the average market income of prime aged working parents in Canada increased by 22% between 1981 and 2000.²⁸ In Nova Scotia during this same time period market income increased by 20%.²⁹ Based on these data, it would appear that nearly 30% of the increase in market income in Canada and 20% of the increase in Nova Scotia were bought with increased work effort.

From a household perspective, the increases in both disposable (after-tax) and market income purchased through increased work effort calculated here are substantial underestimates, because female labour force participation has risen sharply since the early 1980s. For most households, the shift from single-earner status to dual-earner status constitutes a significant "increased work effort" that is not captured here. In other words, the data above compare the hours of working parents in 2001 with the hours of parents who were already working in 1981. They do not account for additional labour force participants within a household.

When the increased work effort is assessed to account for changes in total paid *household* work hours, the most substantial increases in work effort are seen in households with very young children. The employment rate of women with their youngest child aged 6-15 rose from 46.5% in 1976 to 75.3% in 2001. The employment rate of women with their youngest child aged 3-5 rose from 36.9% to 67.4% during this period. For women with infants (0-2), the employment rate

²⁷ Statistics Canada. 2003a. *Labour Force Survey, 1976-2002*. Unpublished data. Custom tabulation prepared by Statistics Canada for GPI Atlantic. Table V0603_16. Minister of Industry. Ottawa.

²⁸ In 1981 in Canada the combined average market income of two-parent, dual-earner families with children was \$63,308. In 2000 it was \$76,960, an increase of 22%. Both are in \$2001 constant dollars. Statistics Canada. *Average Market Income by Economic Family Types, Canada, 1981-2000*. Available from <http://www.statcan.ca/english/Pgdb/famil22d.htm>. Accessed June 5, 2003.

²⁹ In 1981 in Nova Scotia the combined average market income of two-parent, dual-earner families with children was \$53,260. In 2000 it was \$63,801, an increase of 20%. Statistics Canada. *Average Market Income by Selected Economic Family Types, Nova Scotia, 1981-2000*. CANSIM II. Table 202-0202.

rose from 27.7% in 1976 to 62% in 2001.³⁰ These shifts to dual-earner status constitute substantial increased work effort on the part of households that are not captured in the earnings to hours ratios described above.

Overtime

In 2001, an average of 1.2 million Canadians were out of work. At the same time, 2.4 million Canadians, or about 20% of the workforce, clocked about 21 million hours of overtime every week. In Nova Scotia in that same year, 72,200 employees (about 21% of the workforce) worked about 643,000 hours of overtime each week, while 45,600 people were jobless.^{31 32} In other words, if all overtime hours were converted to new full-time jobs, admittedly not an easy task, there would be half a million fewer unemployed Canadians and 16,000 fewer unemployed Nova Scotians.

The incidence of overtime in both Canada and Nova Scotia increased by 15% between 1997 and 2001. Among those who work overtime in this province, nearly 38% get paid for it, while a striking 59% don't. The remaining 3% of overtime workers put in a combination of both paid and unpaid overtime hours. In other words, in a typical week in 2001, roughly 373,000 overtime hours were worked free of charge in Nova Scotia.³³ In Nova Scotia, the incidence of overtime rose from 18.6% of all employees in 1997 to 21.4% in 2001.

- In 2001, 24% of all male employees in Nova Scotia worked overtime and 18.5% of all female employees worked overtime. In total, there were therefore considerably more male employees working overtime than female employees.
- In 2001, Nova Scotian women working overtime were less likely than men to be compensated for their extra labour. Fifty-two per cent of all male employees working overtime in Nova Scotia were working unpaid overtime while nearly 68% of all female employees working overtime did so for free. Overall, there were almost the same number of Nova Scotian men and women working unpaid overtime (21,900 men vs. 20,500 women).
- The propensity to work overtime was highest in the 45-and-over age group at 23.6%. Among 25-44 year old employees, 18.9% worked overtime; and among 15-24 year old employees, only 8.6% worked overtime.
- Among older workers, more women worked overtime without pay than men.

³⁰ Statistics Canada. 2002c. *Women in Canada: Work Chapter Updates*. Catalogue no. 89F0133-XIE. Minister of Industry. Ottawa. pp. 6 and 12, Table 5.

³¹ The unemployment figures cited here are the official figures. They do not include discouraged workers or the underemployed. See Chapter 5 on "The Collapse of Work" for a discussion about the "hidden unemployed," and for information on Statistics Canada's more comprehensive "supplementary unemployment" statistics.

³² Statistics Canada's *Labour Force Survey (LFS)* began collecting information on paid and unpaid overtime in January 1997. These LFS data will be supplemented by other sources where possible.

³³ This is based on 42,400 workers clocking unpaid overtime hours in Nova Scotia and averaging 8.8 hours of unpaid overtime per week. Data are from Statistics Canada's *Labour Force Historical Review 2001*. Paid overtime is defined by Statistics Canada as overtime hours for which the employee was paid or otherwise compensated (time off in lieu). Unpaid overtime is overtime hours not paid for or otherwise compensated. In addition, 2,400 employees in Nova Scotia – or approximately 3% of the total number of employees working overtime – worked *both* paid and unpaid overtime hours in 2001.

For Nova Scotian men, the trade, educational services, and public administration sectors accounted for the highest rates of unpaid overtime. For Nova Scotian women, the educational services, health care and social assistance accounted for the highest rates of unpaid overtime.

Moonlighting

In Canada, between 1976 and 1996 the number of people holding down more than one job tripled. When increases in total population and employment are accounted for, one in 20 workers held a second job or self-employed position in 1996, compared with just one in 50 workers two decades earlier. In Nova Scotia the percentage of workers who are moonlighting more than doubled from 2.1% in 1976 to 4.4% in 2001. Since 1996, when nearly 5% of all employed were moonlighting, there has been a modest decline.³⁴

The composition of the moonlighting work force has changed over the last 25 years. The fastest growing group of moonlighters has been women aged 25-54 years. In 1976 moonlighters were predominantly adult men (outnumbering women three to one) with regular full-time jobs. By the 1990s, many more women had joined the ranks of multiple job holders, so that, by 1996, 51% of moonlighters were adult women, of whom the vast majority were part-timers in the service sector.³⁵

In Canada in 2001, 53.4% of employed moonlighters were women, compared with 46.5% who were men. Similarly, in Nova Scotia, 18,800 workers were moonlighting in 2001, the majority of them women (54.2% women vs. 45.7% men), reversing the earlier gender gap. In 1987, 60.5% of Nova Scotian moonlighters were men, and 39.5% were women. In 2001 in Nova Scotia, 5.1% of employed women overall were moonlighting, up from 3.3% in 1987. In 2001 3.9% of employed Nova Scotian men were holding down more than one job, up only marginally from 3.8% in 1987, and down from 4.6% in 1996.³⁶

In 2001 the majority (52%) of moonlighters in Nova Scotia were between the ages of 25-44, with the remainder split between younger and older workers.

Holding more than one job usually means longer work hours, though in some cases, especially for youth, two or more short-hours jobs may often only add up to one full-time job. On average, Canadian moonlighters usually worked 46.2 hours a week in 1996.³⁷ In Nova Scotia more than 65% of moonlighters worked more than 41 hours per week in 2001. More than 40% worked 50 or more hours per week. In Canada as a whole, 64% of moonlighters worked more than 41 hours per week, and 41% worked more than 50 hours per week.

Not surprisingly, moonlighting and high levels of unemployment don't mix. According to Statistics Canada: "In provinces where even one job can be hard to find, it should not be

³⁴ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

³⁵ Statistics Canada. 1997. *Labour Force Update: Hours of Work*. Vol. 1, no. 2. Catalogue no. 71-005-XPB. Minister of Industry. Ottawa. pp. 32-34.

³⁶ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

³⁷ Statistics Canada, 1997, op. cit., pp. 32-34.

surprising that second jobs are also scarce."³⁸ In comparison to other provinces, therefore, moonlighting rates in Nova Scotia (and in Atlantic Canada in general) are below the national average, since unemployment rates in this region are higher than in other provinces. Statistics Canada's 1995 Survey of Work Arrangements asked moonlighters to indicate the main reasons why they have more than one job, and found that the majority (57%) of paid employees and 46% of self-employed workers do so for economic reasons.³⁹

Self-employment

In 1997 nearly 2.5 million Canadians reported working in their own businesses, more than double the number of self-employed 20 years earlier. In fact, 77% of all jobs created in the first eight years of the 1990s were created in the self-employment sector. This growth in self-employment is "unprecedented," since past job creation has typically and overwhelmingly been in the paid employment sector.⁴⁰

Self-employment as a percentage of total employment has increased in Canada and Nova Scotia over the last 25 years, accelerating in the early 1990s, reaching a peak in 1996, and declining somewhat since then. However, current self-employment rates are still much higher than they were 25 years earlier. About 15% of working people in Nova Scotia were self-employed in 1996, compared with 11% in 1976. By 2001 the rates had dropped to roughly 13%, still above 1976 levels. In Canada, self-employment accounted for 16.2% of those working for pay in 1997 and 15.3% in 2001, up from just over 12% in 1976.⁴¹

In Canada and in Nova Scotia, the self-employed are more likely to be men. The male share of self-employment has declined somewhat in Nova Scotia since 1976, when nearly 73% of self-employed were men. By 2001, 64% of self-employed workers were men. During the same time period the female share of self-employment has increased correspondingly. In 2001, 36% of self-employed workers were women, up from 27% in 1976.⁴²

The growing prominence of self-employment in the labour market has contributed to the polarization of work hours in Canada, mostly due to the propensity of the self-employed to put in long workweeks, but also, interestingly, through an increased incidence of short hours among the self-employed in particular sectors.

In 2001, the self-employed in Canada were seven times more likely to work 50 hours or more per week than paid employees (35% vs. 5%). The self-employed in Canada were about four times more likely to work 41 or more hours per week than paid employees (43% vs. 11%). In Nova

³⁸ Idem.

³⁹ "Economic reasons" include meeting regular household expenses, paying off debts, saving for the future, and "other: economic."

⁴⁰ Of the 775,000 total net job growth between 1990 and 1998, nearly 600,000 jobs were in the self-employment sector. From Lin, Zhengxi, Garnett Picot and Janice Yates. 1999. *The Entry and Exit Dynamics of Self-Employment in Canada*. Research Paper Series. Analytical Studies Branch. Statistics Canada. No. 134. Minister of Industry. Ottawa. p. 1.

⁴¹ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

⁴² Idem.

Scotia the contrast is similar, but not quite as dramatic. In 2001, self-employed Nova Scotians were about 4.5 times more likely than paid employees to work over 50 hours a week, and nearly three times more likely to work 41 or more hours a week.⁴³ These statistics reflect “usual” hours worked, and thus exclude consideration of overtime, vacations, and sick days.

In 2001, 40% of self-employed Nova Scotians worked 41 or more hours a week, and 32% worked 50 or more hours a week.⁴⁴

Voluntary and Involuntary Part-time Work

Statistics dating back to the 1950s indicate that the rate of part-time work in Canada more than quadrupled over a 48-year period from 3.8% in 1953 to 18% in 2001, reaching a peak of nearly 20% in 1993. In Nova Scotia, part-time employment increased from 12.5% of all employees in 1976 to 17.8% in 2001, after dropping off from a peak of more than 20% in 1996.

While youth (15-24 years old) have always constituted a large proportion of part-timers in Nova Scotia, their predominance has declined over the last 25 years from 46% of part-timers in 1976 to 36% in 2001. Instead, more and more adults between 35-54 years of age now work part-time, increasing from 25% of all part-timers in 1976 to 35% in 2001.

Women make up a much larger share of part-timers than men (70% vs. 30%). Many women work part-time because of family responsibilities, and some have reported to Statistics Canada that they would choose full-time work if flexible hours or better childcare were available.⁴⁵ In Nova Scotia, one in four working women were employed part-time in 1976, compared with one in 20 employed men. By 1996, nearly one in three working women worked part-time compared to one in 10 men. In 2001, 26.5% of employed women and 9.9% of employed men worked part-time in Nova Scotia. These figures are consistent with the Canadian averages.⁴⁶

Part-time work in and of itself is not necessarily problematic, especially when chosen voluntarily and when accompanied by decent hourly pay and job security. However, many Canadians who do work part-time would rather be working full-time, but are unable to find full-time work. These same individuals often experience economic hardship because they have insufficient work hours to make ends meet, and because part-time jobs are more likely to pay poorly, carry no benefits, and provide limited job security. Involuntary part-time work is therefore considered a key indicator of underemployment.⁴⁷ Indeed, Statistics Canada counts the difference between standard full-time hours and the number of hours actually worked by involuntary part-timers as a

⁴³ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa. Here we are comparing the usual work hours of the self-employed specifically with usual work hours of all employees, including those who work part-time and full-time. In other places in this report long hours are calculated for full-time employed persons only, which include the self-employed.

⁴⁴ Idem.

⁴⁵ Advisory Group on Working Time and the Distribution of Work, 1994, op. cit., p. 31.

⁴⁶ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

⁴⁷ Statistics Canada. 1997. *Labour Force Update. Hours of Work*. Vol. 1 no. 2. Catalogue no. 71-005-XPB. Minister of Industry. Ottawa. p. 17.

measure of underemployment, and it adds these wanted but unworked hours (translated into full-time job equivalents) to its “supplementary” unemployment statistics.

Statistics Canada has been collecting data on reasons for part-time work since 1976. In 2001, 31% of all part-timers were working part-time involuntarily in Nova Scotia. In Canada the figure was closer to 26%.⁴⁸

In Nova Scotia, involuntary part-time employment is growing much faster than the voluntary types, and is driving the overall upward trend in part-time work. The proportion of involuntary part-timers in Nova Scotia more than tripled between 1976 and 1995, from 13.7% of all part-timers to a striking 43%. After the Labour Force Survey (LFS) questionnaire was revised in 1997, and new definitions of involuntary part-time work were adopted, the figure declined to 29% in 1997 and then increased to 31% in 2001.⁴⁹ In Canada, the rate of involuntary part-time work more than tripled from 10.6% in 1976 to 31.5% in the mid-1990s, and then fell to 26% in 2001. Some of that decline may also be attributable to the new LFS definitions.

According to Statistics Canada and other sources, underemployment is closely related to unemployment, and the rates tend to move in tandem, indicating that many people are “forced into part-time work when economic conditions worsen.”⁵⁰ It is not surprising therefore that underemployment rates are higher in the four Atlantic provinces than elsewhere in Canada. In 1993, for example, the underemployment rate in Atlantic Canada was 51%, the highest in the country. With the exception of two years between 1980 and 1994, this region has had the highest rate of involuntary part-time work in Canada every year.⁵¹ By 2001, with the new definition of involuntary part-time work in effect, the involuntary part-time rate in the Atlantic provinces was 35%, still nearly 10 percentage points higher than the Canadian average.

The incidence of part-time work is nowhere higher than in the Netherlands, where part-time jobs make up 33% of all employment, and where 58% of employed women worked part-time in 2000.⁵² However only 6% of these part-timers say they would prefer full-time work (compared to 26% in Canada and 31% in Nova Scotia); so part-time work in that country is genuinely

⁴⁸ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

⁴⁹ Revisions were made to the definition of involuntary part-time work and to the LFS questionnaire in 1997, creating a break in the series. As a result, data from 1997-2001 are not fully comparable to earlier data, but comparisons can be made within each series. Before 1997 respondents who usually worked less than 30 hours/week in total in *all* jobs were asked their main reason for working part-time, and they were considered underemployed (or “involuntary” part-timers) if they worked part-time because they could not find a full-time job. In 1997, the LFS questionnaire was redesigned, and respondents who worked part-time in their *main* job were first asked whether they wanted to work more or less than 30 hours a week at a single job or business. If they wanted to work full-time, and did not do so because of “business conditions” or because they “could not find full-time work,” rather than for reasons of illness, personal or family responsibilities, or going to school, they were defined as underemployed or involuntary part-time workers. Statistics Canada, 1997, op. cit., p. 17; Statistics Canada. *Guide to the Labour Force Survey*. Catalogue no. 71-543-GIE. pp. 12-13; Available from <http://www.statcan.ca/english/freepub/71-543-GIE/0000071-543-GIE.pdf>.

⁵⁰ Statistics Canada, 1997, op. cit., p. 17. The connection between underemployment and difficult economic times is also made by Noreau, Nathalie. 1994. “Involuntary Part-timers.” *Perspectives*. Statistics Canada. Catalogue no. 75-001E. Minister of Industry. Ottawa. p. 25.

⁵¹ Noreau, 1994, op. cit., p. 29.

⁵² OECD. 2002. *OECD Employment Outlook*. OECD. Paris. pp. 64-70.

voluntary. In addition, while part-time work in most countries tends to be found in lower-paid occupations offering little opportunity for career advancement, the situation in the Netherlands is very different. Part-time work in the Netherlands tends to be "good" work, with equal hourly pay, pro-rated benefits, and equal opportunities for seniority, promotion, training, and career advancement.⁵³ In fact, the Netherlands has laws that make discrimination against part-timers in terms of promotion, pay, and fringe benefits illegal.⁵⁴

For example, in Nova Scotia in 2001, full-time employees were paid on average nearly 50% more per hour than their part-time counterparts. The average hourly wage rate of a full-time employee in 2001 was \$15.34 or \$614.80 a week. The average hourly wage rate for a part-time employee was \$10.13, or \$180.56 a week. In Canada in 2001 full-time employees were paid on average 49% more per hour than their part-time counterparts.⁵⁵

A Statistics Canada study also found that in 2000, the jobs most likely to offer non-wage benefits, including pension plans, extended medical and dental plans, and life/disability insurance, are high-wage, unionized, full-time, and permanent. According to Statistics Canada: "Workers with higher education levels and more work experience were more likely to be in these high-wage, high-benefit jobs." The study also found that certain groups of employees were "doubly disadvantaged," suffering both from less access to non-wage benefits and from lower hourly wages. "These groups include employees with less than high school education, and those in part-time, temporary or non-unionized jobs."⁵⁶

In sum, the high rates of involuntary part-time work in Canada and in the Atlantic Provinces are attributable in large part to the relatively poor conditions of part-time work – lower wages, fewer benefits, and fewer opportunities for career advancement. Improving the quality of part-time work on all these fronts, as in the Netherlands, can potentially encourage shorter work hours, reduce the high rates of unemployment and underemployment in Atlantic Canada, and help improve work-life-family balance.

Contingent or Temporary Work

Nova Scotians are no strangers to temporary work that is seasonal. The very nature of work in the primary sector – fishing, logging, and farming – makes many jobs in these areas that have traditionally provided substantial employment in the province, highly dependent on the seasons. More recently, however, the seasons have had little to do with the increase in temporary or insecure work.

⁵³ Colman, Ronald. 1999a. *If the Economy is Up, Why are Canadians Down? Impact of Job Casualization on Canadian Workers*. Genuine Progress Index Atlantic. Halifax. p. 3.

⁵⁴ Hayden, Anders. 1998. *A Shorter Workweek? An Answer for the Overworked and Unemployed*. Available from file://A:\swt2\anders shorter workwk.htm. Accessed July 12, 1999.

⁵⁵ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

⁵⁶ Statistics Canada. "Non-wage Job Benefits, 2000." *The Daily*. May 21, 2003. Available from <http://www.statcan.ca/Daily/English/030521/d030521c.htm>. Accessed December 8, 2003. Citing Marshall, Katherine. 2003. "Benefits of the Job." *Perspectives on Labour and Income*. Catalogue no. 75-001-XPE. Vol. 15, no. 2. Statistics Canada. Minister of Industry. Ottawa.

Data on temporary employment in Canada have only been collected by Statistics Canada since 1997. Therefore it is not possible to show a long-term trend.⁵⁷ However, in just four years, from 1997 to 2001, seasonal, term or contract, and casual workers have increased in Canada from 11.4% of all workers to 12.8%. One Statistics Canada study estimated that in 1989, only 8% of workers were in jobs with a specified end date.⁵⁸ The incidence of temporary work in Nova Scotia exceeds the Canadian average, with 18% of Nova Scotian workers employed on a temporary basis in 2001, up from 16.7% just four years earlier.

The Advisory Group on Working Time and the Distribution of Work noted in 1994 that temporary workers, like many part-timers, do not generally receive benefits, and that their incomes, like their hours of work, are insecure.⁵⁹

In 2001 in Nova Scotia, the most prevalent form of temporary work was term or contract work, accounting for 37% of temporary work in the province. Seasonal work and casual work accounted for 32% and 31% of temporary work respectively. Roughly the same proportion of all male employees and female employees had temporary jobs in 2001 at about 18% each.⁶⁰

According to the Organization for Economic Co-operation and Development (OECD), temporary work is becoming a "significant feature of the employment landscape" in most OECD countries. Among the OECD's main findings:

- Temporary workers tend to be young, less educated, and low skilled.
- They are rarely covered by collective bargaining agreements, and earn roughly 15% less per hour than permanent workers with similar educational levels and experience, after controlling for a range of individual and industrial characteristics.
- Young people are three times as likely as older workers to hold a temporary job, because these jobs often "serve as entry ports into the world of work."
- Temporary work is often insecure work and is less satisfying than secure work.
- Tasks associated with temporary work tend to be "monotonous" and schedules "inflexible."⁶¹

Shift work

⁵⁷ Andrew Heisz, of Statistics Canada, points out that the increase in temporary work could be due to a cyclical phenomenon, rather than a long-term trend. Heisz, Andrew. Senior Research Economist, Business and Labour Market Analysis Division, Statistics Canada. Reviewer comments. Received October 23, 2003. GPI Atlantic acknowledges this possibility, but has been unable to test the hypothesis because data from earlier points in time were not available from Statistics Canada. As new Statistics Canada data become available in the coming years, it will be possible to assess whether or not current trends in temporary work are long-term.

⁵⁸ Statistics Canada study cited in Advisory Group on Working Time and the Distribution of Work, 1994, op. cit., p. 33.

⁵⁹ The Advisory Group on Working Time and the Distribution of Work, 1994, op. cit., pp. 32-33.

⁶⁰ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

⁶¹ OECD. 2002. *OECD Employment Outlook*. OECD. Paris. pp. 130-137; International Labour Organization. 2003. *Global Employment Trends*. Geneva. p.105.

Unorthodox hours are one characteristic of the new economy that has emerged in the last three decades. Our society has always required certain around-the-clock services such as police, fire, hospital services, etc. However, the growth and expansion of the service sector has also meant that hours of service for more and more businesses are offered while most of us sleep (e.g. 24-hour supermarkets). In addition, investments in expensive machinery often require the continuous use of that machinery, to ensure that the value is amortized and the considerable investment recouped in as short a time period as possible. In forestry for instance, expensive tree-felling equipment is often operated 24 hours a day simply so that owners can pay for the machines.⁶²

Approximately 30% of employed Canadians worked shift or non-standard hours in 2001. This figure has increased slightly over the last decade. Rates of shift work for women have remained relatively stable over the last decade, at 28%, while rates for men increased from 28% in 1991 to 31% in 2001.⁶³ Prior to 1990, few data exist on the incidence of non-standard hours among Canadian workers. However Statistics Canada says that historical evidence "points to a rise in the prevalence of shift work in both Canada and the United States throughout the 1970s and 1980s because of the growth of the service sector and dramatic increases in the proportion of students working during the school year."⁶⁴ In general, shift workers tend to be young, single, less-educated, and less affluent.

Despite its prevalence, working shifts is mostly not a choice but a requirement of the job. In fact, evidence now points to a substantial physical and emotional toll that shift work takes on workers, including higher risks of adverse health outcomes and family breakdown.

Unemployment

Except for the Great Depression, the proportion of Canadians without work in the 1980s and 1990s has never been higher in this century, with unemployment rates averaging 9.4% between 1980-89 and 9.8% between 1990-98. In the 1950s only 4.2% of Canadians were out of work, and in the 1960s, the average unemployment rate was just 5%.

Peak unemployment years were 1983 and 1993, when 11.9% and 11.4% of Canadians respectively were jobless. Since 1976, the unemployment rate in Nova Scotia has consistently exceeded the Canadian average. The 1980s saw average jobless rates of 11.8%, and in the 1990s the proportion out of work in Nova Scotia averaged 12%. Since 1996, unemployment rates have declined in both Canada and Nova Scotia, and in 2000 reached their lowest levels in 25 years. Currently the unemployment rate in Canada is 7.4%, and the unemployment rate in Nova Scotia is 9.4%.⁶⁵

⁶² For a detailed description of the economics of mechanized forest harvesting, please see Panno, Linda and Minga O'Brien. 2001. *The Forest Accounts. A Way Forward*. Volume 2. GPI Atlantic. Halifax.

⁶³ Shields, Margot. 2002. "Shift Work and Health." *Health Reports*. Statistics Canada. Catalogue no. 82-003. Minister of Industry. Ottawa. p. 28.

⁶⁴ Idem.

⁶⁵ Current rate for Canada from Statistics Canada. Rate for Nova Scotia from the Department of Finance.

Young people both in Canada and Nova Scotia are more likely to be unemployed than other age groups. In 2001, the unemployment rate for 15 to 24-year-old Canadians was 12.8%, and it was 17.7% for 15 to 24-year-old Nova Scotians. The unemployment rate for 20 to 24-year-old Canadians was 10.3%, and it was 15.6% for 20 to 24-year-old Nova Scotians. In all other age groups, Nova Scotia unemployment rates also exceeded the Canadian averages.

In Nova Scotia, where average unemployment rates have remained consistently higher than the national average, the provincial averages nevertheless conceal marked intra-provincial disparities, with some regions considerably worse off than others. Unemployment was least severe in the Halifax area in 2001 at 7.1% – below the Canadian average. But a short drive in this province does not only result in changes in weather – the official jobless rate also soars as one leaves the capital, reaching a staggering 17% in Cape Breton and 19.1% in the industrial Cape Breton heartland of Sydney. It should be noted that the official unemployment rates exclude discouraged workers who have given up looking for work. So the actual jobless rate in Cape Breton is larger than the official figures indicate.

Statistics Canada only began collecting data on labour force estimates by region in 1987. Those data indicate that the official unemployment rate in Cape Breton declined by two percentage points, from 19% in 1987 to 17% in 2001. There have also been improvements in the official unemployment rates on the North Shore and the Annapolis Valley, where 1987 levels were 14.8% and 11.4% respectively, falling to 11.4% and 7.8% in 2001. Halifax also saw a decline from 8.8% in 1987 to the 2001 level of 7.1%.⁶⁶

However, according to current estimation methods, the official unemployment rate actually falls when the unemployed stop looking for work! For instance, if the labour force consisted of 900 employed and 100 unemployed people, the unemployment rate would be 10%. But if the 100 unemployed people became discouraged with their job prospects and stopped looking for work, they would no longer be counted as members of the labour force and the total labour force would drop to 900. The number of officially unemployed would then be zero.⁶⁷ For example, in the U.S. recently, the unemployment rate fell to 6.2% from 6.4% because of the sharp rise in the number of "discouraged workers."⁶⁸ Discouraged workers – those who are out of work but have given up looking for work – are left out of the official numbers.

The official unemployment statistics also exclude the underemployed – those who cannot find sufficient hours to make ends meet and who are therefore working part-time because they cannot find full-time time work (involuntary part-timer workers). (The term “underemployment” also sometimes refers to those who are working beneath their skill level because they cannot find suitable work, but these underemployed are not included in Statistics Canada’s supplementary unemployment statistics). Official statistics also exclude many women who are at home with children and would like to have paid work but who cannot find a job with a flexible work schedule or who cannot afford or find suitable daycare. The official statistics also exclude

⁶⁶ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

⁶⁷ Yates, Michael, D. 1994. *Longer Hours, Fewer Jobs. Employment and Unemployment in the United States*. Monthly Review Press. New York. p. 62.

⁶⁸ Stinson, Marian. “U.S. Work Force Still Shrinking.” *The Globe and Mail*. August 2, 2003. Toronto. p. B1.

students who remain in school because they cannot find work, people on short-term job creation projects, the prematurely or forcibly retired, and those in prisons.

Statistics Canada therefore compiles “supplementary” unemployment statistics that include at least some of these “hidden unemployed” – discouraged workers and the underemployed portion of involuntary part-time work. The latter is assessed by calculating the difference between the hours actually worked and the full-time hours these employees are seeking, assessed as full-time job equivalents. For example, if someone is working 20 hours a week but wants to work 30, this person is counted as one-third of an unemployed person in the supplementary unemployment statistics. In 2001, once these two categories of “hidden” unemployed were added to the official numbers, the unemployment rate was three percentage points higher for Canada, and more than four percentage points higher for Nova Scotia.

Discouraged workers tend to be concentrated in areas of high unemployment. In 1989, about one-third of all discouraged workers in Canada resided in the four Atlantic provinces although the region accounted for only 7.6% of the country’s labour force in that year.⁶⁹ In 2001, the Atlantic provinces accounted for 36% of the country’s discouraged workers and 7.2% of the country’s total labour force.⁷⁰

In 2001, once some of the “hidden” unemployed are added in, the unemployment rate in Nova Scotia increases from 9.7% to 14%. Using the more comprehensive measure, nearly one in four youth (15 to 24-year-olds) in the province were out of work in that year. For older workers in the 25-44 and 45-and-over age groups, the unemployment rates increased by three and four percentage points respectively, when discouraged workers and underemployment estimates were added. For those over 55, once these hidden unemployed were included, the unemployment rate nearly doubled from 6.8% to 12%.

Statistics Canada data on the duration of unemployment indicates that on average, the unemployed were without work for longer periods in 2001 than they were 25 years earlier. In Canada the average number of weeks that an unemployed person was without work increased from 13.9 weeks in 1976 to 24 weeks in 1996, before falling again to 15.4 weeks in 2001. In 2001, unemployed Nova Scotians were without work for an average of 15.9 weeks, up from 13.9 weeks in 1976, and down from 22.1 weeks in 1996.

The OECD defines the long-term unemployed as those who have been continuously without work for at least one year.⁷¹ In Canada the proportion of the unemployed who were out of work for 52 weeks or more in 1976 was 3.8%. This proportion soared to 16.3% in 1996 and then dropped to 9% in 2001, but is still more than double the levels of 25 years earlier. In Nova Scotia the jobless have experienced a similar increase in long-term unemployment – up from 2% of the unemployed in 1976 to 8.6% in 2001, after peaking in 1996 at 14.5%.

⁶⁹ Akyeampong, Ernest B. 1989. “Discouraged Workers.” *Perspectives*. Statistics Canada. Minister of Industry. Ottawa. pp. 64-69; and by the same author: 1992. “Discouraged Workers – where have they gone?” *Perspectives*. Statistics Canada. Catalogue no. 75-001E. Minister of Industry. Ottawa. pp. 38-43.

⁷⁰ The proportion of the total labour force was calculated using data from Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

⁷¹ OECD, 2002, op. cit., pp. 191-194.

Studies have shown that long average spells of unemployment have greater economic and social costs than shorter spells. These costs include the depreciation of skills, and loss of confidence, which may lead to eventual withdrawal and "exclusion" from the labour force.⁷² Studies have also indicated that those who experience longer spells of unemployment are at greater risk of illness and premature death.

Technology and the Shift from Goods to Services

These trends outlined above are taking place against a larger backdrop where technologies have transformed the workplace and the place of the worker in it.

In an increasing number of jobs, the computer has become the brain or control centre – doing the thinking, organizing, planning, and even the monitoring of the system's performance.

According to Statistics Canada, in just over a decade, the proportion of workers using a computer at their main job has increased by more than 70%, from 33% of workers in 1989 to more than half (57%) of workers in 2000. Nearly 6.4 million Canadian workers (80% of those using computers in their main jobs) worked at their computers every day. Other industrialized countries are experiencing the same upward trend.⁷³

In the last century we have shifted from a society that produces goods to a society that produces services.⁷⁴ In the U.S., 90% of the workers produced goods in 1900. By 2000, 90% produced services.⁷⁵ Here in Canada more than 70% produced services by the mid-1990s.⁷⁶ The shift in the nature of work is so dramatic that some have likened it to a revolution, not unlike the industrial one that preceded it.

Forestry, fishing, and farming, for example, are primary goods sectors where the job losses due to automation have been significant. For example, according to Statistics Canada, there were 1.4 million farmers in Canada in 1939. By 1995 that number had dwindled to 431,000, a 70% drop.⁷⁷ During this same time period the total Canadian labour force more than tripled from 4.1 million in 1939 to 13.5 million in 1995. Farmers made up 35% of the Canadian labour force in 1926 but only 3% in 1995. This dramatic change in the structure of the labour force has been felt most

⁷² Williams, Colin C. and Jan Windebank. 1998. "The Unemployed and Paid Informal Sector in Europe's Cities and Regions." In *Unemployment and Social Exclusion. Landscapes of Labour Inequality*. Paul Lawless, Ron Martin, and Sally Hardy (eds). Jessica Kingsley Publishers. London. p. 38.

⁷³ Marshall, Katherine. 2001. "Working with Computers." *Perspectives*. Statistics Canada. Catalogue no. 75-001. Minister of Industry. Ottawa. pp. 9-11.

⁷⁴ The goods-producing sector refers to both the resource sector and the manufacturing sector. It includes agriculture, forestry, mining, fishing, oil and gas, utilities, construction, and manufacturing. Everything else falls under the broad category of the services-producing sector.

⁷⁵ In his book, *The Careless Society: Community and its Counterparts*, John McKnight writes that the very nature of human development has been defined by the work people do and the tools they use: hunters, gatherers, farmers, Bronze Age, Iron Age, Industrial Revolution. He says we have entered a new age – the Service Economy. McKnight, John. 1995. *Careless Society. Community and its Counterparts*. Basic Books. New York. p. 92.

⁷⁶ Osberb, Lars, Fred Wien, Jan Grude. 1995. *Vanishing Jobs. Canada's Changing Workplaces*. James Lorimer and Company. Toronto. p. 59.

⁷⁷ Statistics Canada. 2000b. *Human Activity and the Environment*. Catalogue no. 11-509-XPE. Minister of Industry. Ottawa. p. 96.

acutely in largely rural provinces like Nova Scotia where, in 1881, farm families comprised approximately 70% of the population. By 1986 they made up only 2%.⁷⁸

The increasing mechanization of agriculture, which includes extensive use of machines⁷⁹ and chemicals,⁸⁰ has meant fewer farmers. In 1921 in Canada, there were 22 agricultural workers for every tractor and combine. By 1996, there were more tractors and combines than there were agricultural workers. The question that needs to be asked is "are farmers better off today than they were, say, 30 years ago?" Not according to Statistics Canada. Net farm income, as a share of total farm cash receipts, dwindled from 28% in 1971 to only 6% in 1997 in part because of the increasing cost of farm inputs such as machinery, energy, fertilizers, and pesticides.⁸¹

The increased productivity that often results from technological changes may increase economic activity without creating better employment opportunities for many people. In fact, in both the United States and Canada, much of this new productivity is taking the form of "jobless economic growth" – where state-of-the-art technology is boosting production and profits while jobs are being shed.⁸²

Much of the new economic activity is generating jobs in the Third World, where an abundant supply of cheap labour keeps labour costs down and where working conditions are less subject to government regulation.^{83 84} To give just one example, the call centre industry is now shedding jobs in western countries and rapidly expanding its operations in India, where average call centre salaries are less than 10% of those in the U.K. or North America. In just three years, the number of Indian call centres has grown from 50 to 800. Indian author, Praful Bidwai remarks that the call centres are reducing educated, young Indian undergraduates to "cyber-coolies":

"They work extremely long hours badly paid, in extremely stressful conditions, and most have absolutely no opportunities for any kind of advancement in their careers.... It's a

⁷⁸ Osberg, Lars, Fred Wien, Jan Grude. 1995. *Vanishing Jobs. Canada's Changing Workplaces*. James Lorimer and Company. Toronto. p. vi.

⁷⁹ In 1921 there were two tractors and combines for every thousand hectares of cropland. By 1996 there were 24. Statistics Canada. 2000b. *Human Activity and the Environment*. Minister of Industry. Catalogue no. 11-509-XPE. p. 96.

⁸⁰ In 1931 approximately 254,000 tonnes of fertilizer were used in Canada. By 1996 about 17 times more fertilizer (4.3 million tones) was in use. In the Canadian west, sales of chemical fertilizers increased by 370% between 1967 and 1997. The use of chemical pesticides (including herbicides) also increased. Between 1970 and 1995 the area treated with herbicides increased 18-fold nationally. Idem.

⁸¹ Total cash receipts and operating expenses have both risen sharply. Ibid. p. 99. See also Scott, Jennifer. 2001. *The Nova Scotia GPI Soils and Agriculture Accounts: Volume 1 – The Economic Viability of Farming*. GPI Atlantic. Halifax.

⁸² Menzies, Heather. 1996. *Whose Brave New World? The Information Highway and the New Economy*. Between the Lines. Toronto. p. 143.

⁸³ Idem.

⁸⁴ According to the International Labour Organization, forced labour, slavery, and human trafficking are on the rise around the world. The report attributes the increase in these conditions to a number of factors, including "poverty, unemployment, civil disorder, political repression and gender and racial discrimination," creating an environment in which the vulnerable (mostly women and children) can be easily exploited. A combination of anti-poverty and labour market regulatory measures are needed to counter these trends, says the report. From ILO. 2001. *ILO Study Finds Forced Labour and Human Trafficking on the Rise. Migrants, Women and Children are Especially Vulnerable*. Press Release. May 25, 2001. Geneva.

dead end, it's a complete cul-de-sac. It's a perfect sweatshop scenario, except that you're working with computers and electronic equipment rather than looms."⁸⁵

The Global Assembly Line

Globalization and "free" trade have therefore resulted in a labour market where Canadian workers are now competing with cheap labour abroad. At the same time, technology continues to reduce available work and increase the capital intensity of production and growth. The growing polarization of hours described above in large part reflects the emergence of two separate work forces – a "core" work force of highly educated and highly skilled employees, working longer hours and putting in higher rates of unpaid overtime than ever, and a "contingent" work force of mostly unskilled, less educated workers that can be hired and laid off in response to market conditions and fluctuations in demand.⁸⁶ The latter are typically underrepresented by trade unions that often protect their own "core" members through contract clauses requiring layoffs according to seniority, thus reinforcing the increasing segmentation of the work force.⁸⁷

There is little disagreement that global pressures on employers to reduce labour costs in the interests of competitiveness contributed to growing job insecurity in the 1990s and exerted a downward pressure on real wages.

Global pressures have also resulted in the move toward "just-in-time" production, where the goal is to have low inventory (both in inputs and output) in order to boost the bottom line and produce quicker returns on investment. A trim inventory means that very little capital is invested in excess stock. This kind of production usually means more variety for consumers, greater capacity to respond quickly to shifts in consumer demand, and lower costs for firms. But there is a price to be paid as well for "just-in-time" production. According to the Advisory Group on Working Time and the Distribution of Work:

"The price of variety and speed in delivering services and products is variability and uncertainty in the labour market.... [I]nvariably demand fluctuates from one week to the next, even in a growing market, making the supplier want to hire people who will also work variable hours, on demand. This flexibility is often gained by reducing the number of core, permanent, full-time workers to a minimum, making the regular hours of work more variable, or increasing reliance on people whose hours of work can be easily changed: temporary workers, part-time workers without fixed hours, or so-called self-employed contractors such as homeworkers."^{88 89}

⁸⁵ BBC News. December 11, 2003. Available from http://news.bbc.co.uk/1/hi/world/south_asia/3292619.stm.

⁸⁶ Because of what are called "lean production techniques," the number of "core" workers, or those in permanent jobs, shrank during the 1990s. As jobs are shed and the company is made more "lean," the core workers often find themselves doing the jobs of the lost workers – working longer and more variable hours in the form of paid and unpaid overtime. Jackson, Andrew and David Robinson. 2000. *Falling Behind. The State of Working Canada, 2000*. Canadian Centre for Policy Alternatives. Ottawa. p. 50.

⁸⁷ Colman, Ronald. 1999a. *If the Economy is Up, Why are Canadians Down? Impact of Job Casualization on Canadian Workers*. GPI Atlantic. Halifax. p. 3.

⁸⁸ Advisory Group on Working Time and the Distribution of Work, 1994, op. cit., p. 29.

⁸⁹ A homemaker is someone who works from home and is paid by the piece. These workers are usually isolated and unorganized (non-unionized), poorly paid, and without benefits. This type of work has been very widespread among immigrants working in the garment industry. It is also found in insurance, electronics, and even automobile

The Advisory Group concluded that as a result of the structural changes taking place in Canada and elsewhere, it is "quite possible, and even likely, that the non-standard job of today will become the standard job of tomorrow."

Globalization has contributed markedly to the new forms of contingent and precarious work described above, and for many has created greater insecurity rather than the opportunity and affluence promised by many free trade advocates. On balance, both labour and government appear to have lost power since the free trade agreements. According to Pierre Pettigrew:

*"Globalization is an invisible, anonymous process, driven by abstract, nonhuman forces and factors. As it bypasses the authority of states, reducing their power, it sets up the marketplace as, in effect, the new god that we must worship, replacing the nation-state. The trouble is, this new god, though it may be more efficient, is incapable of taking a long-run view and can think only in material terms. The state, for all its shortcomings, is made up of people – people whose life experience may give them a long-term perspective and whose children make them likely to have a broad-ranging concern for the future. Furthermore, because the state is run by people, if we don't like what they're doing to us, we can eventually change them. Sooner or later, the state must respond to the demands of the people living in it. However, if we don't like what the market does, we can't repeal its laws. If we storm the bunker of globalization, we won't find a madman there or a clique of conspirators – just an empty space."*⁹⁰

With the growth of insecure, casual, marginal service-sector jobs, and with technology rendering many jobs redundant, employees are increasingly powerless to resist demands for unpaid overtime and other infringements of what were once considered employee "rights." The trends briefly outlined above indicate a dramatic change in the nature of work, and in employer-employee relationships. Hours of work have become more polarized and less predictable, widening the gap between rich and poor, and between a well-paid, highly educated, core workforce on the one hand, and a large mass of displaced blue-collar workers and low-paid contingent workers with few rights and benefits on the other.

2. THE COSTS OF OVERWORK AND UNDERWORK

"Many of the employed are working longer hours, resulting in high levels of stress, poorer health, and a lack of time for the things that make life worth living. Many young people are losing hope of ever finding decent jobs. The costs of unemployment – such as unemployment benefits, social assistance, and health-related expenses – drain the public treasury. Economic insecurity provides fodder for a politics of intolerance, in which immigrants, minorities, and the poor become scapegoats for society's failures."

assembly. For instance, General Motors farms out subassembly work, with one report describing rural workers in the Midwest piecing together suspension components at their kitchen tables. From Yates, Michael. 1994. *Longer Hours, Fewer Jobs. Employment and Unemployment in the United States*. Monthly Review Press. New York. p. 48.

⁹⁰ Pierre Pettigrew, then Canadian Minister for International Cooperation, addressing conference on African Development in September, 1996. Cited in Cayley, David. 1998. *The Expanding Prison. The Crisis of Crime and Punishment and the Search for Alternatives*. Anansi Press. Toronto. p. 77.

Technological advance, which once promised to bring on an "Age of Leisure," instead seems to be depositing a downsized and devastated scrap heap of humanity in its wake."
– Anders Hayden⁹¹

In our conventional economic accounts, the costs associated with many of the trends discussed above are either invisible or are actually counted as contributions to economic prosperity and wellbeing. The longer the work hours, and the more we spend on health care, crime, and family breakdown – all of which are highly correlated with unemployment – the more the economy grows. This growth is then mistakenly taken as a sign of prosperity and progress.

The Genuine Progress Index (GPI) recognizes that the unequal distribution of work hours, growing inequality, and unemployment carry economic costs that must be explicitly measured and made visible to policy makers if they are to have the full range of information they need to make decisions.

This report examines costs associated with the trends in work hours described in Part 1 – costs that are currently invisible in two ways in standard accounting mechanisms:

- Health care costs, spending on prisons and other justice costs, and spending related to the breakdown of families (divorce, for instance) are currently counted as direct contributions to the GDP.
- Production losses due to unemployment, underemployment, or fatigue and errors resulting from excessively long work hours represent potential lost production that depresses the GDP, but these costs are not made explicit.⁹² Because these production losses do not register anywhere in our current measures of progress, our conventional measures can provide no estimate of the degree to which these losses limit our economic potential.

In the following section we will summarize some of the economic and social costs associated with unemployment, underemployment, and the growing polarization (unequal distribution) of work hours in the labour market, and with the growing income and wealth inequality associated with those trends. We will also discuss some of the environmental costs associated with long and short work hours.

⁹¹ Hayden, Anders. 1999. *Sharing the Work, Sparing the Planet. Work time, consumption and ecology*. Between the Lines. Toronto. pp. 6-7.

⁹² For example, it has been estimated that work fatigue produces accidents, errors, and productivity losses worth \$100 billion annually in the U.S. alone. Some of the world's worst disasters – including the Exxon Valdez oil spill, the Chernobyl nuclear catastrophe (estimated cost \$300 billion), the Three-Mile Island nuclear accident, and the deadly Union Carbide chemical leak in Bhopal, India – have been attributed to work fatigue (all occurring during the night shift), as have more than 50% of trucking accidents. Studies point to an estimated 25% decline in sleep time, a 15% increase in clinical insomnia, and a 2-8 fold increase in ulcers and related gastrointestinal problems – all related at least in part to overwork and work stress. Shift workers have a 60% higher rate of divorce than workers putting in regular hours. Available from numerous sources including CNN. *Lack of Sleep America's top health problem, doctors say*. Available from <http://www.cnn.com/HEALTH/9703/17/nfm/sleep.deprivation/>; Canada Safety Council. *Fatigue*. Available from <http://www.safety-council.org/info/OSH/fatigue.htm>.

Where data are available, quantitative measures have been used to estimate the potential dollar value of some of these costs. However, there are many instances where these kinds of quantitative data are not available, and where monetary estimates are not possible, especially in assigning value to services not traded in the market economy. In these cases, qualitative measures have been used, and the benefits and costs of the trends noted in Part 1 have been described in accordance with the available evidence rather than quantified in dollar terms.

For details on the methodologies used and how the dollar estimates were derived, please refer to Part 2 of the report.

Costs of Stress associated with Long Work Hours

Excessively long work hours are one significant contributing factor to work stress, but by no means the only one. Studies have found that long work hours usually exacerbate stress when *combined* with lack of control, repetitive routine, lack of support, and other negative work conditions. While existing evidence does not allow us to separate out the stress-induced costs of long work hours from other forms of work stress, the following cost estimates are essential to consider, because they reveal that work stress is very costly and because the evidence indicates that long hours and work overload contribute substantially to this work stress. Therefore, long work hours should at least be seen as carrying hidden potential costs, rather than being uncritically assessed as positive contributions to the economy, as GDP-based measures of progress and conventional accounting mechanisms implicitly assume.

Excessive working hours may result in a number of health effects including: ⁹³

- increased risk of heart disease
- sleep difficulties
- increased tiredness
- sexual disorders
- gastric disturbances
- headaches/migraine
- backaches
- dizziness
- weight loss or weight gain
- increased incidence of accidents
- apathy
- depression
- irritability, intolerance, boredom, cynicism
- burnout

However, because of the complexity of the issues, the interaction of a number of factors, and the difficulty of confirming direct one-way causal relationships, it is very challenging to estimate with any degree of accuracy 1) the specific health costs resulting from stress that is directly

⁹³ London Hazards Centre. 1994. *Hard Labour. Stress, Ill-health and Hazardous Employment Practices*. London Hazards Centre Trust Ltd. London. p. 37.

attributable to long work hours and 2) the lost productivity associated with stress-related absenteeism that may be specifically related to working too many hours.

However, based on cost estimates cited in the literature, we have attempted to quantify the cost of absenteeism due to workplace stress, and then applied these estimates to Statistics Canada's 1994 General Social Survey (GSS) finding that 32.8% of workers reported stress in their work environment from too many demands or hours. We have extrapolated from these sources to estimate that the absenteeism costs specifically attributable to long work hours in Nova Scotia were nearly \$70 million in 2001. It should be noted that the methodology used to estimate these absenteeism costs was based only on wages, whereas actual economic losses based on GDP or output per worker, would be considerably higher.

Long Work Hours and the Family

Workplace stress caused by long work hours also takes its toll on family life.

In an important Health Canada study on the "work-life" conflict, the authors found that the 1990s were a "turbulent" period for most families, which found themselves struggling for some job security. The study found that:

- Throughout the 1990s a greater percentage of Canadian workers assumed more responsibilities (i.e. the number of working women, dual-earner and single-parent families, sandwich employees,⁹⁴ and employees with responsibilities for elder care increased over the decade).
- Labour market changes and technological changes increased job insecurity, elevated work demands, and blurred the boundary between work time and family time."⁹⁵

The study also found that work-life conflict is resulting in:

- More stress – now twice as prevalent as it was 10 years ago.
- Increased absenteeism – employees experiencing high levels of work-life conflict are away from work three times as often as those with low work-life conflict.
- Lower job satisfaction – job satisfaction among workers has decreased by nearly 30% since 1991.
- Lower commitment to employers – survey results show that employee commitment has decreased by 24% since 1991.⁹⁶

In sum, the direct and indirect costs associated with the impact of long work hours and other work stresses on family life, as described in the literature, include:

⁹⁴ "Sandwich employee" is a phrase used for a woman who experiences pressure from both sides of the family dependence scale, and who takes care of both young children and elderly parents.

⁹⁵ Higgins, Christopher, and Linda Duxbury. 2002. *The 2001 National Work-Life Conflict Study: Report One*. Health Canada. Ottawa. p. 4. Available from <http://www.hc-sc.gc.ca/pphb-dgspsp/publicat/work-travail/>. Accessed September 3, 2002.

⁹⁶ Preliminary findings were summarized in Canadian Policy Research Networks. 2001. "New Data Show Increasing Conflict Between Work and Rest of Life." *Networknews*. No. 16. Ottawa. p. 1.

- Health effects on stressed individuals and their partners, including depression, burnout, and heart disease, as well as numerous other stress-related disorders;
- Organizational costs, including higher absenteeism and lower productivity;
- Costs of family breakdown (lawyers fees, lost productivity in the work place, human costs, societal costs, and further health costs);
- Effects on children (short and long-term health effects, and adverse psychological and learning impacts of "parental deficit" and family breakdown, including the long-term costs associated with children being socialized by television sets instead of by their parents);
- Costs associated with increased drug and alcohol abuse;
- Long-term societal costs associated with the deterioration of family life due to increased parental absence from the home.

Loss of Leisure

In the 1950s, the promise of new technologies and skyrocketing productivity led many academics to predict that by the year 2000 we would have a 20-hour workweek.⁹⁷ Imagine, they asked, what could be done with all that leisure time – more vacations, more books to read, more time to spend with family and friends, more time just to live. Writers in the 1950s and 1960s regularly imagined such a world, and speculated about the massive social adjustments that would be required to accommodate the anticipated explosion in free time.

Instead, in a cruel irony, leisure time is shrinking for many people, and work hours are expanding. Even weekends, once the refuge from work for many, have been invaded by work. According to one Statistics Canada analysis: "Changes in the way we live – from more women working full-time to 24-hour just-in-time production schedules and the growth of self-employment – have changed many people's relationship to Saturday and Sunday." Statistics Canada data confirm that Canadians who work full-time often use the weekend to do more work, both paid and unpaid.⁹⁸

Time-use data indicate that leisure time declines with marriage and with raising children. On average, married people have less free time in a day than single people do and married people with young children have the least amount of free time. According to Statistics Canada's GSS in 1998, employed single men and women without children enjoy 6.2 and 6.0 hours of leisure per day respectively. Married men and women without children have 5.4 and 4.9 hours of leisure per day respectively. Married men and women with children have 4.4 and 4.3 hours of free time while their full-time employed counterparts have the least amount of free time at 3.6 hours a day (Table ES2).

The literature overall indicates clearly that a large segment of working men and women, particularly full-timer dual earners with children, have less free time today than they did in the 1960s. Comparative time-use studies also indicate that Canadians generally have less free time

⁹⁷ Lightman, Alan. 2002. "Prisoners of the Wired World." *Globetechnology*. March 16, 2002. Available from <http://www.globetechnology.com>. Accessed March 17, 2002.

⁹⁸ Silver, Cynthia and Susan Crompton. 2002. "No Time to Relax? How Full-time Workers Spend the Weekend." *Canadian Social Trends*. Catalogue no. 11-008. Statistics Canada. Ottawa. p. 20.

than most western Europeans and about the same amount of free time as Americans. For example, the average Danish citizen has 11 hours more free time per week than the average Canadian.⁹⁹

Table ES2. Leisure time in Canada, 1998.

Status	Leisure Time for Men (No. Of Hours/Day)*	Leisure Time for Women (No. Of Hours/Day)*
Single, no children	6.2	6.0
Married, no children	5.4	4.9
Married with children under 25	4.4	4.3
Married with children, working full-time	3.6	3.6

*Averaged over a 7-day week

Note: For the first three rows in this table, leisure time data are averages for all employed men and women working full-time or part-time. The fourth row gives the leisure hours of *full-time* dual-earner parents only.

Source: Fast et al., 2001, op. cit., pp. 20-23. Based on Statistics Canada, *General Social Survey* data, 1998.

When free time and personal care time are added, women lost personal time in all four Atlantic provinces between 1992 and 1998. In 1992, women in all four Atlantic provinces still had more free time than women in other parts of Canada. By 1998 rates of free time and personal care time for women in the Atlantic region were at or below Canadian levels. In some cases, as in Nova Scotia, the changes in work patterns and longer average work hours for certain segments of the working population have manifested in reduced free time.

Workers in western European countries enjoy as much as three times more vacation time each year as most Canadians (or Americans) do. Based on the amount of vacation time provided in relation to years of service, Canadian workers would have to work, on average, 15 years before they received the vacation time mandated by some European countries after just one year of work.

While two weeks vacation is required after one year of employment in Canada, workers actually receive various amounts of vacation time depending on where they work, whether they are unionized, and how long they have been employed. Unionized workers receive more vacation time than non-unionized workers, with 60% of unionized workers and only 31% of non-unionized workers receiving more than 16 days vacation per year. Overall, only one in four Canadian workers enjoyed more than four weeks paid vacation a year in 1995.

In Germany, by contrast, 70% of all employees receive at least six weeks of vacation a year, and most of the others get between five and six weeks.¹⁰⁰ Denmark, France, Austria, and Spain have 30 days vacation a year, and Sweden has 32.¹⁰¹

⁹⁹ Harvey, Andrew. 1995. "Canadian Time Use in a Cross-National Perspective." *Statistics in Transition*, Vol. 2, no. 4. p. 603.

Non-Standard Work and Growing Inequality

Partly to blame for increasing inequality in our society is the growing disparity between the different kinds of work available – particularly between full-time, “permanent,” highly skilled work on the one hand, and insecure, temporary, marginal jobs on the other.

In 1998 low-income Nova Scotians (the bottom 20% of all households including both economic families and unattached individuals) had the lowest average disposable income in the country at \$9,293.¹⁰² By 2001, Nova Scotia's poorest 20% of households ranked third lowest in the country with an average disposable income of \$10,604.^{103 104} Only the poor in British Columbia and New Brunswick had lower incomes.

Between 1990 and 1998, all income groups in Nova Scotia saw their disposable income decline, but this decline was not evenly shared. In that period, the poorest 20% of households in the province lost nearly 25% of their disposable income while the rich lost less than 1%. In 1990 the richest 20% of Nova Scotian households had 6.2 times as much disposable income as the poorest 20%. By 1998, they had 8.2 times as much. In 2001, the richest 20% of households had 7.7 as much disposable income as the poorest 20%.¹⁰⁵ In fact, between 1990 and 2001 the poorer the household, the bigger the percentage drop in income, leading to a growing gap between rich and poor. However, while the poorest Nova Scotians lost the most in both percentage terms and in actual constant dollars – \$1,782 between 1990 and 2001 – the richest Nova Scotians gained \$5,512 in constant dollars, an increase of 7.2%. Middle income Nova Scotians (3rd quintile) lost \$616 in actual constant dollars between 1990 and 2001.¹⁰⁶

Statistics Canada data for 2001 show that the average real disposable incomes of all families (economic families and unattached individuals) in Canada stagnated or declined between 1992 and 1997, except for the highest quintile which registered improvements starting in 1995. Between 1997 and 2001, improvements in disposable income were seen for all quintile groups. However, the data confirm that in the second half of the 1990s, the greatest gains were enjoyed by the highest quintile.¹⁰⁷ Between 1996 and 2001, inequality in income distribution between the

¹⁰⁰ German Embassy. “Questions and Answers about Germany.” Washington D.C. Available from www.germany-info.org.

¹⁰¹ Economic Policy Institute World Almanac. Cited in *The Timesizing Wire*. Available from www.timesizing.com/1vacatns.htm.

¹⁰² Statistics Canada. 2003e. *Income Trends in Canada, 1980-2001*. Catalogue no. 13F0022XCB. Table 701. Minister of Industry. Ottawa. Disposable income here has not been adjusted for family size.

¹⁰³ Idem. New Brunswick's lowest quintile (20%) had \$10,560 in disposable income; British Columbia's lowest quintile had only \$9,702.

¹⁰⁴ Disposable income is income after taxes and government transfers (social assistance, public pensions, EI benefits, tax credits, etc.). It is used here instead of market income because it is “the level at which most analyses concerned with welfare and well-being focus.” Heisz, Andrew, A. Jackson, and G. Picot. 2002. *Winners and Losers in the Labour Market of the 1990s*. Statistics Canada. Catalogue no. 11F0019, no. 184. Ottawa. p. 4.

¹⁰⁵ In 1998 the poorest 20% of Nova Scotia households survived on \$9,293 a year (in \$2001) (after taxes and transfers), while the richest 20% had more than \$76,000 in disposable income. Statistics Canada. 2003e. *Income Trends in Canada, 1980-2001*. Catalogue no. 13F0022XCB. Minister of Industry. Ottawa. Table 701.

¹⁰⁶ Idem.

¹⁰⁷ The term “quintile” simply means “one-fifth,” and refers here to five income groups ranked from the top 20% of incomes to the bottom 20% of incomes. To assess income by quintile, all incomes in a given population are ranked

quintiles grew. Statistics Canada found that the after-tax (disposable) income of the highest 20% (5th quintile) of families in Canada in 1996 was eight times that of the lowest quintile. By 2001 the richest 20% had average disposable incomes that were 8.7 times those of the lowest 20%. Between 1993 and 2001 the gains by the highest quintile were largest and gains by the lowest quintile were smallest, contributing to further growth in inequality.¹⁰⁸

In sum, the recent improvements in disposable income for the 3rd, 4th and 5th quintiles have not been experienced by the poorest 40% of households in Canada, whose incomes have increased only marginally. Thus, the increase in income inequality and the growing gap between rich and poor in Canada has become increasingly pronounced in the last decade.¹⁰⁹

In Nova Scotia the incidence of low income among families increased in the 1990s from 7.4% of families in 1990 to 10.5% in 1996, and 11.1% in 1998, and then declined to 7.9% in 2001, still above the 1990 rate. In Canada the incidence of low income among families increased in the 1990s from 8.3% in 1990 to 10.7% in 1996, and then declined to 7.6% in 2001.¹¹⁰

Single mothers have the highest rates of low income among all demographic groups in Canada, but their low-income rates declined sharply from 2000 to 2001. In Nova Scotia, average real incomes (in constant 2001 dollars) of single mothers rose from \$18,229 in 1997, the lowest in the country, to \$26,352 in 2001, an increase of 44.6%, largely due to sharp increases in employment among single mothers.¹¹¹ Since the mid-1990s, cuts in social assistance payments to single mothers have pushed more single mothers into the labour force, leading to higher incomes but also to increasing levels of time stress as these mothers struggle to juggle their paid and unpaid work responsibilities. As noted, full-time employed single mothers put in an average 75-hour workweek when both paid and unpaid work are considered.¹¹²

In Nova Scotia in 2001, 38,000 or nearly one in five children (19.2%) lived below the base low-income cut-off – compared to the Canadian average of one in six children (15.6%). The children experiencing the highest rates of poverty are those living with lone-parent mothers – 53.9% compared to 12.8% living in a two-parent family.¹¹³

Statistics Canada found that the disposable income (after taxes and transfers) of the richest 20% (fifth quintile) of all families in Canada rose by \$18,127 – an increase of 21.7% from 1993 to 2001. In the same time period, the lowest quintile fared the least well on the basis of disposable income with an increase of only \$182 or 1.6%. The middle three quintiles had increases of 11%

from the lowest to the highest and then divided into five groups. Thus the bottom one-fifth of incomes is referred to as the “first quintile,” the top one-fifth as the “fifth quintile,” and the middle 20% of incomes as the “third quintile.”

¹⁰⁸ Statistics Canada. 2003f. *Income in Canada 2001*. Catalogue no. 75-202-XIE. Ottawa. p. 74. and Table 7.2. In 2001 the average disposable income of the highest quintile in Canada was \$101,628 while the lowest quintile averaged only \$11,675 in disposable income.

¹⁰⁹ Statistics Canada, 2003e, op. cit., Table 701.

¹¹⁰ Statistics Canada, 2003e, op. cit., Table 804. Prevalence is based on after-tax income.

¹¹¹ Statistics Canada. 2003f. *Income in Canada 2001*. Catalogue no. 75-202-XIE. Ottawa. Especially Tables 6.1 and 8.1, and p. 90.

¹¹² Colman, Ronald. 2003. *A Statistical Profile of Women's Health in Canada*. GPI Atlantic. Halifax.

¹¹³ Raven, Pauline and Lesley Frank. 2003. *Promises to Keep: The Nova Scotia Child Poverty Report Card, 1989-2001*. The Canadian Centre for Policy Alternatives. Halifax. p. 1.

to 14% in disposable income. Therefore, as noted by Statistics Canada, "gains by the highest quintile were largest and gains by the lowest quintile were smallest," contributing to further growth in inequality.¹¹⁴

In Nova Scotia the situation was similar. The real disposable incomes of all families stagnated or declined for all quintile groups between 1990 and 1997. Between 1997 and 2001 real disposable incomes increased for all quintiles, with the smallest gain experienced by the lowest quintile. Between 1997 and 1999 the poorest 20% of Nova Scotians saw their real disposable income fall from \$10,047 to \$9,404 and then increase to \$10,604 by 2001. At the same time the richest 20% of Nova Scotians (5th quintile) saw their real disposable incomes increase by 10.6% (or \$7,866) between 1997 and 2001. The middle three quintiles had increases in disposable income of between 9.7% and 10%.¹¹⁵

Interestingly, the stagnation or decline in real incomes in the early to mid-1990s and the growing gap between rich and poor occurred despite increases in the GDP, which challenges the widely held assumption that economic growth necessarily benefits the poor. Economic commentators often assert that "a rising tide lifts all boats." However the actual data indicate that the robust economic growth of the 1990s benefited primarily the richest Canadians, and that it was primarily the gains of the wealthy that raised the "average" income of Canadians.

In addition to contributing to declining real incomes and low wages for many Canadians, the polarization of hours in Canada has therefore also contributed to the growing inequality in weekly earnings. As noted earlier, the standard workweek has been shrinking while the proportion of workers working long hours and short hours increased, particularly between 1976 and 1996. Although there has been some reversal of this trend in recent years, the proportions of long-hours and short-hours workers in 2001 were still considerably greater than they were 25 years ago, even if down somewhat from their mid-1990s peaks.

Health Costs Associated with Poverty

Poverty is one of the best predictors of ill health. Low income Canadians are more likely to have poor health and die earlier than other Canadians.¹¹⁶ Socio-economic status has been identified as a precursor of cancer, cardiovascular disease, arthritis and musculoskeletal disorders, diabetes mellitus, dental diseases, drug dependence and abuse, and infant mortality and morbidity.¹¹⁷

¹¹⁴ Statistics Canada. 2003e. *Income Trends in Canada, 1980-2001*. Catalogue no. 13F0022XCB. Minister of Industry. Ottawa. p. 74. Incomes cited are not adjusted for family size.

¹¹⁵ Idem.

¹¹⁶ Colman, Ronald. 2002a. *The Cost of Chronic Disease in Nova Scotia*. GPI Atlantic. Halifax. p. 53. Original references: Health Canada. 1999. *Toward a Healthy Future: Second Report on the Health of Canadians*. Ottawa, p. 31; for a summary of similar data in the U.S., see Blumenthal, Susan (U.S. Assistant Surgeon-General), and Jessica Kagen (U.S. Department of Health and Human Services). 2002. "The Effects of Socioeconomic Status on Health in Rural and Urban America." *Journal of the American Medical Association*. 287, p. 109.

¹¹⁷ Colman, 2002a. op. cit., p. 53. Original reference: Almer, Robert, and Donald Eddins. 1987. "Cross-Sectional Analysis: Precursors of Premature Death in the United States." In *Closing the Gap: The Burden of Unnecessary Illness*. Amler, Robert, and Bruce Hull (eds). Oxford University Press. New York and Oxford. Table 1, p. 183.

Job insecurity, low wage work, and unemployment can and do lead to low income and poverty. As noted above, the gap between rich and poor increased in Canada through the 1990s, and many of the poor saw their indebtedness increase and their real incomes decline further.

Poverty and low income result in direct social costs in the form of transfer payments and social assistance, including subsidized housing, employment insurance, and child benefits to individuals and families in need.

But there are many health costs associated with low income and poverty that may not be as obvious. For example, studies have shown that people with low incomes are more likely to be hospitalized and use more physician services than those with higher incomes.

A growing body of evidence indicates that income *distribution* is one of the most important determinants of population health. After reviewing the evidence, the editor of the *British Medical Journal* concluded:

"What matters in determining mortality and health in a society is less the overall wealth of the society and more how evenly wealth is distributed. The more evenly wealth is distributed, the better the health of that society."¹¹⁸

If growing inequality is bad for health then the trends of the 1990s are cause for concern. The evidence demonstrates that alleviating poverty and reducing inequality by closing the gap between rich and poor would bring substantial savings to the health care system.

Poverty is not an independent variable, but has causes that can often be found in employment characteristics. Thus, unemployment, underemployment, and non-standard work – characterized by poor pay, tenuous stability, frequent bouts of unemployment, and a polarization of work hours – contribute to both income inequality and poverty, and thus to adverse health outcomes.

Costs of Unemployment

The following is a summary of some of the economic and social costs of unemployment for Nova Scotia in 2001. In the estimates that follow, 2001 official (9.7%) and supplementary (14%) unemployment figures for the province are used. For details on the methodologies used to calculate the costs please refer to Chapter 9 of the report.

¹¹⁸ Colman, 2002a, op. cit., p. 55. Original reference: "Editorial: The Big Idea." *British Medical Journal*. April 20, 1998. p. 985, cited in Health Canada. 1999. *Toward a Healthy Future: Second Report on the Health of Canadians*, Ottawa. p. 39.

Summary of Economic Costs

Maintaining large numbers of unemployed people is expensive. In addition to the obvious direct costs of providing the unemployed with a portion of their lost income through employment insurance benefits and various other social assistance programs intended for those on low income, the unemployed have less income and therefore pay less income tax (if any at all) than those with jobs. They also spend less and therefore generate less sales tax, and smaller revenues for businesses and workers whose livelihood depends on consumer spending. Reduced tax revenues in turn mean less public spending on health, education, transportation and other public goods. In addition, the unemployed represent lost productive potential to both the economy and society, since they are not producing potentially useful goods and services. These productivity losses and other hidden and indirect costs to the economy are substantial.

Assessments of the costs of unemployment demonstrate that unemployment is costly for everyone in society, not just the unemployed. Table ES3 demonstrates that unemployment in Nova Scotia cost the provincial and national economy at least \$4 billion in 2001 in lost output and taxes and in direct payments to the unemployed.

Cost calculations for estimated output losses have been made using both a hypothetical 0% unemployment base rate (full employment) and a 3.5% unemployment base rate.

Table ES3. Summary of Economic Costs of Unemployment, Nova Scotia, (\$2001 million).

Losses	Estimated Economic Costs of Unemployment			
	Based on 9.7% Unemployment Rate (using hypothetical 0% unemployment base rate)	Based on 14% Comprehensive Unemployment Rate (using hypothetical 0% unemployment base rate)	Based on 9.7% Unemployment Rate (using hypothetical 3.5% unemployment base rate)	Based on 14% Unemployment Rate (using hypothetical 3.5% unemployment base rate)
1. Output loss	\$4,900	\$7,100	\$3,100	\$5,300
2. Fiscal costs				
• Employment Insurance	\$525	\$525	\$525	\$525
• Social Assistance	\$251	\$251	\$251	\$251
• Lost Direct Taxes	\$153	\$220	\$108	\$175
• Lost Indirect Taxes	\$3.15	\$4.5	\$2.2	\$3.6
TOTAL	\$5.8 billion	\$8.1 billion	\$4.0 billion	\$6.2 billion
Cost per capita	\$6,153	\$8,592	\$4,243	\$6,577

Notes:

- Some of the data used to derive these calculations were from 1999, while others were from 2000 and 2001. In all cases the most recent data were used. All dollar amounts were converted to \$2001 for consistency, using Statistics Canada Consumer Price Index.
- Some of the costs in Table ES3 are borne by the province and others, such as employment insurance and lost federal income taxes, are borne by the country as a whole.
- Data on social assistance were not included in the calculations for direct/indirect taxes lost due to the unavailability of data. Those on social assistance would pay some taxes and these have not been included in the calculations above.
- Use of hypothetical 3.5% unemployment base rate in keeping with the Canadian Centre for Policy Alternatives' paper on the *Real Cost of Unemployment in Canada*, and assumes that even in a situation of "full employment," there will always be some people between jobs who are on the unemployment rolls. However, the experience of some countries like the Netherlands, which have experienced rates of unemployment below 3%, indicates that the CCPA's 3.5% base unemployment rate may be too high.
- Numbers have been rounded.
- Population figure for N.S. in 2001, used to calculate per capita costs, was 942,691 (N.S. Department of Finance, Statistical Review, 2002).

Summary of Social Costs

The evidence indicates that the unemployed suffer higher rates of a wide range of physical and mental ills than those with jobs, and studies confirm that unemployment is accompanied by specific sets of consequences ranging from distress to increased risks of premature death and suicide.¹¹⁹ The Canadian Public Health Association notes that unemployment "is taking a significant toll on the health of Canadians" and that "the evidence that unemployment kills – particularly the middle-aged – now verges on the irrefutable."¹²⁰

When the loss of work is also accompanied by poverty, the health outcomes may be significantly amplified.¹²¹

In addition to the effects on mind and body, unemployment has also been linked to increased rates of spousal and child abuse, divorce, criminal acts, and suicide. The social costs associated with these many social, psychological, and health problems cannot be calculated precisely or comprehensively, but estimates have been made for health, crime, and family breakdown costs attributable to unemployment based on data indicating higher relative risks for the unemployed. In the context of the total social costs attributable to unemployment, the following are likely to be significant underestimates, since they exclude many intangible costs for which insufficient quantifiable data are available, including social exclusion, loss of identity, and psychological effects on children.

Based on estimates in the literature, the evidence indicates that unemployment may cost Nova Scotia between \$250 million and \$400 million a year in excess disease, crime, and divorce costs (Table ES4). The \$400 million estimate includes costs attributable to discouraged and underemployed workers who are excluded from the official unemployment figures, and also includes a wider range of crime cost estimates. The following is intended for illustrative purposes only.

For more details on the methodologies used to calculate the costs summarized below please refer to Chapter 9 of the report.

¹¹⁹ Canadian Public Health Association (CPHA). 1996. *Discussion Paper. The Health Impact of Unemployment*. CPHA. Ottawa. Available from: <http://www.cpha.ca/english/policy/pstatem/unempl/htm>. Accessed December 29, 2002. p. 1; Kirsh, Sharon. 1983. *Unemployment. Its Impact on Body and Soul*. Canadian Mental Health Association. Toronto. pp. 47-48; Harvey Brenner, cited in Yates, Michael, D. 1994. *Longer Hours, Fewer Jobs. Employment and Unemployment in the United States*. Monthly Review Press. New York. pp. 67-69.

¹²⁰ CPHA, 1996, op. cit., p. 2.

¹²¹ Please refer to section on Inequality in Chapter 8.

Table ES4. Summary of Social Costs associated with Unemployment in Nova Scotia (\$2001).

Social Cost Category	Low End Estimate (9.7% Rate)	Higher End Estimate (14% Rate)
Disease	\$182 million	\$256 million
Family breakdown	\$10 million	\$14 million
Crime**	\$60 million	\$130 million
Human capital losses	Not estimated	Not estimated
TOTAL	\$252 million	\$400 million

** Low end and high end crime cost estimates were derived from the "conservative" (direct cost) and "comprehensive" cost estimates provided in Dodds and Colman (1999), op. cit., as explained in Chapter 9, rather than by including discouraged and underemployed workers in the higher end estimates. In this case, therefore, an unemployment rate of 9.7% was used to derive both the \$60 million and \$130 million estimates.

Notes:

- Numbers have been rounded.
- Human capital includes the education, skills, and health of the population. A deterioration of any of these assets can adversely affect productivity and the ability of the human economy to produce goods and services in the future. The longer one is without work, for instance, the greater the chance that one's skills will deteriorate or, in conventional accounting language, depreciate. While methodological challenges have prevented the assignment of a monetary value to the costs associated with the loss of human capital due to unemployment, it should be emphasized that these costs are likely to be very significant. Therefore the total cost estimates in Table 4 above should be considered underestimates of the true or full social costs of joblessness.
- Due to the use of different sources, 2001 joblessness rates were used in conjunction with 1997 crime data, 1998 divorce data, and 1998 health data. Please see the health, family breakdown, and crime cost sections of Chapter 9 for a detailed explanation of data sources used to calculate costs.

Environmental Costs

As productivity increases, a portion of the gain may be distributed among workers either in the form of increased pay or as increased time off from work.¹²² In the first half of the 20th century, productivity gains were often taken as increased leisure. But in the last four decades, it is generally pay that has gone up which, economists argue, sets off consumption cycles because additional income usually gets spent. Juliet Schor has described the tendency to purchase higher consumption levels with long work hours as a "work-and-spend" cycle. When real wages stagnate or decline as they did for most Canadians in the 1990s, and living standards need to be maintained, working longer hours is the only way to make the same amount of money. In other words, increased work effort has allowed families to maintain their standard of living.

It is very difficult to derive monetary estimates for the environmental costs of economic growth and increased consumption, let alone to estimate the environmental costs of long work hours. But

¹²² In Part 3 of this report, we examine the argument that increases in productivity may result from decreases in hours of work.

this does not mean that the costs are negligible, as higher levels of consumption produce additional strains on limited natural resources and on the earth's waste assimilation capacity. Anders Hayden argues that a fundamental shift in thinking and attitude, which he sums up as "working less, consuming less, and living more," may be required to overcome the work-and-spend cycle that Schor describes.¹²³ He calls this shift in thinking the "ecological promise of work-time reduction."

Commuting costs are described in the report as one example of the environmental costs of paid work. A reduction in work hours, such as a shift to a four-day, 32-hour workweek, would correspondingly reduce these costs.

According to Statistics Canada's General Social Survey (1998), the most common reason for weekday travel was commuting to and from work. Forty-seven per cent of the adult population commuted to work in 1998, and the average amount of time spent on the road was 62 minutes a day (up in all cities since 1986). Most of this travel is concentrated in the rush hours, in the early morning and late afternoon. The average travel time going to and from work in the Halifax area is 49 minutes. In addition, 77% of drivers in Canada were alone in their vehicles on their way to work, up from 69% in 1986.¹²⁴ According to the latest census data, 37.8% of commuters in Canada commute less than 5 km; 23.1% commute between 5 and 9.9 km; 13.2% commute between 10 and 14.9 km; 8.1% between 15 and 19.9 km; and 17.8% commute 20 km or more. The median commuting distance in Canada in 2001 was 7.2 km, and in Nova Scotia it was 7.8 km.¹²⁵

A 1998 study by *GPI Atlantic* found that telecommuting in Canada cost only 21% of commuting costs when both internal and external costs are considered. The study found that the full cost of commuting in Canada, using a small car, was \$7,000 in 1998. This included internal costs such as vehicle ownership and operation, commuting time, user-paid parking costs, and non-reimbursed accident costs, which amounted to 60% of the total cost. The remainder were external costs such as greenhouse gas and pollutant emissions, taxpayer subsidized accident costs, and land-use impacts.¹²⁶ The report also found that while telecommuting offered a savings

¹²³ To encourage this shift, Hayden argues for ecological tax reform (ETR), which would impose taxes and charges on energy/carbon, primary materials, water, polluting emissions, pesticides, landfill disposal, road use, disposable products, non-returnable containers etc. rather than on labour and income, as at present. ETR also involves the removal of subsidies to ecologically destructive industries. According to proponents of ecological tax reform, instead of taxing "goods" and labour – that is, the things we need, and our productive energy – we should be taxing "bads," such as waste and pollution. See Hayden, 1999, op. cit., p. 19. Since the burden of such new taxes would fall partly on those at the bottom of the income scale, advocates of ETR argue that income taxes would have to be correspondingly reduced for low-income groups, or the new taxes offset with income supports for the poor. Indeed income tax reductions are seen as an essential concomitant of any ecological tax reform, not only to ensure that ETR does not increase social inequities, but also to ensure that the new measures are "revenue-neutral." See Rees, William E. 1995. "More Jobs, Less Damage. A Framework for Sustainability, Growth and Employment." *Alternatives Magazine*. Vol. 21, no. 4. Waterloo. p. 30.

¹²⁴ Clark, Warren. 2000. "Traffic Report: Weekday Commuting Patterns." *Canadian Social Trends*. Spring. Catalogue no. 11-008. Statistics Canada. Minister of Industry. Ottawa.

¹²⁵ Statistics Canada. 2003d. *Commuting Distance, 2001 Census*. Available from <http://www12.statcan.ca/english/census01/products/>. Accessed November 25, 2003.

¹²⁶ Colman, Ronald. 1998a. *Costs of Commuting and Telecommuting in Nova Scotia*. Prepared for the N.S. Department of Transportation. GPI Atlantic. Halifax. The number of commuting km is based on N.S. averages. From Statistics Canada. *Households and the Environment, 1994*. Catalogue no. 11-526. Operating and ownership

of 80% of these costs on those days when there was no vehicle commute, it was not cost-free. Land-use impacts from telecommuting, for example, are assessed as equal to those from automobile use, since telecommuting is as likely to encourage urban sprawl as automobile dependency.¹²⁷

Due to time and resource limitations, an up-to-date full-cost accounting analysis of commuter costs, and the savings that could be achieved with flexible work schedules, shorter workweeks, and telecommuting in Nova Scotia, could not be undertaken for this report.¹²⁸

3. THE FUTURE OF WORK

"If labour productivity continued to rise at a normal rate, and the resulting gains went exclusively towards increased free time rather than increased incomes, it would take only a few short decades to cut the work hours of the 'consumer class' of the North in half."
– Anders Hayden¹²⁹

If some of the work trends described in Part 1 of this report persist, the ramifications do not bode well for society as a whole. The likely result will be an ever increasing number of marginalized workers, high rates of poverty, longer stints of unemployment, and a further increase in the direct and indirect costs associated with illness, stress, absenteeism, low productivity, crime, family breakdown, premature death, and ecological decline. While large numbers of Canadians cannot get the hours they need to make ends meet, the numbers of people working long hours may also continue to increase, and their families, health, and communities will suffer. Free time will continue to shrink, and we will become increasingly habituated to high rates of time stress, struggling ever more intensely to juggle domestic and work schedules, and to balance work, family, and life responsibilities. Heightened job insecurity and time pressure will result in health problems and a reduced sense of wellbeing, and it will impair our overall quality of life. The growing gap between skilled and unskilled, and between those working long hours on the one hand and the unemployed and underemployed on the other, will cause social inequities to grow and correspondingly threaten social cohesion. This prognosis is not theoretical, as these trends have already been well documented in North America in the 1990s.

By contrast, changing the nature of work and redistributing work hours can potentially reduce unemployment and also improve the living and working conditions and health of Canadians. Several western European countries have already demonstrated practical, alternative ways to organize work that hold promise for North America.

costs based on Canadian averages. From Canadian Automobile Association. 1998. *Driving Costs*. Externalities from Litman, Todd. 1997. *Transportation Cost Analysis*. Victoria Transport Policy Institute.

¹²⁷ Idem.

¹²⁸ With flexible work schedules, people could travel to and from work at times other than rush hour, thus subtracting time from their commute. One type of flexible work schedule is called "time-shifting," where workers can check their emails from home, for example, and then travel to work in off-peak periods. GPI Atlantic's *Nova Scotia GPI Transportation Accounts*, scheduled for release at the end of 2004, will provide further details on the full costs of transportation, including environmental externalities.

¹²⁹ Hayden, 1999, op. cit., p. 42.

Alternative Work Arrangements

Reducing and redistributing work hours can potentially avoid costs at both ends of the polarization spectrum. Those who are overworked or "over-employed" can reduce their work hours and their work stress, and thereby increase their free time, and improve their health and work-life balance. At the same time, the underemployed can take on more of the freed-up hours, and jobs can be created for the jobless, thereby reducing the well-documented health, justice, and family breakdown costs of unemployment and job insecurity.

There are alternative work arrangements that have been tried and tested, which can help reduce excess work hours, narrow the income gap, avoid many of the costs described, increase labour productivity and free time, and improve work-life balance and the overall quality of life. These include: work sharing, job sharing, compressed workweeks, a 4-day workweek, overtime reduction, flexitime, telecommuting, phased retirement, sabbaticals, unpaid leaves, and increased vacation time. These alternative work arrangements are all discussed in some detail in Chapter 13 of the report along with a discussion of the benefits and obstacles associated with worktime reduction from the perspective of employers and employees. Specific examples are also provided of circumstances where these new arrangements have been implemented successfully.

There is no one simple solution to the labour market and social challenges that Canada and Nova Scotia currently face. GPI Atlantic recognizes that any solution to a complex problem will also be complex, and the focus on work hours in this report does not imply that any single worktime reduction scheme or any single method of redistributing hours will be a panacea. However, a substantial body of evidence demonstrates that a combination of the work reduction models and policy options outlined in Part 3 of this report, if skillfully implemented in conjunction with other social policies, can contribute markedly to a more equitable society and to a better quality of life for its citizens. In particular, the report demonstrates that there are many *voluntary* worktime reduction options available that can potentially benefit employers, employees, and government alike.

Less Work... More Jobs

According to University of Toronto labour economist, Frank Reid, there are three key elements necessary for worktime reduction to create new jobs. These are:

- A large reduction in worktime – by 10%-20% (i.e. equivalent to a half-day or full day each week). Ideally, this magnitude of work reduction would be achieved by the implementation of a wide range of work reduction options that can be voluntarily chosen by employees. The wider the range of options, the higher the rate of voluntary take-up by employees will likely be. While a 10-20% reduction in worktime may seem large, it would do no more than bring North American work hours more closely into line with average hours currently worked in Western Europe.
- The reduction affects many workers at once.

- A strong commitment to the restriction of overtime use.¹³⁰

Ample evidence now indicates that a reduction in work hours is accompanied by an increase in *hourly* production and output.¹³¹ This is called a productivity *offset* and is important when it comes to the job creation potential of reduced hours. In 1994 the Federal Advisory Group on Working Time and the Distribution of Work concluded from a review of existing evidence that a 10% reduction in working time would produce a 5% increase in productivity (output per hour).¹³² For example, if an employer were to cut work hours by four hours per week (10% of a 40 hour workweek), it would only cost the employer the equivalent of a loss of two hours, because of the increased productivity associated with the reduced worktime. The improved productivity results largely from increased efficiency, reduced absenteeism, and a decline in errors and accidents due to worker fatigue. Because of this productivity gain, an employer who reduced the workweek by four hours may only look for new workers to replace two hours of the lost time (not four), thus cutting the job creation potential indicated by the freed-up hours in half.¹³³

There are also a number of "offsetting" factors that may lower the employment gains from reduced overtime. These are described in detail in Chapter 14 of the report. Assuming all the offsets exist at the same time, it can similarly be estimated that together they would reduce expected employment gains from overtime reduction or elimination by about 50%. Despite these potential offsets and productivity gains, it is not unusual for the job creation potential from reduced worktime to be calculated based on the assumption that one work-hour freed produces one work-hour created for a new employee. In assessing the job creation potential of worktime reduction for Nova Scotia in this report, both the simple arithmetic and productivity-offset methods are used to demonstrate the difference in results, with the report's own conclusions based on the latter (and more conservative) method.

4. JOB CREATION POTENTIAL IN NOVA SCOTIA

"Research shows that, under the right circumstances, a major reduction in working time could result in a meaningful decrease in unemployment and a significant redistribution of jobs."

– Advisory Group on Working Time and the Distribution of Work¹³⁴

¹³⁰ These three factors necessary for worktime reduction to create new hires are from labour economist Frank Reid. Cited in O'Hara, Bruce. 2000. *The Case for Shorter Work Time*. Available from <http://www.vcn.bc.ca/timework/share.htm>. Accessed November 17, 2002.

¹³¹ According to Anders Hayden, only in rare cases would total production actually increase. Thus it is important to distinguish here between hourly productivity increases on the one hand and total production on the other. From Hayden, Anders. Author of *Sharing the Work, Sparing the Planet*. Reviewer comments. August 25, 2003.

¹³² The evidence included both consultations with representatives of European countries that had implemented work reduction schemes and discussions with Canadian firms that had experimented with shorter workweeks.

¹³³ Advisory Group on Working Time and the Distribution of Work (AGWTDW), 1994, op. cit., p. 75.

¹³⁴ AGWTDW, 1994, op. cit., p. 3.

New Jobs from Overtime Reduction

Reducing overtime hours may provide a key source of potential jobs for the unemployed and underemployed. A simple arithmetic calculation indicates that the 21 million overtime hours clocked in Canada in one week in 2001 are the equivalent of 525,000 full-time jobs. In Nova Scotia the 643,000 overtime hours would theoretically translate into more than 16,000 new jobs, assuming a 40-hour workweek. If every one of these jobs were filled from the ranks of the officially unemployed, it would reduce unemployment in Nova Scotia by 35%.¹³⁵

If we were to consider only paid overtime hours, the full-time job equivalents would be fewer. In Canada in 2001 there were 9 million hours of paid overtime worked per week, the equivalent of 225,000 full-time jobs. This could theoretically have reduced the ranks of the unemployed in Canada by 19%, and brought the unemployment rate down from 7.2% to 5.8%. In Nova Scotia, an average of 241,000 hours of paid overtime were worked every week, equal to more than 6,000 full-time jobs. If these jobs had been filled by workers previously unemployed, this would have reduced the ranks of the unemployed by 13% and brought the unemployment rate down from nearly 10% to 8.4%.¹³⁶

If overtime hours had been eliminated in Nova Scotia's goods-producing sector in 2001 and replaced by new jobs, roughly 3,300 additional jobs could have been created – an employment increase of nearly 5% in that sector, with the majority of new jobs being created in manufacturing (2,060) and construction (633). In proportion to the size of their workforces, job creation among goods-producing industries was highest in utilities (7.4%) and manufacturing (5.4%).

Similarly, the elimination of all overtime hours in the service sector could have resulted in an additional 14,300 new jobs overall – with the highest number of new jobs in education (3,500), health care and social services (1,658), and public administration (1,555). New jobs in health would have represented a 13% increase in employment in that sector. The job increases in the professional field (7.9%) and public administration (6.7%) would also be relatively high. Among all industries, educators clocked the most overtime hours.

Therefore, if all paid and unpaid overtime had been eliminated across the board for all industries in 2001, and if all new jobs created were based on the average straight hours worked per employee in each industry, Nova Scotia could have been 17,573 full-time jobs richer – an increase in employment of 5.2%.¹³⁷ If offsets that reflect more realistic industry responses to

¹³⁵ That is, using the official number of unemployed in Nova Scotia in 2001, which does not include the so-called "hidden" unemployed, who include discouraged workers and the underemployed portion of involuntary part-time work.

¹³⁶ New theoretical unemployment rate for N.S. calculated by dividing the new estimated number of unemployed (39,600) by the total labour force in 2001 (468,900). Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

¹³⁷ The earlier calculation of 16,000 new jobs from overtime elimination was based on a 40-hour week. The industry-based calculation above uses the average straight hours worked per week per employee. For instance, the average workweek of someone employed in the forestry industry is 50.3 hours, while someone employed in accomodation and food services works 33.3 hours a week on average. Industry-specific data for average workweeks

overtime reduction efforts reduced this job creation potential by 50%, there would have been 8,787 new jobs created. In actual fact, the conversion rate would be considerably less, because of the inclusion of unpaid overtime hours, which employers have no incentive to convert to paid work, and because of the difficulties of matching the skills of overtime workers with those of the unemployed. Therefore, these calculations should not be considered as descriptive of actual jobs that could be created given current economic realities, but a theoretical exercise designed to illustrate the hidden costs of overtime in terms of lost potential jobs and consequent taxpayer-funded employment insurance and social security costs. Any actual attempt to convert overtime hours to new jobs would have to be accompanied by a range of legislative and program initiatives – including incentives to employers who hired previously unemployed workers – along with carefully crafted training programs.

In Canada, between 1997 and 2001, 238,000 jobs were created in the manufacturing sector.¹³⁸ During this same time period, 28 million *additional* overtime hours (532,700 overtime hours per week) were worked in the manufacturing sector in 2001 over and above the overtime hours worked in 1997. If just half of these additional overtime hours had been converted to new jobs, this increase in overtime alone could have yielded about 6,700 full-time equivalent jobs.¹³⁹ In Nova Scotia during the same time period, 4,600 jobs were created in manufacturing and 1.1 million *additional* overtime hours were worked in the sector (20,930 overtime hours per week) – which could have yielded about 260 new jobs based on a 50% conversion rate.¹⁴⁰

Furthermore, 4.3 million overtime hours were worked each week in Canada in 2001 in the manufacturing sector alone.¹⁴¹ In Nova Scotia in the same year, 84,600 overtime hours per week were worked in manufacturing. If just 50% of these overtime hours had been converted to new jobs, an additional 53,700 jobs would have been created in Canadian manufacturing in 2001 and an additional 1,060 jobs would have been created in manufacturing in Nova Scotia.¹⁴²

were used to calculate the potential number of new jobs created by the elimination of overtime in those industries, which accounts for the difference in these two job creation estimates.

¹³⁸ Statistics Canada began collecting data on overtime in 1997. Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

¹³⁹ The full-time equivalent of the aggregate change in overtime hours in Canada is calculated by taking the difference between the average weekly overtime hours worked by overtime workers in 1997 and 2001, which gives 532,700 hours. This is then divided by 40, representing the usual length of a full-time workweek. Assuming a 50% conversion into new jobs, the final figure is 6,659. If full-time *annual* hours are used for this calculation, (1,920/year counting two weeks vacation plus statutory holidays), then 28 million additional overtime hours could theoretically yield about 14,500 new jobs, or more than 7,000 jobs if just 50% of the additional overtime hours had been converted to new jobs. Data from Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

¹⁴⁰ *Idem*. Using full-time annual hours, the additional overtime hours could have created about 523 new jobs in Nova Scotia, or about 260 jobs if just 50% of the additional overtime hours had been converted to full-time job equivalents.

¹⁴¹ The previous calculations were based on *additional* overtime hours worked in 2001 compared with 1997.

¹⁴² Final figures are assuming a 50% conversion into new jobs. Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

New Jobs from Hours Reduction

In order to calculate the job creation potential and other economic impacts of a 10% reduction in hours worked in Canada in 1994, the Federal Advisory Group on Working Time and the Distribution of Work commissioned Infrometrica Limited, a computer-modelling economic analysis and forecasting firm, to apply its Canadian econometric model to the issue. Infrometrica found that reducing worktime by 10% could result in a "substantial redistribution of jobs" in Canada, accounting for resultant hourly productivity increases and the conversion of 50% of the freed-up hours to new jobs.

Between 1995 and 2004, the unemployment rate was predicted to drop by four percentage points due to the reduction in work hours. GDP would be little affected because neither more nor less was being produced as a result of the change in work arrangements. In other words, the size of the "pie" would not change much overall. Real disposable income would decrease by 0.7% after five years and by 1.4% after 10 years, due to the shorter work hours, but this would be offset by substantial increases in leisure time for those who were working. Infrometrica's econometric model found a 2.6% expansion of leisure time at the end of a projected five-year phase-in of a 10% reduction in work hours, and a 2.7% expansion after 10 years.

The situation of the unemployed would also improve because many of them would find work.¹⁴³ In addition, according to the Infrometrica model, government expenditures on social assistance and employment insurance would decrease, the tax base would widen, and corporate profits would rise slightly, largely due to predicted hourly productivity increases.

In fact, the fairly substantial predicted increase in government revenues would allow the possibility of a commensurate cut in taxes that would compensate workers for the slight decline in real disposable income. This could produce a revenue-neutral solution for government that would minimize any adverse impact on employee incomes. As well, part of the predicted increase in real corporate profits could also be returned to employees, thus further ameliorating the slight reduction in real disposable income.

One of the key conclusions reached by the Federal Advisory Group based on its analysis of the modelling exercise, was that "it is possible to reduce the unemployment rate significantly without affecting Canada's inflation rate or international competitiveness."¹⁴⁴

For the purposes of this report we have used Infrometrica's background study for the Federal Advisory Group in 1994 as a template for estimating the impact of a 10% reduction in worktime in Nova Scotia. As specific computer modelling was not done for Nova Scotia, we are limited here to estimating changes in the unemployment rate.¹⁴⁵

¹⁴³ "Free" time would decrease substantially for those who found work after being unemployed. But for them, presumably, this change would be welcomed. Indeed, it is debatable whether the free time they previously had while unemployed can even be termed "leisure" time, since it was likely unwanted.

¹⁴⁴ Advisory Group on Working Time and the Distribution of Work, 1994, op. cit., p. 76.

¹⁴⁵ It was suggested to GPI Atlantic that, in the absence of computer modelling, we should concentrate on the labour force dimensions of a reduction in worktime. From McCracken, Mike. Infrometrica Limited. Personal communication. June 29, 2003.

As previously noted, a 10% reduction in working time for those who are currently employed would likely result in an increase in hourly labour productivity of 5%. Because of this productivity offset, only about half of the reduction in work hours would result in new jobs.

Thus, in 2001, Nova Scotians worked a total of 15.6 million hours per week. Theoretically, a 10% reduction in work hours would have amounted to almost 1.6 million freed up hours, available both for new hires from among the unemployed and for redistribution among the underemployed. This reduction in work hours can be achieved in a number of ways, many of them discussed in Chapter 13. These include shorter workdays, shorter workweeks, sabbaticals, longer vacations, phased-in retirement, improvement in the conditions of part-time work, and other methods that could be tailored to the particular needs of different sets of employees.

This reduction in hours is equivalent to roughly 38,740 full-time jobs, or about 85% of the 45,600 officially unemployed that year.¹⁴⁶ Due to the offsetting effect of productivity increases, only half of the hours reduction would have resulted in new jobs. Therefore, about 19,370 new jobs could have been created. Assuming that all the new jobs were filled from the ranks of the unemployed, this job creation would have brought the unemployment rate down from 9.7% to 5.6%.¹⁴⁷ It should be noted that an unemployment decline of this magnitude is not inconceivable and was actually achieved in the Netherlands. In that country, a long-term drop in unemployment from 12.2% to 2.9% was partly attributed to the country's deliberate redistribution of work hours through promotion of high-quality part-time work.

However, there is a wide range of intervening variables that complicate the equation between work hours reduction and job creation. For example, the size of businesses in Nova Scotia presents a special challenge in translating shorter work time into job creation potential, as the conversion is easier in larger enterprises. Nearly three out of four businesses in this province are small, employing fewer than five people. Nine out of 10 businesses in the province have fewer than 20 employees.¹⁴⁸

But this does not mean that most employees work in small firms. In fact, 60.5% of all Nova Scotian employees in 2001 worked in firms with more than 20 employees. Nearly 30% of all Nova Scotian employees worked in firms with more than 100 employees in 2001.¹⁴⁹

Therefore, while small businesses are clearly an important part of the business landscape in this province, the greater challenges they may face in translating work-hours reductions into new jobs do not constitute an impediment to instituting work-hours reductions for very substantial portions of the provincial labour force. In fact, a five-year phased-in work-reduction plan, such as that recommended by the Federal Advisory Group on Working Time and the Distribution of Work,

¹⁴⁶ Full-time jobs are calculated by dividing the total available hours by the average usual workweek for full-time work in Nova Scotia in 2001, which was 41.3 hours. Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

¹⁴⁷ The new theoretical unemployment rate is calculated by dividing the new number of unemployed (26,230) by the labour force in 2001 (468,900).

¹⁴⁸ Hachey, Leanne. Policy Analyst. Canadian Federation of Independent Business. Personal communication. May 30, 2003.

¹⁴⁹ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

could begin with larger firms and gradually embrace smaller firms over time as the new work arrangements gradually took hold. France also instituted its 35-hour workweek in phases according to firm size.

These and other challenges facing Nova Scotia are discussed in Chapter 15 of the report, which outlines *Policy Recommendations* based on the evidence presented and on Nova Scotia conditions. Innovative work-reduction and job creation policies in this province could also potentially provide a model for the rest of the country and beyond.

DEFINITIONS

actual hours: Number of hours actually worked by the respondent during the reference week, including paid and unpaid hours. Actual hours reflect temporary increases or decreases in work schedules because they represent the actual hours worked in a particular week and include overtime, holidays, vacation, illness, strikes, etc.

discouraged worker: Discouraged workers are those who want work but have given up looking for it – largely because they believe they are unable to find a suitable job.

disposable income: Disposable income is total income which includes government transfers, less income tax. Disposable (after-tax) income is more illustrative of a family's overall economic wellbeing.

employment rate: The number of persons employed expressed as a percentage of the population 15 years and over.

full-time: Full-time employment consists of persons who usually work 30 hours or more a week at their main job or only job.

human capital: Human capital includes the education, skills, and health of the population. A deterioration in any of these assets can adversely impact productivity and the ability of the human economy to produce goods and services in the future.

involuntary part-time: Those individuals who are working part-time but who would rather be working full-time but are unable to find full-time work. Involuntary part-time employment is also referred to as underemployment.

just-in-time production: Stocks and inventory are kept at a minimum so that any fluctuation in demand must be met by increased/decreased work hours.

labour force: The number of civilian, non-institutionalized persons 15 years of age and over who, during the reference week, were employed or unemployed.

labour productivity: Labour productivity is a measure of the quantity of goods and services produced in relation to each hour worked. It is calculated by taking the GDP (a measure of total output) over a given time period and dividing it by the total number of hours worked in that time period. In theory, the higher the output relative to the labour input, the higher the productivity. In other words, an economy is regarded as more productive if the current amount of goods and services can be created/produced in fewer hours or if more can be produced in the same number of hours.

lean production (*Kaisen in Japanese*): The smallest number of workers as possible are assigned to a job. Once workers show that the job can be done with fewer staff, they are encouraged to be more productive so that numbers of employees can be reduced yet again – ultimately resulting in the fewest employees possible.

market income: Market income is the sum of earnings (from employment and net self-employment), investment income, private retirement income, and other sources of income. It is equal to the total income minus government transfers.

multiple job holder: Those persons who, during the reference week, were employed in two or more jobs simultaneously.

overtime: Paid overtime includes any hours worked during the reference week over and above standard or scheduled paid hours, for overtime pay or compensation (including time off in lieu). Unpaid overtime refers to the time spent directly on work or work-related activities over and above scheduled paid hours. These must be extra hours worked for which the respondent received no additional compensation.

participation rate: The proportion of the working age population either working or actively looking for work. The participation rate for a particular group (i.e. age, sex, etc) is the number of labour force participants in that group expressed as a percentage of the population in that group.

part-time: Part-time employment consists of persons who usually work less than 30 hours per week at their main job or only job.

permanent job: A permanent job is one that is expected to last as long as the employee wants it, given that business conditions permit. It has no pre-determined termination date.

productivity offset: A reduction in work hours is accompanied by an increase in *hourly* production and output. This is called a productivity *offset* and is important when it comes to the job creation potential of reduced hours. In 1994 the Federal Advisory Group on Working Time and the Distribution of Work concluded from a review of existing evidence that a 10% reduction in working time would produce a 5% increase in productivity (output per hour). For example, if an employer were to cut work hours by 4 hours per week (10% of a 40 hour workweek), it would only cost the employer the equivalent of a loss of 2 hours because of the increased productivity associated with the reduced worktime. Furthermore, this employer may only look for new workers to replace two hours of lost time (not four), thus cutting the job creation potential indicated by the freed up hours in half.

quintile: The term “quintile” simply means “one-fifth,” and refers to five income groups ranked from the top 20% of incomes to the bottom 20% of incomes. To assess quintiles, all incomes in a given population are ranked from the lowest to the highest and then divided into five groups. Thus the bottom one-fifth of incomes is referred to as the “first quintile,” the top one-fifth as the “fifth quintile,” and the middle 20% of incomes as the “third quintile.”

temporary job: A temporary job has a pre-determined end date, or will end as soon as the specified project is completed. It includes seasonal jobs; term or contract jobs including work done through a temporary help agency; casual jobs; and other temporary work.

underemployment: An individual is underemployed if he/she is employed but has insufficient work hours (i.e. involuntary part-time) or when his/her skills are underutilized or when wages, productivity or other job qualities are sub-standard.

unemployment rate: The number of unemployed persons expressed as a percentage of the labour force. A person is considered unemployed if during the reference week they were without work, had actively looked for work in the past 4 weeks, and were available for work.

usual hours: Prior to January 1997, usual hours were the number of hours usually worked in a typical week by the respondent to the Labour Force Survey, regardless of whether they were paid. Beginning in January 1997, usual hours for employees refers to their normal paid or contract hours, not counting any overtime.

"The number of hours worked is one important indicator of a country's overall quality of life... While the benefits of hard work are clear, working more is not the same as working better."¹⁵⁰

– Juan Somavia, Director-General, International Labour Organization

¹⁵⁰ Quote excerpted from International Labour Organization. 1999. *Americans Work Longest Hours among Industrialized Countries, Japanese Second Longest*. Press Release. September 1999. Available from <http://www.ilo.org/public/english/bureau/inf/pr/1999/29.html>. Accessed July 4, 2002. p. 1.

Foreword

Limitations of the GDP, or Economics when people no longer matter.

"I sometimes think that GDP must stand for Gross Distortion of Prosperity, because it provides a very misleading picture of our national wellbeing. It certainly was not created as a measure of wellbeing but it is often taken as a sign of "how we are doing" as a nation."

– Roy Romanow¹⁵¹

"To me, this concept of GDP means nothing at all. I know for certain technical reasons of managing certain money flows in the economy, it may be quite useful; but as a measurement of any kind of achievement it's meaningless. ... How can anybody assert that "growth" is a good thing? If my children grow, this is a very good thing; if I should suddenly start growing, it would be a disaster. Therefore, the qualitative discrimination is the main thing; it's far more important than some mysterious adding-up of everything. We've all learned at school that you must add together only things of essentially the same quality."

– E.F Schumacher¹⁵²

"Conventional economics is a form of brain damage."

– Hazel Henderson¹⁵³

"Economy, economy. Shit spews from the factory. It's killing you and me, but it's good for the economy."

– Jamie Junger¹⁵⁴

The most important yardstick used to measure how well the economy is doing is the Gross Domestic Product or GDP. It is essentially made up of two numbers – one counting the production of goods and the other the production of services within the borders of a country in a given period.¹⁵⁵ Its architects designed it as an aggregation of the market value of all goods and

¹⁵¹ Excerpted from *"Connecting the Dots: From Health Care to Illness and Wellbeing,"* a speech by Roy Romanow to the "International Foundation," Ottawa. May 8, 2003. Available from <http://www.gpiatlantic.org/realitycheck>.

¹⁵² Schumacher, E.F. 1979. *Good Work*. Harper & Row Publishers. New York. p. 125.

¹⁵³ Henderson quoted by David Suzuki at a public presentation May 14, 2003, Dalhousie University, Halifax.

¹⁵⁴ Excerpted from his song titled *Economy* on his most recent CD titled *Telepathetic*. Jamie Junger is a musician living in Chester, Nova Scotia.

¹⁵⁵ Prior to the 1980s the GNP (Gross National Product) was used to indicate economic performance. The GDP has been the official figure used since then. What is the difference? GDP measures all production that takes place within the borders of a country, regardless of who owns the units of production. The GNP measures national production, providing income to the citizens of the country, regardless of where production takes place. In Canada, for instance, a good deal of income flows out of the country because of the high levels of foreign ownership of domestic production. This means that the GNP is lower than the GDP. "Use of GDP over GNP masks the economic position of all countries having high levels of foreign ownership," writes Cosby (1997 p. 372). He says the shift toward the GDP was made to "mask the lopsided consequences of free trade and globalization, and thus make developing

services, and it was first used as a measure of wartime production in Britain.¹⁵⁶ But it was never intended as an index of economic welfare or prosperity, as it is used today. Simon Kuznets, Nobel Prize winner and one of the GDP's principal architects, never endorsed its modern use as an overall measure of progress, and he warned 40 years ago:

*"The welfare of a nation can scarcely be inferred from a measure of national income.... Goals for 'more' growth should specify of what and for what."*¹⁵⁷

The GDP includes a variety of expenditures defending against, or mopping up after, events that could hardly be considered marks of progress or wellbeing – things like car accidents, crime, pollution, and disease. The money spent cleaning up a polluted site, for instance, is counted as a contribution to economic prosperity, rather than a cost of the activity that caused the damage in the first place. All spending is added to the GDP, whether or not it signifies an improvement or decline in wellbeing. Under a sensible accounting system, in which environmental and social wellbeing are taken into account, such liabilities would register as costs rather than gains to the economy.

But instead, the GDP adds everything together, and never subtracts. This anomaly led Robert Kennedy to remark 35 years ago:

*Too much and too long, we have surrendered community excellence and community values in the mere accumulation of material things....The GNP counts air pollution and cigarette advertising and ambulances to clear our highways of carnage. Yet the gross national product does not allow for the health of our children, the quality of their education, or the joy of their play. It measures neither our wit nor our courage; neither our wisdom nor our learning; neither our compassion nor our devotion to our country. It measures everything, in short, except that which makes life worthwhile.*¹⁵⁸

Despite this recognition of the GDP's deficiencies, conventional wisdom still holds that if the GDP grows, society benefits. But the evidence does not support this assumption.¹⁵⁹ Higher levels

countries appear better off." Cosby, David. 1997. "A Genuine Progress Indicator for Canada: An Alternative to Growth as a Measure of Progress." in *Alternative Federal Budget Papers*. Canadian Centre for Policy Alternatives. Ottawa. pp. 369-397.

¹⁵⁶ It was World War II that led to the use of the GDP as a measure of wartime economic activity. At the time, John Maynard Keynes, who played a central role in the British Treasury, penned a famous paper called "The National Income and Expenditure of the United Kingdom, and How to Pay for the War," which laid the groundwork for the use of the GDP as a tool to measure total economic performance. But even then it was not considered an accurate indicator of a nation's welfare. From Cobb, Clifford, Tom Halstead, and Johathan Rowe. "If the GDP is Up, Why is America Down?" *The Atlantic Monthly*. October, 1995. p. 67.

¹⁵⁷ Kuznets, Simon. *The New Republic*. October 20, 1962 cited in Cobb, Clifford, Tom Halstead, and Johathan Rowe. "If the GDP is Up, Why is America Down?" *The Atlantic Monthly*. October, 1995. p. 67.

¹⁵⁸ Kennedy, Robert. "Recapturing America's Moral Vision." March 18, 1968. In Guthman, Edwin O., C. Richard Allen, Robert F. Kennedy. 1993. *RFK: Collected Speeches*. Viking Press. New York.

¹⁵⁹ In December 2000, California-based public policy organization *Redefining Progress* released a report titled *Blazing Sun Overhead and Clouds on the Horizon: The Genuine Progress Report for 1999*. The report revealed that the economic boom of 1999 in the United States came at "substantial social, economic and ecological costs... The boom that caused the economy to rise was accomplished through ecological degradation, overextended workers, as well as increased consumption and consumer debt." This incongruence between a booming economy and a less than

of growth and output in the industrialized world have not necessarily increased levels of satisfaction, wellbeing, and economic security. In fact, in 1998, when Canadians were polled about how their financial situation compared to that of their parents at the same stage in life, less than half (44%) answered there had been an improvement – despite an increase of approximately 60% in real GDP per capita over the previous 25 years.¹⁶⁰

What does this apparent anomaly tell us? GDP per capita was much lower 25 years ago than it is today, but are we better off today than we were in 1978? In the 1970s fewer people were out of work. In 1978 fewer people needed food banks. Since 1989 food bank use in Canada has doubled and today there are more than 700 food banks across the country. In Nova Scotia, food bank use increased by about one third between 1996 and 2001 alone. In the 1970s, crime rates were lower and we were less likely to lock our doors and cars. Atlantic groundfish stocks had not yet collapsed, throwing 40,000 people out of work, and devastating coastal communities. In the 1970s fewer people questioned whether we could afford social programs, and the level of personal debt was much lower. Indeed, today millions of Canadians' consumption exceeds their income. In sum, the economy (and the GDP) can grow even as poverty, insecurity, and inequality increase, while the gap between rich and poor widens, while the earth's resources are depleted, while our communities collapse, and while our quality of life worsens.

David Crosby of the University of Manitoba sums up the paradox in a paper written to accompany the Canadian Centre for Policy Alternatives' (CCPA) Alternative Federal Budget in 1997. He says our adherence to the GDP as a measure of progress is responsible for the fact that we are "running around like rats, with less and less leisure, and more and more work, for less and less pay, despite economic growth."¹⁶¹

Longer paid working hours make the GDP grow by increasing output and spending. But free time is not valued in our measures of progress, so its loss does not register anywhere in our accounting system. Given this imbalance, it is not surprising that the substantial economic productivity gains of the last 50 years have manifested in increased output, incomes, and spending, while there has been no real increase in leisure time.

The GDP also fails to place a value on natural, human and social capital assets, which are subject to depletion and depreciation. Because it ignores non-market benefits and costs, the GDP cannot

content populace was also the subject of a seminal article published in Atlantic Monthly (1995) entitled "If the GDP is Up, Why is America Down?" The authors, Clifford Cobb, Ted Halstead and Jonathan Rowe, use the 1994 U.S. election to illustrate their point. They write that the strange gap between what economists choose to measure and what Americans experience became the official conundrum of the election campaign. "Paradox of '94: Gloomy voters in good times," the New York Times proclaimed on its front page. "Boom for whom?" read the cover of *Time Magazine*. The authors state that the problem had to do with the definition of prosperity itself and how it is measured – the good and the bad are simply lumped together.

¹⁶⁰ Osberg, Lars and Andrew Sharpe. 2001. "Comparisons of Trends in Gross Domestic Product and Economic Wellbeing – the Impact of Social Capital." In *The Contribution of Human and Social Capital to Sustained Economic Growth and Wellbeing*. International Symposium Report. Helliwell, John F. (ed). Human Resources Development Canada. Ottawa. p. 310.

¹⁶¹ Cosby, David. 1997. "A Genuine Progress Indicator for Canada: An Alternative to Growth as a Measure of Progress." In *Alternative Federal Budget Papers*. Canadian Centre for Policy Alternatives. Ottawa. p. 369.

send early warning signals to policy makers indicating a need for re-investment in natural, human, and social capital. As economist Herman Daly noted, the GDP encourages the opposite:

"The current national accounting system treats the earth as a business in liquidation."¹⁶²

While the GDP mistakenly counts many costs as if they *were* contributions to prosperity and wellbeing, it ignores many genuine benefits and contributions to wellbeing and quality of life, such as volunteer work, simply because no money is exchanged. Thus, paid child-care, hired domestic help and restaurant food preparation all add to the GDP, while the economic values of unpaid child-care, housework, and home food preparation remain invisible in the economic accounts.¹⁶³

It is somewhat perverse that our current accounting system ignores vital assets such as the value of voluntary work, while an increase in crime, sickness, and lawyers to handle divorce cases, all make the GDP grow.

These shortcomings and others led to a joint declaration by 400 leading economists, including Nobel Laureates:

"Since the GDP measures only the quantity of market activity without accounting for the social and ecological costs involved, it is both inadequate and misleading as a measure of true prosperity.... New indicators of progress are urgently needed to guide our society.... The GPI is an important step in this direction."¹⁶⁴

The Genuine Progress Index (GPI), or Economics as if people mattered.¹⁶⁵

"What we count and measure determines what we can be held accountable for."
– Roy Romanow¹⁶⁶

The balance sheet approach of the GPI differs from the current income approach of the GDP by distinguishing assets from liabilities. Conventionally, long work hours are only counted as an

¹⁶² Ibid. p. 383.

¹⁶³ The monetization of unpaid work does not imply that unpaid work should be paid or taxed, nor that economic motives are found beneath the caring and giving work that constitutes a considerable portion of non-market production. Instead, the explicit acknowledgement of the economic value of unpaid work argues that social support systems that enable its effective functioning should be viewed as essential social infrastructure rather than potentially dispensable welfare measures. Colman, Ronald. 1998. *The Economic Value of Unpaid Housework and Child Care in Nova Scotia*. Genuine Progress Index Atlantic. Halifax. p. 13.

¹⁶⁴ The full text and a complete list of signatories is available from *Redefining Progress*, 1904 Franklin St. 6th Floor. Oakland, California. 94612.

¹⁶⁵ The word *economics* is derived from the Greek root *oikonomia*, meaning the management of the household so as to increase its use value to all of its members over the long run. This is in contrast to *chremastistics*, the manipulation of property and wealth so as to maximize short-term exchange values. One enhances future productivity to the ultimate benefit of the community, while the other seeks short-term gain for the individual. Crittenden, Ann. 2001. *The Price of Motherhood*. Henry Holt and Company. New York. p. 67. The GPI attempts to assess economic development in the former sense, while the GDP may be classified as a measure of chremastistics.

¹⁶⁶ Romanow, 2003, op. cit., p. 6.

asset because they usually translate into increased output. But as will be discussed in Part 2, there are economic, social, cultural, and environmental costs associated with increased output. Longer work hours may diminish our quality of life. The flip side of this equation, unemployment or underemployment of those who cannot find sufficient hours of work to make ends meet, lowers our standard of living and diverts precious resources from those activities that actually enhance human and social welfare.

The Genuine Progress Index treats natural, social and human capital much as conventional accounts assess the value of produced capital, accounting for depreciation and investment. From that perspective, the social assets considered in this particular report are quality of life and a secure society. Costs associated with unemployment and overwork represent a deterioration or depreciation in the value of these assets, and call for renewed social re-investment in human resources.

The GPI is not intended to replace the GDP. The GDP will undoubtedly continue to function for the purpose for which it was designed – as a gross aggregate of final market production. It is however the misuse of the GDP as a measure of progress that is being challenged here. Rather than suggesting changes or adjustments to the GDP, the GPI is presenting a qualitatively different measure – a balance sheet of social, economic, and environmental assets and liabilities that reflect the long-term flows or trends that cause our assets to depreciate or increase in value.

To do this, the GPI assesses the economic value of social and environmental assets by imputing market values wherever possible to the services provided by human, social, and environmental capital. But it should be emphasized that the monetization of that which we might normally consider "priceless" is not an end in itself. It is a temporary measure, necessary only as long as financial structures, such as prices, taxes, government budgets, and monetary incentives, continue to provide the primary cues for the actual behaviour of businesses, consumers, and governments.

Monetization is a tool to communicate with the world of conventional economics, not a view that reduces profound human, social, and environmental values to monetary terms. It is a temporary but necessary step in order to overcome the conventional tendency to undervalue the services of unpaid labour, leisure time, natural resources, and other "free" assets, and in order to make their contribution to prosperity clearly visible. That visibility, in turn, is essential to bring these values and assets more fully into the policy arena, and to include their consideration in the policy-making process.

Until that happens, these assets will be effectively ignored by policy makers. For example, the 12% nationwide decline in volunteers has never been addressed or debated in any legislature in Canada – its invisibility in our economic growth statistics and related measures of progress ensure that this major decline in social capital remains off the policy agenda of Canadian governments. The GPI assigns a monetary value to voluntary work in order to signify its actual economic value to Canadian society, to indicate how much it would cost Canada to replace these services for pay if they were to disappear, and thereby to raise the profile of volunteerism and ensure it gets the attention it merits.

Ultimately, however, it must be acknowledged that money is a poor tool for assessing the value of volunteerism, healthy forests, the loss of leisure time, the breakdown of a family, the loss of work, health, or security, or the disintegration of a community. Monetization can never adequately assign value to the non-material values that give human life meaning.

This report is also not a final product. It will continue to evolve as more data become available, as methodologies are improved, and as additional variables are included. It will continue to grow in form and content, especially in those areas where further research was not possible due to time and funding constraints.

It should also be noted that the valuations presented in this report are not precise. Any attempt to move beyond simple quantitative market statistics to the valuation of goods and services that are not exchanged for money in the market economy will provide considerable uncertainty. In many cases dollar figures are not given, and instead a review of the literature is presented. When dollar values are not assigned, it does not mean these costs are negligible. Therefore, any aggregate cost estimates presented here are conservative, as they exclude variables where monetization was not possible.

With all of its limitations, the GPI is still a small step toward measuring sustainable development more precisely than conventional accounts are able to do. It is a work in progress designed to lay the groundwork for an economy that will genuinely reflect the social, spiritual, environmental, and human values of our society.

Introduction

"People are not asked to find themselves in their work, but to lose themselves in [it]."

– Theodore Roszak¹⁶⁷

What a society measures and does not measure tells us a lot about the values and priorities of that society. Currently we do not, as a society, measure non-market transactions, the integrity of ecosystems, quality of life, or wellbeing. Our focus on measures of economic growth indicates a largely materialist value base. Fortunately, this is starting to change. As noted in the preceding section, our adherence to GDP-based measures of progress, which effectively attribute an economic value of zero to all non-market activities, sends misleading and dangerous signals to policy-makers. Until our core measures of progress, and the policy signals they send, include key information about our wellbeing, policy cannot, almost by definition, reflect broader social values and interests.

In particular, our current measures of progress ignore major aspects of human capital that helped create the economic system in the first place, such as education, skills, and human health. In 1995 the World Bank started to include estimates of human capital in measuring a country's wealth, with its first rough estimates indicating that 59% of the wealth in developed countries was found in their human and social capital. Natural resources accounted for 25% of wealth, and manufactured capital for just 16%.¹⁶⁸

A sound economic system that values work must also value the human, natural, and social capital on which all work is based. For instance, the GDP counts the increase in work hours as growth but ignores the negative effects that excess work hours can have on human health and the strife that it can bring to families. In fact, chronic health problems that are associated with work stress are counted within the GDP as *contributions* to economic growth, instead of costs.

According to International Labour Organization Director-General, Juan Somavia:

"The number of hours worked is one important indicator of a country's overall quality of life.... While the benefits of hard work are clear, working more is not the same as working better."¹⁶⁹

It is precisely because work hours are a key indicator of overall quality of life that this indicator is a core component of the Nova Scotia Genuine Progress Index.

Most of the creative research relating work time issues to quality of life was undertaken 20-30 ago, and just needs to be dusted off. Ground-breaking books and studies on the 4-day workweek, costs of unemployment, the redistribution of work hours, and the effects of work on health and

¹⁶⁷ Roszak, Theodore. 1979. *Person Planet: The Creative Disintegration of Industrial Society*. Anchor Press. New York. p. 215.

¹⁶⁸ Cited in Crittenden, op. cit., 2001, p. 71. Original source is World Bank, *Monitoring Environmental Progress*, Washington D.C., 1995.

¹⁶⁹ Quote excerpted from ILO, op. cit., 2002, p. 1.

family were written in the 1970s and early 1980s. At that time, productivity gains were widely seen as translating into increased leisure time, and there was a desire to be creative and experimental in exploring the impacts of reduced working time on human potential. Like other pioneering initiatives, this experimentation flourished in Europe where longer vacation time, shorter workweeks, and family leaves eventually made their way into legislation.¹⁷⁰ But at the same time, with very few exceptions, these issues literally disappeared off the political and economic agenda of North America, and have not been seriously considered by governments for 20 years.

In this three-part report paid work is examined from a broader perspective of genuine progress and human wellbeing.

PART ONE: WORK HOURS AND THE CHANGING NATURE OF WORK

Where data permit, Part 1 of this report investigates the quantitative trends in paid work hours over the last several decades, particularly in Nova Scotia. For comparative purposes, trends are also considered for Canada as a whole, and in some cases for the United States and Europe.¹⁷¹ Part 1 also considers trends in types of work (i.e. part-time, full-time, shift work, casual etc.) and trends that have been taking place within the domain of work itself. For instance, during the last century the ways in which work is done have changed enormously, requiring exploration of factors such as the role of technology and automation. In addition, over the last 100 years our economy has shifted from being predominantly manufacturing-based to being service-based. This shift has had a profound impact on the nature of work.

Part 1 analyzes these trends and others against the backdrop of measuring real progress and wellbeing. How, for example, do the trends of recent decades affect the distribution of wealth and leisure in our society? As a result of the dramatic changes in the hours and nature of work, are we better off today than we were 25, 50 or 100 years ago?

Particular emphasis is placed on an examination of paid work hours within the context of “time use,” which in turn is a remarkable window on quality of life. Previously unpublished data will be presented here which sheds light on trends in leisure time and total work hours (both paid and unpaid) of dual- earner parents.

Four components or indicator sets constitute the GPI time use variables: paid work, unpaid household work, voluntary work, and leisure time. Quality of life is partly determined by the way these patterns of time use are balanced. GPI Atlantic has already produced major reports on the economic value of unpaid household work and voluntary work. This report explores paid work, and a future report will summarize trends in free time.

¹⁷⁰ Similarly, Denmark was the first country to invest in wind energy, long before the Kyoto Accord kindled more widespread interest in renewable energy sources. As a result of this foresighted investment, the Danes are today at the leading edge of the global market in this expanding industry. While Canada compares itself increasingly to its southern neighbour, it actually has much to gain by looking east, across the Atlantic, for innovative and successful initiatives on both work-time issues and environmental protection.

¹⁷¹ International comparisons have been made with great caution, because the data sources vary considerably, as do definitions and survey questions.

PART TWO: COSTS OF OVERWORK AND UNDERWORK

Work is an integral part of our lives, and is inextricably linked to most other aspects of our wellbeing and our world. It has implications for our families and friends, our communities, our personal health and wellbeing (physical, emotional, and psychological), and the health of the earth's ecosystems. It has global implications for human rights issues, the distribution of leisure time, and equality. Part 2 of this report examines costs – which are invisible in our current system of accounting – associated with the trends in work. For instance, what are the costs associated with unemployment and underemployment, or where skills and talents are underutilized? What are the health costs associated with long work hours, or no work hours? Is the changing nature of work taking a toll on family life or community life, and if so, what is it costing us? If paid work hours increase at the expense of leisure or voluntary work, what is the opportunity cost associated with the loss of leisure time or volunteer activity? These and other questions will be explored both in Part 2 of this report, and in other GPI time-use reports.

PART THREE: THE FUTURE OF WORK

Part 3 presents the perceived benefits and obstacles to shorter work time from the perspective of employees, employers, and unions. The various forms of new work arrangements are discussed, accompanied by examples that demonstrate how paid work could practically be reconfigured in our lives to take wellbeing and quality of life into account. Evidence will be drawn from European countries that have successfully implemented shorter working hours. Canadian union and corporate examples will also be discussed.

The job creation potential of reduced work time and reduced overtime will also be explored, with special attention paid to Nova Scotia.

Finally, Part 3 will explore ways in which genuine progress could be made in the area of paid work. Policy recommendations are discussed, as well as the areas where more data are required.

Important Note to the Reader:

The subject of this report is paid work hours and, by extension, the conditions under which employees labour. Currently economic activity and related policies revolve around work and production rather than the conditions of work. The clear purpose of work in our society is production – for either private or public good, with both employers and government concerned about increasing productivity and competitiveness. However, in his seminal book *Person Planet*, Theodore Rozsak argues there is much more to work than this. He also argues that it is not enough to make paid work more bearable. Altering the atmosphere and incentives of work still does not place the whole and unique person at the centre of economic life, he argues.

We have to be careful in this report not to do what Rozsak describes as "blunting the edge of discontent."¹⁷² He argues that "job enrichment" and "job restructuring" should not be seen as the ultimate solution to problems such as absenteeism and high turnover, which are currently

¹⁷² Rozsak, 1979, op. cit., p. 212.

obstacles to discipline and productivity in the workplace. The worker, according to Rozsak, should not be treated as a mere means to an end – namely a more productive workplace.

In Rozsak's ideal world, and indeed from a Genuine Progress Index perspective that is broader than economic production alone, "persons not personnel" would be able to develop their gifts, or their "calling." He writes: "If only we were given the chance to be in our work with the full force of our personality, mind and body, heart and soul... what a power would be released into the world! A force more richly transformative than all the might of industrial technology."

Rozsak recognized in 1979 that whether one answers one's "calling" makes no difference to the profit and loss statements currently referenced to assess how "well off" a company or society is. "It does not show up in the economic indicators. So they sweep it out of sight and continue to work us as personnel, not persons."¹⁷³ This too represents the perspective of the GPI, which defines and measures wellbeing according to broader parameters than indicated by the economic growth statistics alone. While it is nearly impossible to quantify the value of such fulfillment, this clearly does not mean it is negligible.

In this study, as in Rozsak's analysis, the worker is therefore seen as a whole person, not simply as a commodity whose labour power is traded, or as a means to a profitable end. However, given the language conventionally used to assess paid work and progress, it is sometimes difficult to meet Rozsak's criteria in this report. Workers are inevitably referred to according to production categories, or by the type of work they do – such as clerical or manufacturing workers, for instance, or as part-timers, moonlighters, or the unemployed.

In her illuminating book *Whose Brave New World*, Heather Menzies warns of the dangers of adopting the official language of the discourse.¹⁷⁴ Menzies tells of the time she spent interviewing women who had lost their jobs operating the telephone exchange in Ste. Agathe, Quebec, after Bell Canada computerized their work in the 1980s. When Menzies finally sat down to write their stories using the "official language," she found "the women's humanity disappeared" and that she had "translated them from historical agents with a moral claim arising from their lived reality into objects of the discourse's reality... they became data in the never-never land of futures projections; their reality was gone."¹⁷⁵ We run into this very danger in this report.

For the purposes of this report, official data sets were used wherever possible, and first hand accounts of workers' experiences were not sought. As a result, it may be even more difficult at times to place a human face and a lived context on the data presented than in studies like Menzies's, which relied on interview materials. Therefore, it is essential to remind the reader at this introductory stage, that the data are not disembodied numbers but represent actual human beings, "with lives, families, aspirations, dreams and a stake in things."¹⁷⁶

¹⁷³ Ibid. p. 218.

¹⁷⁴ According to Menzies: "Today we don't hear too much about people being fired, laid off, and losing the identity they'd spent a lifetime developing. We hear of 'downsizing,' 're-engineering' and 're-organizing' for flexibility. Jobs are shed, jobs are outsourced and people are released from employment, sometimes even de-hired and unassigned" Menzies, Heather. 1996. *Whose Brave New World? The Information Highway and the New Economy*. Between the Lines. Toronto. p. 17.

¹⁷⁵ Menzies, 1996, op. cit., p. xiv.

¹⁷⁶ Idem.

PART ONE

WORK HOURS &
THE CHANGING NATURE OF
WORK

Chapter 1. Introduction

Douglas Sims had been a dedicated Wal-Mart employee. For 11 years he worked in receiving in the company's store in Plainview, Texas. In 1998, after working a gruelling 48 hours in just three days, he was carrying a television set out to a customer's car when he dropped dead of a heart attack. Of course his family was shocked and, like most working class families struggling to get by, was unprepared for the loss and ensuing financial difficulty. But Wal-Mart wasn't as unprepared. The *Houston Chronicle* reported that Wal-Mart had taken out life insurance in Douglas Sims' name prior to his death, and pocketed a policy worth \$64,000. His family got nothing.

According to the *Houston Chronicle* article, Wal-Mart has taken out life insurance policies on the lives of 350,000 of its employees in the U.S., where the company employs (both full and part-time) one million people.^{177 178} The practice is now the subject of a class action law suit stating that Wal-Mart is not entitled to benefit from the death of its employees and that the money should go to the deceased workers' estates.

But Wal-Mart isn't alone in this practice. It is estimated that between five and six million workers in the United States have life insurance policies taken out in their name by at least 25% of the country's biggest and richest companies. But these days, lawsuits about life insurance aren't the only thing Wal-Mart has to worry about. Employees, who say they were pressured to work overtime, have also sued the retail giant for unpaid overtime in 30 U.S. states. The workers claim that not only were they not paid time and a half but their overtime hours were also erased from their time records, so that Wal-Mart wouldn't be obligated to pay the overtime premium. The workers also claim that if they refused the unpaid overtime, they were threatened with demotions, fewer hours, and docked pay.¹⁷⁹

A growing body of evidence indicates that these are not isolated examples. This kind of exploitation is more widespread than before, and for a variety of reasons, many workers are finding themselves in no position to fight back.

Jobs are becoming more insecure. Since 1997 alone, when Statistics Canada began collecting information on whether jobs were permanent or temporary, the number of people employed in temporary jobs in Canada has increased by 12%.¹⁸⁰ In the same time period, from 1997 to 2001, Nova Scotia has experienced an increase of 8%.

¹⁷⁷ The Houston Chronicle. April 15, 2002. Available from www.walmartwatch.com/info/. Accessed December 12, 2002. The total number of U.S. employees taken from Wal-Mart's official Web site <http://www.walmart.com>.

¹⁷⁸ Wal-Mart has approximately 20,000 employees in Houston, Texas alone. Kaplan, David. "Shopping for jobs at Wal-Mart." *The Houston Chronicle*. May 16, 2002. Available from <http://www.chron.com/cs/CDA/story.htm?special/chron10002/1410558>. Accessed October 21, 2003.

¹⁷⁹ The Associated Press. "Jury: Wal-Mart Forced Employees to Work Unpaid Overtime." December 19, 2002. Available from <http://www.newsday.com/>. Accessed December 20, 2002.

¹⁸⁰ A permanent job is defined by Statistics Canada as one that is expected to last as long as the employee wants it, given that business conditions permit. There is no predetermined termination data. A temporary job, on the other hand, has a predetermined end date or will end as soon as the specified project is completed. Statistics Canada, 1997.

Part-time employment is also on the rise. In 2001, 18% of those employed in Canada were working less than 30 hours a week, up from 3.8% in 1953, peaking at nearly 20% in 1993.¹⁸¹ But for many part-timers, part-time work isn't what they want – it's just all they can find. Statistics Canada calls people who would rather be working full-time, "involuntary" part-timers. Statistics Canada has been collecting data on reasons for part-time work since 1976 but revisions were made to the definition and questionnaire in 1997, creating a break in the series.¹⁸² As a result, subsequent data (1997-2001) are not comparable to earlier data. However, comparisons can be made within each series. Thus, between 1976 and 1995, the proportion of involuntary part-timers, as a percentage of all part-timers, nearly tripled, increasing from 10.6% to 31.5%. In 1997, using Statistics Canada's revised definitions, the proportion of involuntary part-timers was 31.1%. By 2001 it dropped to 26%.¹⁸³

There are also many more people unable to get by on one job. Between 1976 and 1996 the number of moonlighters in Canada tripled, most of them working in the service sector.^{184 185}

At the same time that there aren't enough permanent, secure, and full-time jobs to go around, the percentage of people working long hours has risen. Over the last twenty-five years (1976-2001) the percentage of full-time employees in Canada working 50 or more hours per week has increased from 13% to 18%. In 1976, one-quarter of those working full-time worked more than 41 hours a week. By 2001 this had increased to nearly a third.

This growing polarization in the amount of time people spend working is partly responsible for the widening gap between rich and poor in Canada. A recent report published by the Canadian Centre for Policy Alternatives, titled *Rags and Riches: Wealth Inequality in Canada*, uses data from Statistics Canada's 1999 Survey of Financial Security. It found that the average wealth of the richest 10% of Canadian households more than doubled in the past 30 years, from \$442,468 in 1970 to \$980,903 in 1999 (in constant 1999 dollars).¹⁸⁶ Over the same time period the poor got poorer, losing an average of \$2,355 per family unit, and found themselves deeper in debt.

Labour Force Update. Hours of Work. Vol. 1, no. 2. Catalogue no. 71-005-XPB. Minister of Industry. Ottawa. pp. 40-41.

¹⁸¹ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

¹⁸² Before 1997 respondents who usually worked fewer than 30 hours/week in total in *all* jobs were asked their main reason for working part-time, and were considered underemployed or "involuntary" part-timers if they worked part-time because they could not find a full-time job. In 1997, the LFS questionnaire was redesigned and respondents who worked part-time in their *main* job were asked why they do so. If they do not work full-time because of "business conditions" or because they "could not find full-time work" they are defined as underemployed or involuntary part-timers. Explanation is taken from Statistics Canada. 1997. *Labour Force Update. Hours of Work.* Vol. 1, no. 2. Catalogue no. 71-005-XPB. Minister of Industry. Ottawa. p. 17.

¹⁸³ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue No. 71F0004XCB. Minister of Industry. Ottawa.

¹⁸⁴ Officially, moonlighters are called "multiple job holders." A moonlighter is defined by Statistics Canada as someone who holds more than one job. Statistics Canada, 1997, op. cit., p. 39.

¹⁸⁵ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

¹⁸⁶ Kerstetter, Steve. 2002. *Rags and Riches: Wealth Inequality in Canada*. Canadian Centre for Policy Alternatives. Ottawa. Available from <http://www.policyalternatives.ca>. This information was extracted from the Press Release dated December 12, 2002.

Statistics Canada found that the increase in earnings inequality that took place in the 1980s and 1990s occurred in conjunction with changes in the distribution of annual and therefore weekly hours worked. At the same time that the standard workweek (35-40 hours) has been shrinking, the proportion of workers working long hours (50 hours or more) and short hours has risen. Statistics Canada analyst, Rene Morissette, found that inequality in weekly earnings was tied to three factors: 1) The decline in the real hourly wages of young workers. 2) The decline of the standard workweek coupled with hours polarization. 3) A growing tendency for workers with high wages to work longer hours and for lower-wage workers to work below-average hours.¹⁸⁷

Morissette partially attributes this third point to the tendency of firms to use part-time employment for low-skilled workers in order to reduce fixed labour costs, while at the same time increasing hours for high-skilled (and high-paid) workers.¹⁸⁸

In addition to these trends there is also a disturbing and connected trend in the shortage of work. Over the last several decades in Canada the unemployed have been on a roller coaster ride. In the 1950s unemployment averaged 4.2%.¹⁸⁹ Unemployment rates steadily increased each decade before reaching an all-time high (except for the Depression) of 11.4% in 1993. In February, 2004 the official unemployment rate in Canada stood at 7.4%.¹⁹⁰ In Nova Scotia it was 9.4%.¹⁹¹

But this number excludes a growing number of "hidden" unemployed. Official figures only include those who actively sought work at some point during the four weeks prior to the survey and do not include "discouraged" workers – those who want work but did not seek work in the previous four weeks – and those who hold part-time jobs but who want full-time jobs (involuntary part-timers). In 2000, for instance, the official unemployment rate in Canada was 6.8%. If these two other groups were added to the official figures, the unemployment rate would have been closer to 10%.¹⁹² In Nova Scotia the official unemployment rate in 1997, for instance,

¹⁸⁷ Morissette, Rene. 1995. *Why has Inequality in Weekly Earnings Increased in Canada?* Statistics Canada. No. 80. Ottawa. p. 5.

¹⁸⁸ Ibid. p. 6.

¹⁸⁹ Battle, Ken and Sherri Torjman (eds). 1999. *Employment Policy Options*. Caledon Institute of Social Policy. Ottawa. p. 5.

¹⁹⁰ Most recent unemployment figure from Statistics Canada. Available from <http://www.statcan.ca/start.html>. Accessed February 19, 2004.

¹⁹¹ Nova Scotia Department of Finance. Available from <http://www.gov.ns.ca/finance/statistics/agency/index.asp?p=4>. Accessed March 20, 2004.

¹⁹² Definitions of unemployment vary. The official Statistics Canada definition is as follows:

Unemployed persons are those who, during reference week: a) were on temporary layoff during reference week with an expectation of recall and were available for work, or b) were without work, had actively looked for work in the past four weeks, and were available for work, or c) had a new job to start within four weeks of reference week, and were available for work. The unemployed are defined by their availability for paid work, and their active search for paid work. The unemployment rate is therefore expressed as a percentage of the labour force, which includes all those working for pay and actively looking for work. However, Statistics Canada has recognized that this definition does not distinguish between those unemployed for long periods and those experiencing very short spells of unemployment between jobs. The former is likely a better indicator of job and financial insecurity than the latter. The official definition also excludes many people who want jobs, but have become so discouraged that they have given up looking for work. It also excludes estimates of underemployment, including the extra hours that involuntary part-time workers would work if they could find full-time employment. To provide this information, Statistics Canada has recently developed "supplementary measures of unemployment" that expand the official definition. Statistics Canada's supplementary unemployment rates provide measures of: 1) long-term

was 12%. Once discouraged workers and involuntary part-timers were added in, the real unemployment rate was closer to 19%.

The official figure also disguises the fact that long-term unemployment is on the rise. The OECD defines long-term unemployed as those who have been continuously without work for at least one year. In Canada the proportion of those unemployed for 52 weeks or more in 1976 was 3.8%. This soared to 16.3% in 1996 and then dropped to 9% in 2001 – still more than double the levels of 25 years earlier.

In OECD countries in general, 30% of total unemployment was long-term in 2000. In some countries such as Italy, Greece, Belgium, Ireland and Germany, 50% of total unemployment was long-term, while in New Zealand, Iceland, Canada, United States, Norway, Korea and Mexico less than 20% were unemployed long-term.¹⁹³

Growing inequality in Canada can partly be blamed on the kinds of work available. Some labour market analysts refer to part-time, casual, temporary, on-call work as "precarious" jobs occupied by the growing ranks of "peripheral workers."¹⁹⁴ Bureaucrats refer to this group of workers as "the contingent labour force." In her book *Whose Brave New World? The Information Highway and the New Economy*, Heather Menzies calls this kind of work "work on the fringes." She says fancy language is used to hide the true meaning of who these people are: "the human equivalent of post-it-notes: marginal add-ons used briefly, then discarded, without a sound and without

unemployment – the proportion of the labour force unemployed for more than one year; 2) the proportion of the labour force unemployed for more than three months; 3) what Canadian unemployment rates would look like if the stricter U.S. definition of unemployment were used; 4) "discouraged searchers" – people not looking for work because they believe no jobs are available (this rate is particularly high in Newfoundland and in areas like Cape Breton); 5) people who are not officially included in the labour force because they are waiting to start a new job. This includes a) those not looking for work because they are awaiting replies from prospective employers; b) those not looking because they were waiting to be recalled to a former job; and c) people with jobs lined up to start in more than four weeks. 6) involuntary part-timers, or those who are "underemployed" and want to be working longer hours. These are people who would be working full-time if full-time work were available. Statistics Canada expresses this measure in terms of full-time job equivalents, to reflect the quantity of hours lost to underemployment.

Categories (1) and (2) above are smaller than the official unemployment rate, because they only count people who are in the labour force and actively looking for work, and are already included in the official unemployment statistics. Category (3) is also smaller than the official Canadian rate, because the U.S. definition of unemployment is even stricter than the Canadian one. Categories (4) and (5) include people not working for pay, but excluded from the official unemployment counts because they are not officially recognized as being in the labour force. Category (6), by contrast, counts some people who are normally counted as employed – involuntary part-timers – but who are actually underemployed. Only those hours lost to unemployment, expressed as full-time job equivalents, are included in these supplementary unemployment calculations. Finally, Statistics Canada provides a comprehensive measure of unemployment that adds categories (4), (5), and (6) above to the official statistics, and thus includes discouraged searchers, those waiting to start work, and the underemployed portion of involuntary part time work. (As noted, the long-term unemployed in categories (1) and (2) are already part of the official unemployment statistics.) Statistics Canada. 1999f. "Supplementary measures of unemployment." *Labour Force Update*. Catalogue no 71-005-XPB. Vol. 3, no. 3. Summer; Statistics Canada. "Supplementary unemployment rates by age groups, sex, Canada, provinces, annual averages." *Labour Force Historical Review 2001*.

¹⁹³ OECD. 2002. *OECD Employment Outlook*. OECD. Paris. pp. 191-194.

¹⁹⁴ Not all part-time work falls under the category of casual. However, because most part-time work lacks fringe benefits, security, and has limited potential for advancement, it suggests that it is not necessarily beneficial for workers. Please see Chapter 4 for further discussion on this issue.

leaving a trace." Menzies says that when people lose their jobs nowadays, we no longer hear about them being fired, laid-off, or losing the identity they've spent a lifetime developing. Instead, she says, we are fed a steady diet of meaningless jargon and plastic words about a company that's "re-structuring" or "re-organizing" or "re-engineering" its work force.

In his book *Hollow Work, Hollow Society, Globalization and the Casual Labour Problem in Canada*, Dave Broad argues that this "major shift" in the Canadian labour market, and indeed the global labour market, is benefitting employers, not workers. Increases in the numbers of people working part-time who would rather be working full-time creates a competitive atmosphere where workers are just hanging on by their teeth, unwilling to rock the boat. For employers, this means they can keep their labour costs down because part-time wages are generally lower than full-time wages, benefits are usually minimal, if they exist at all, and having a reserve army of part-time staff at their disposal allows for greater flexibility in meeting demand without having to pay overtime. Broad notes that laying off part-timers is also cheaper than laying off full-time employees, with costly severance packages rarely required.¹⁹⁵

These trends are taking place against a larger backdrop where machines are replacing people at an unprecedented pace, so that "jobless growth" increasingly severs the once assumed connection between economic growth and employment. Since at least the 1960s there has been a vigorous debate about the impact that new technologies might have on jobs and work. Indeed, the widely held assumption of the 1960s and 1970s that improved technologies would lead to massive increases in leisure time has now been disproved. In her book, Menzies outlines some of this debate and discusses the views of various critics about the indiscriminate use and blind acceptance of new technologies. In the U.S. in the 1960s, she writes, physicist J. Robert Oppenheimer called for a dialogue on automation, warning of its potentially destructive effects. France's Jacques Ellul warned of a new tyranny associated with technology, and Canada's George Grant extended Ellul's ideas in a "double lament" for Canada's absorption into the U.S. commercial empire and the absorption of society within "the empire of technique." In this empire, Grant argues, values that are strictly technical – faster, more efficient and more productive – rule.¹⁹⁶

But despite these words of warning, technologies have transformed the work place and the place of the worker in it.

In the last century we have shifted from a society that produces goods to a society that produces services.¹⁹⁷ In the U.S. 90% of the workers produced goods in 1900. By 2000, 90% produced services.¹⁹⁸ Here in Canada more than 70% produced services by the mid-1990s.¹⁹⁹ The shift in

¹⁹⁵ Broad, David. *Hollow Work, Hollow Society. Globalization and the Casual Labour Problem in Canada*. Fernwood Publishing. Halifax. pp. 13-24.

¹⁹⁶ Menzies, 1996, op. cit., p. 23.

¹⁹⁷ The goods producing sector refers to both the resource sector and the manufacturing sector. It includes agriculture, forestry, mining, fishing, oil and gas, utilities, construction, and manufacturing. Everything else falls under the broad category of the services producing sector.

¹⁹⁸ In his book, *The Careless Society: Community and its Counterparts*, John McKnight writes that the very nature of human development has been defined by the work people do and the tools they use: hunters, gatherers, farmers, Bronze Age, Iron Age, Industrial Revolution. He says we have entered a new age – the Service Economy. McKnight, John. 1995. *Careless Society. Community and its Counterparts*. Basic Books. New York. p. 92.

the nature of work is so dramatic in fact that some have likened it to a revolution, not unlike the industrial one that preceded it.

Forestry, fishing and farming are goods sectors where the job losses due to automation have been significant. For instance, according to Statistics Canada, there were 1.4 million farmers in Canada in 1939. In 1995 that number dwindled to 431,000, a 70% drop.²⁰⁰ During this same time period the total Canadian labour force tripled. This trend was felt most acutely in rural provinces like Nova Scotia where, in 1881, farm families comprised approximately 70% of the population. By 1986 they made up only 2%.²⁰¹ The increasing mechanization of agriculture, including extensive use of machines²⁰² and chemicals,²⁰³ has meant fewer farmers. In 1921 there were 22 agricultural workers for every tractor and combine. By 1996, there were more tractors and combines than there were agricultural workers. The question that needs to be asked is "are farmers better off today than they were, say, thirty years ago?" Not according to Statistics Canada. Net farm income, as a share of total farm cash receipts, has dwindled from 28% in 1971 to only 6% in 1997.²⁰⁴

Among other things, this shift from goods to services, largely due to technology, has resulted in more than the disappearance of many blue-collar jobs in goods-producing industries. According to Osberg et al. (1995) the remaining goods producing jobs "usually demand more intensive work and often deliver less pay and poorer economic security."²⁰⁵ Osberg's compendium of Nova Scotia case studies chronicles many of these trends and changes and points out that full-time employment in forestry, fishing, mining, and agriculture is a thing of the past. He notes that "the crucial problem facing rural areas today is the large-scale disappearance of such traditional jobs." Here in Nova Scotia, the proportion of people working in the resource (or primary goods) sector, for instance, fell from 21% of all workers in 1951 to only 6% 40 years later.²⁰⁶ At the same time, more than seven out of every 10 workers in Canada are now working in a service sector job – some are well-paid and secure but, as Osberg points out, the new jobs are "disproportionately in sectors paying below average wages."²⁰⁷

¹⁹⁹ Osberg, Lars, Fred Wien, Jan Grude. 1995. *Vanishing Jobs. Canada's Changing Workplaces*. James Lorimer and Company. Toronto. p. 59.

²⁰⁰ Statistics Canada. 2000b. *Human Activity and the Environment*. Minister of Industry. Catalogue no. 11-509-XPE. p. 96. Between 1939 and 1995 the total Canadian labour force more than tripled from 4.1 million to 13.5 million. Farmers made up 35% of the Canadian labour force in 1926 but only 3% in 1995.

²⁰¹ Osberg, Lars, Fred Wien, Jan Grude. 1995. *Vanishing Jobs. Canada's Changing Workplaces*. James Lorimer and Company. Toronto. p. vi.

²⁰² In 1921 there were two tractors and combines for every 1,000 hectares of cropland. By 1996 there were 24. Statistics Canada. 2000b. *Human Activity and the Environment*. Minister of Industry. Catalogue no. 11-509-XPE. p. 96.

²⁰³ In 1931 approximately 254,000 tonnes of fertilizer were used in Canada. By 1996 about 17 times more fertilizer was in use. In the Canadian west, sales of chemical fertilizers increased by 370% between 1967 and 1997. The use of chemical pesticides (including herbicides) also increased. Between 1970 and 1995 the area treated with herbicides had increased 18-fold nationally. *Idem*.

²⁰⁴ Total cash receipts and operating expenses have risen sharply. *Ibid.* p. 99.

²⁰⁵ Osberg et al., 1995, op. cit., p. xii.

²⁰⁶ *Ibid.* p. 1.

²⁰⁷ *Ibid.* p. 59.

Osberg provides many examples of cases where traditional goods-producing jobs were lost due to technological change. In 1979, for example, a freezer was a Nova Scotia fish plant's major capital expenditure. By the 1990s, "rows of \$500,000 Baader filleting machines (each replacing a dozen workers, with 4% higher yield) feed the conveyor belts, which are lined with ergonomically designed trimming and packing stations."²⁰⁸

In her book, *Fear of Falling: The Inner Life of the Middle Class*, Barbara Ehrenreich investigates the decline of the blue-collar working class in the U.S. She explains how the working class in the U.S., with its once strong unions and tradition of workplace defiance, became a "burden" to employers. She describes a "brutal assault" by the corporate elite of the 1970s on not only the wages and living standards of the working class but on their very jobs.²⁰⁹ She writes that while many blue-collar workers lost their jobs and continue to do so, it was the decline in wages that contributed most to their declining living standards.²¹⁰

Here in Canada for instance, real wages in service-providing industries have declined in the last decade. Between 1991 and 2003 average hourly earnings of hourly paid employees in service industries dropped from \$15.68 to \$15.29 – a decline of 2.5%.²¹¹

Many unemployed blue-collar workers turn to jobs within the service sector, which tend to be low paying, casual, and insecure. In industrial Cape Breton, for example, many relatively high-paying blue-collar jobs in the coal and steel industries have been replaced by comparatively low-paying jobs in call centres. A growing part of the service sector is based on hiring workers only when they are needed – another trend referred to as the "casualization" of work.

The expression "McJob" is often used to describe the quality of the new and emerging service sector jobs. Albeit overly simplistic, as Osberg notes, the term nevertheless accurately describes many service sector jobs.²¹² Menzies describes this particular type of job, named after the McDonald's hamburger chain, as computer-defined. "The essence of this abbreviated form of work is that the computer does all the thinking, organizing, and planning. Furthermore, the tasks

²⁰⁸ Ibid. p. 9.

²⁰⁹ This "brutal assault" was waged in a number of ways, says Ehrenreich: (1) manufacturing jobs were increasingly outsourced to lower paid third-world labour; (2) capital was shifted from manufacturing to financial speculation; (3) workers were reduced to "labour costs"; (4) full-time work was replaced by part-time work with no benefits. Ehrenreich argues that the Reagan Administration in the early 1980s set the tone for these trends by breaking the Air Traffic Controllers Union, and by "eviscerating" the Occupational Health and Safety Administration and the National Labour Relations Board. Ehrenreich, Barbara. 1989. *Fear of Falling. The Inner Life of the Middle Class*. Pantheon Books. New York. pp. 206-208.

²¹⁰ Between 1979 and 1984, 11.5 million American workers lost their jobs because of plant shutdowns or relocations, and only 60 percent of them found new jobs. Ibid. p. 207. Ehrenreich cites the following as the source for these data: Bluestone, Barry and Bennett Harrison. 1982. *The Deindustrialization of America: Plant Closings, Community Abandonment, and the Dismantling of Basic Industry*. Basic Books. New York.

²¹¹ Hourly earnings were converted to \$2003 constant dollars for comparison purposes. Hourly wage average for 2003 based on 5 months of data. Statistics Canada. 2003b. *Survey of Employment, Payrolls and Hours*. Table 281-0031. Minister of Industry. Ottawa.

²¹² Osberg rightly points out that the view that service jobs are uniformly low wage while manufacturing jobs pay well is oversimplistic. For example, high wage jobs within the service sector exist in the knowledge-based or information-based fields. Osberg et. al., 1995, op. cit., p. 59.

are so completely determined and controlled by the computer system that job performance can be measured and monitored by the system itself."²¹³

The "McJob" or, by extension, the "McDonaldization" of work, is essentially the process by which the principles of the fast-food industry – efficiency, speed, economies of scale, predictability, calculability, and control through technology – are being applied to an ever greater number of workplaces all over the world.²¹⁴

Menzies says the increased productivity that often results from technological changes may increase economic activity, but it is not creating better employment opportunities for most people. In fact, in Canada, much of this new productivity is taking the form of "jobless economic growth" – where state-of-the-art technology is boosting production and profits while jobs are being shed.²¹⁵

Andrew Heisz of Statistics Canada summarized some of the other major changes in the labour market over the last 25 years including:

- the increasing labour market participation of women;
- the increasing educational attainment of women relative to men;
- massive increases in the human capital attainment of the workforce. The first generation of people to benefit from the 1960s expansion in post-secondary education begin to mature in the workforce, and higher education remains popular among new entrants;
- and the declining labour market participation of young people.²¹⁶

These trends and others, which will be discussed in greater detail in the following chapters, have important implications for our quality of life, wellbeing, families and communities. Are they a sign of genuine progress or are the costs associated with them outweighing the benefits?

This brings us back to the Wal-Mart employees and their dilemma. With a growing trend towards insecure, casual, marginal service-sector jobs, and with technology rendering many jobs redundant, employees are increasingly powerless to resist demands for unpaid overtime and other infringements of what were once considered employee "rights." The topics briefly outlined in this introductory section have dramatically changed the nature of work, and of employer-employee relationships. Hours of work are more polarized and less predictable, widening the gap between rich and poor. The gap also widens between a well-paid, highly educated, core workforce and a large mass of displaced blue-collar workers and low-paid contingent workers with few rights and benefits. In those circumstances, the predicament of the Wal-Mart workers and others like them is easier to comprehend.

Each of the trends outlined in this introductory section will now be examined more closely, with documentary evidence for Canada and Nova Scotia provided where possible.

²¹³ Menzies, 1996, op. cit., p. 9.

²¹⁴ Taken from *The Disenchanted Kingdom: George Ritzer on the Disappearance of Authentic American Culture*. The Sun. June, 2002. Available from <http://www.derrickjensen.org/ritzer.html>. Accessed March 27, 2004.

²¹⁵ Menzies, 1996, op. cit., p. 143.

²¹⁶ Heisz, Andrew. Senior Research Economist, Business and Labour Market Analysis Division, Statistics Canada. Reviewer comments. Received October 23, 2003.

Chapter 2. Work Hours – an Historical Perspective

"Steady employment for 52 weeks a year is a modern invention."

– Juliet Schor²¹⁷

The subject of work has occupied the writings and musings of many contemporary thinkers. Simone Weil, a moral and political philosopher who lived during the early part of the twentieth century, believed work was part of the rational soul of each person. According to Weil, work was ultimately spiritual because it was the way in which reality enters the body.²¹⁸ She wrote: "Our age has its own particular mission...the creation of a civilization founded upon the spiritual nature of work."²¹⁹ Ralph Waldo Emerson and Henry David Thoreau also contemplated the value of work in human life. Emerson believed work was an organic extension of our selves. He said, "Let it be in your bones. In this way you will open the doors by which the affluence of heaven and earth shall stream into you." And Thoreau viewed work as integral part of life but not as its sole purpose: "The really efficient labourer will not be found to crowd his day with work, but will saunter to his task surrounded by a wide halo of ease and leisure."²²⁰

In his compelling book *Critique of Economic Reason*, Andre Gorz views work as a "modern invention" which for the most part, "bears no relation to the tasks...which are indispensable for the maintenance and reproduction of our individual lives."²²¹ Roszak echoes this view and points at the Industrial Revolution as the key turning point in the history of work. Work done in traditional societies was "thoroughly dignified and [an] intrinsically engaging use of life," writes Roszak. Work after the Industrial Revolution became an "abstract commodity valued only as the means of earning the wages that purchased subsistence."²²²

The Industrial Revolution fundamentally changed the significance of time in the work process. Time keeping and the control of time became "key characteristics of an industrial system based on predictability, regularity, synchronization of production, and maximization of output."²²³

It is commonly thought that hours of work became gradually shorter over time and that the hours we typically work today are a culmination of centuries of reductions in hours worked. But, as Blyton points out, the patterns of work time are far more complex. Historical information about work hours prior to the industrial revolution points to a time when the work pattern for those who were in control of their working lives was one of "alternate bouts of intense labour and of idleness." Work hours for the medieval artisan, for instance, were probably about 8 hours a day.²²⁴ In fact, Schor notes that the eight-hour movements of the late 1800s were just trying to

²¹⁷ Schor, Juliet. 1991. *The Overworked American. The Unexpected Decline of Leisure*. Harper Collins. New York. p. 48.

²¹⁸ CBC radio. *Ideas* Program on Simone Weil. January 7, 2003.

²¹⁹ Idem.

²²⁰ Sinclair, Gabe. 2000. *The Four-Hour Day*. The Four-Hour Day Foundation, Inc. Baltimore. p. 124.

²²¹ Gorz, Andre. 1988. *Critique of Economic Reason*. Verso. London. p. 13.

²²² Roszak, 1979, op. cit., p. 213.

²²³ Blyton, Paul. 1985. *Changes in Working Time. An International Review*. St. Martin's Press. New York. p. 1.

²²⁴ Ibid. p. 16. In her book *The Overworked American* Juliet Schor also suggests that the medieval work day was not more than eight hours a day. Schor, 1991, op. cit., p. 46.

recover what their ancestors had four or five centuries earlier.²²⁵ Remarkably, as much as one-third of the medieval calendar year was holidays.²²⁶

Schor cites French historian, Jacques LeGoff, who describes pre-capitalist labour time as dominated by "agrarian rhythms, free of haste, careless of exactitude, [and] unconcerned by productivity." Based on this conception of time, LeGoff sees the pre-capitalist society generally as "sober and modest without enormous appetites, undemanding, and incapable of quantitative efforts."²²⁷ One of the important features of pre-industrial society was the absence of a culture of consumption and accumulation. Schor attributes this to both the unavailability of goods as well as the absence of a middle class with disposable income.²²⁸

In her book on work time in the U.S., Schor asks a crucial question: "Given the high value medieval people placed on a leisurely way of life, why did they accede to gruelling hours and the loss of their free time?"²²⁹ She suggests the following answer: In the medieval economy, peasants had access to land that provided them with the means to subsist and grow food. They were not dependent on the market for their subsistence. But the growth of the market, and capitalism, led to the "uprooting" of the peasantry from the land that had sustained them for centuries. "Now their survival depended on participation in the market in labour. They had become proletarians, reduced to selling time and toil." Essentially, says Schor, "capitalists were successful because workers lacked alternatives."²³⁰

In the early days of the industrial revolution men, women and children worked 11 to 16 hour days, six days a week. These gruelling hours, especially for women and children working in the textile industry, were at the time recognized as being unhealthy and led to "The Ten Hours Reformers" who, in 1802 and 1819, were responsible for several Acts of Parliament (in England) calling for a 10-hour working day. The new laws were largely ignored and unenforced until the mid-1800s, when the hours of women and children in the textile industry were brought into line with average hours worked in other industries.²³¹

According to Gary Cross in *A Quest for Time*, two important steps in the lengthening of the work day were a centralized workplace, and mechanization:

"Mechanization, especially in steam driven textile mills, provided incentives to raise working hours. Efforts to amortize costly equipment over shorter periods, attempts to reduce cost as competition increased and prices dropped, and hopes

²²⁵ Schor, 1991, op. cit., p. 46.

²²⁶ Ibid. p. 47. This was the case in medieval England, where people worked harder than their neighbours to the south. Spain enjoyed holidays totalling five months a year.

²²⁷ Idem. This characterization of the 'natural' work rhythms of pre-industrial society is also found in Cross, Gary. 1989. *A Quest for Time. The Reduction of Work in Britain and France, 1840-1940*. University of California Press. London. p. 5.

²²⁸ Schor, 1991, op. cit., p. 47.

²²⁹ Schor writes that work hours "under capitalism" reached their peak in 1850 when the average U.S. worker toiled for 3,650 hours per year—an increase of more than 50% over what they had been in medieval times. Schor, 1991, op. cit. p. 44.

²³⁰ Ibid. pp. 52-53.

²³¹ Blyton, 1995, op. cit., p. 17.

of taking advantage of new gas lighting all encouraged the lengthening of work hours."²³²

A new work and leisure ethic emerged in the nineteenth century. The traditional patterns where irregular bouts of work were mixed with leisure were replaced by structured blocks of work time separated by predictable blocks of personal time.²³³ In the early 1900s Henry Ford introduced the moving conveyor belt. For the first time machinery was used to set the pace of work.²³⁴ In exchange for this loss of control to maximize productivity, workers accepted more leisure and more money. Between 1840 and 1940 the industrial work year was almost cut in half and the ideas of an 8-hour day, a work-free weekend, retirement, and a regular paid vacation gradually emerged.^{235 236}

By the end of the nineteenth century one of the key characteristics of pre-industrial society – the absence of a culture of consumption and accumulation – had become a thing of the past. In pre-industrial society, people worked only the hours needed in order to maintain their basic living standards. But by the late 1800s and early 1900s, the availability of consumer goods motivated the desire to work longer and make more money.

Many writers have advanced the idea that a consumer culture is at the centre of an increasingly hectic life that leaves less and less free time to the individual.²³⁷ It should be noted that not all analysts agree that free time has actually decreased. While Schor documents a decline in free time, John Robinson and Geoffrey Godbey, in their 1997 book *Time for Life*, use American time use data dating back to the 1960s to argue that free time has actually increased in the U.S.²³⁸ They ascribe the prevailing sense of lack of time or "time famine" to the fact that people today are "doing more and doing things more quickly and simultaneously."²³⁹ A more detailed discussion regarding these differing viewpoints on trends in leisure time can be found in the section on Data Considerations in the Appendix of this report.

By the turn of the century, a 60-hour workweek spread over six days was typical. But by the 1960s work hours had dropped dramatically and a worker typically put in 40 hours over five

²³² Cross, 1989, op. cit., p. 7. The argument linking long hours to capital investment is also made in Schor, 1991, op. cit., p. 59.

²³³ Cross, 1989, op. cit., pp. 9-11.

²³⁴ Schor, 1991, op. cit., p. 59.

²³⁵ Annual work hours fell from a high of 3,000 to 3,600 hours in the mid 19th century to the contemporary standard of 1,650 to 2,000 hours per year. Cross, 1989, op. cit., p. 19.

²³⁶ Idem.

²³⁷ Robinson, John P. and Geoffrey Godbey. 1997. *Time for Life. The Surprising Ways Americans Use Their Time*. The Pennsylvania University Press. Pennsylvania. p. 49. Robinson's list of writers who have advanced this idea include Schor, Juliet. 1991. *The Overworked American. The Unexpected Decline of Leisure*. Harper Collins. New York; Galbraith, John Kenneth. 1984. *The Affluent Society*. Houghton Mifflin. Boston; Linder, Staffan Burenstam. 1970. *The Harried Leisure Class*. Columbia University Press. New York; Cross, Gary. 1993. *Time and Money: The Making of Consumer Culture*. Routledge. New York.

²³⁸ Every 10 years since the 1960s the "America's Use of Time Project" has collected several thousand time use diaries in the U.S., in which Americans record their daily activities on an hourly basis. Using these data, Robinson and Godbey reach different conclusions than did Schor, and they point to methodological problems in Schor's use of data. A more detailed discussion on this debate concerning trends in leisure can be found in the Appendix of this report.

²³⁹ Robinson and Godbey, 1997, op. cit., pp.123-126.

days. Since then little has changed, and standard work hours today are similar to what they were four decades ago, with only a very slight decline from an average of 40 to about 37 hours a week (Figure 1). The apparent stability of *individual* work hours in the last 40 years, however, conceals the fact that *households* are actually putting in much longer hours than before, due to the sharp increase in female employment and dual-earner families over this same period. In fact, when total work burden is considered (both paid and unpaid work), total household work hours for dual-earner families are as long today as they were a hundred years ago (Table 1).²⁴⁰ In addition, legislation often did not keep pace with the actual decline in standard paid work hours in the 20th century, and nearly half of all Canadians live in jurisdictions that have still not legislated a 40-hour workweek. For instance, Ontario and Alberta have a 44-hour standard, and Nova Scotia and P.E.I are at 48 hours.²⁴¹

Figure 1 illustrates how standard weekly hours in Canada dropped for the first 60 years of the twentieth century but then stabilized.²⁴² What the figure does not show, however, because it indicates only *average* hours, is that work hours over the last 20 years have also polarized. Thus, an increasing number of workers cannot get the hours they need to make ends meet, while a corresponding number are working longer hours, leaving the average largely unchanged.²⁴³

According to Statistics Canada, hours of work in Canada have gone through three phases: reduction (1900-1960) stabilization (1960-present), and polarization (1980-present). This general trend, however, is not unique to Canada. Trends are similar in other industrialized countries. Part 1, Chapter 3 will examine these trends in detail.

Since the 1930s productivity has skyrocketed. Between 1950 and 1970 alone, the GDP in industrialized countries grew 2.5 times and industrial production almost tripled, with similar rates of growth recorded in Australia, Canada, and the United States.²⁴⁴ It was this dramatic growth in productivity and subsequent increases in real earnings that provided momentum for the sharp decline in standard work hours over the first 60 years of the 1900s.

The general stability of the workweek since the 1960s is also related to improvements in non-wage benefits such as longer vacations, paid holidays, and health and pensions plans during this period.²⁴⁵

²⁴⁰ Colman, Ronald. 1998. *The Economic Value of Unpaid Housework and Child-Care*. GPI Atlantic. Halifax.

²⁴¹ White, Julie. 2002. "A New Look at Shorter Hours of Work in the Communications, Energy, and Paperworkers Union." *Just Labour*. Vol. 1. Toronto. pp. 41-49. White is a researcher with the Communications, Energy and Paperworkers Union. She points out that Taiwan moved from a 48-hour to a 42-hour legislated workweek and that "Taiwanese workers are now covered by more progressive legal standards on hours of work than half of all Canadian workers."

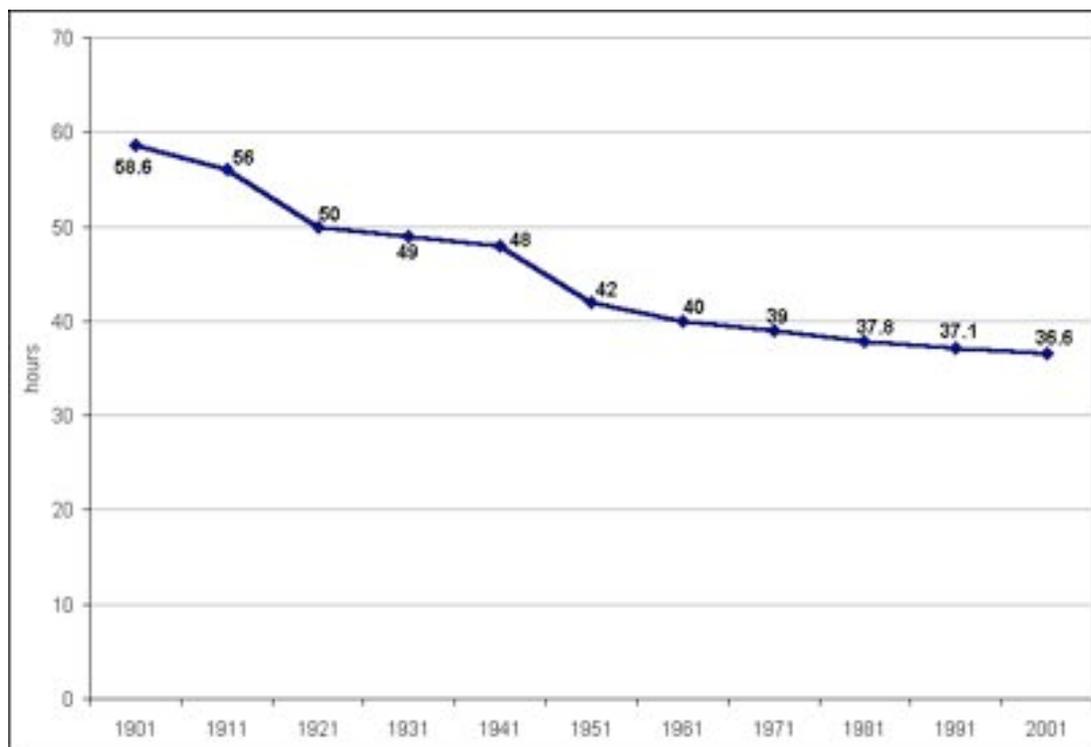
²⁴² Standard weekly hours refers to a 35-40 hour workweek – or full-time hours.

²⁴³ Hours polarization is defined by Statistics Canada as a "decline in the proportion of people working standard hours (a 35-40 hour workweek) that increases the proportion of people working both long (41 or more) and short (34 or less) hours. The stability of the average standard workweek over the last 20 years masks these changes in hours distribution. Sheridan, M., D. Sunter, and B. Diverty. 1996. "The Changing Workweek: Trends in Weekly Hours of Work." *Canadian Economic Observer*. Statistics Canada. Cat. no. 11-010-XPB. p. 3.3.

²⁴⁴ Evans, Archibald A. 1975. *Hours of Work in Industrialized Countries*. International Labour Organization. Geneva. p. 12.

²⁴⁵ Sunter, Deborah and Rene Morissette. 1994. "The Hours People Work." *Canadian Economic Observer*. Statistics Canada Cat. No. 11-010. Ottawa. pp. 4.5.

Figure 1. Standard Weekly Hours in Canada, 1901-2001.



Source: **1901- 1971:** Sheridan, Mike, Deborah Sunter, and Brent Diverty. 1996. "The Changing Workweek: Trends in Weekly Hours of Work." *Canadian Economic Observer*. Statistics Canada. Catalogue no. 11-101-XPB. p.3.3. **1981-2001:** Usual hours data from Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

Despite the fact that by the 1970s normal hours of work in most industrialized countries ranged from 40 to 48 hours, workers and their unions continued to push for shorter workweeks largely because they wanted a share in the benefits of increased productivity, more leisure and social time, and a reduction in unemployment.^{246, 247}

Despite the decline in standard full-time work hours, *total* work hours (both paid and unpaid) over the last century have not declined. Table 1 below illustrates that total work hours for men and women with children may actually have increased substantially since 1900, largely due to the participation of women in the paid work force after WWII. Historical data indicate that married women did not enter the paid workforce in any significant numbers until that time. Data are not

²⁴⁶ Industrialized countries include most of Europe, Australia, Canada, New Zealand, Japan and the United States. Normal hours of work are either legislated or determined by collective agreement or arbitration awards. According to Evans (pp. 32-33), in nearly all the countries in which relatively long normal hours of work are laid down in law, a substantial proportion of workers actually work a shorter week as a result of collective agreements.

²⁴⁷ As early as 1824, the Provident Unions of Shipwrights of the Port of London were aware that there was a connection between work hours and unemployment. At the time they resolved that: "every member of the union will not engross a greater share of work than what he can accomplish by working regular hours...and that no candle work be performed after the people on the outside have left work, so that every opportunity may be given to those out of employ." Cited in Blyton, 1985, op. cit., p. 35.

available on men's unpaid housework at the turn of the 20th century, but it is assumed to have been minimal in light of the long male paid workweek and the usual presence of a full-time non-employed female homemaker.

Table 1. Total Work Hours per week, Dual-earning Couple between 25-44 years of age with Children, Canada, 1900 and 2000 (includes both full-time and part-time workers).

	1900	2000
Male, paid work	58.6	44.8
Female, paid work	--	25.2
Male, unpaid work	N.A.	24.5
Female, unpaid work	52	42.7
Total Work Hours	110.6	137.2

Note 1: Paid work hours cited here include both part-time and full-time work. Average full-time combined hours of prime age, dual-earner couples with children are 144.6 hours, including 48.6 hours of paid work for full-time employed married fathers and 38.8 hours for full-time employed married mothers. See Part 1, Section 3.4 on Total Work Hours for a detailed analysis.

Note 2: Paid and unpaid work hours for 2000 in Table 1 are from the time diary data in Statistics Canada's 1998 General Social Survey, and it is assumed here that these results are the same for 2000. It should be noted that time diary data on paid work include work-related activity like commuting, breaks at work, and on-the-job training. Labour Force Survey data for 2000, using time-estimate methods, indicate 43.1 hours of paid work per week for full-time employed married fathers and 38.5 hours for full-time employed married mothers. When both full-time and part-time workers are included married fathers put in an average of 42.4 hours a weeks of paid work and married mothers an average of 32.9 hours, according to Labour Force Survey data.

Sources: **Female unpaid work (1900):** Historical studies cited by Schor, p. 200, footnotes 5 and 6; **female paid work (1900):** Historical data confirm that married women did not enter the paid workforce in any significant numbers until after WWII; **female paid and unpaid work (2000):** Based on Statistics Canada's General Social Survey (Time use data). Fast et al. 2001. "The Time of Our Lives." In *Canadian Social Trends*. Statistics Canada. Catalogue no. 11-008. p. 22. The figures would be higher for full-time employed single mothers – approximately 44 hours paid work/week and 30.8 hours unpaid work/week; **male paid work (1900):** Benimadhu, Prem. 1987. *Hours of Work: Trends and Attitudes in Canada*. Conference Board of Canada. Ottawa. p. viii; **male paid and unpaid work (2000):** Based on Statistics Canada's General Social Survey (Time use data). Fast et al. 2001. "The Time of Our Lives." In *Canadian Social Trends*. Statistics Canada. Catalogue no. 11-008. p. 22.

In her book, Schor describes the "time squeeze" – the feeling of not having enough time – as a characteristic of the 1980s and 1990s, especially among women with children. Schor estimated the average employed person in the U.S. worked 163 hours more per year in 1987 than 20 years earlier, counting only paid work hours. This is the equivalent of one extra month of paid work time per year, at 40 hours per week. Broken down, men were working nearly 100 more hours per year for pay (the equivalent of 2.5 more weeks) while women were working about 300 additional paid hours per year or 7.5 more weeks (at 40 hours per week).²⁴⁸

When both paid and unpaid work time is tallied, employed mothers in the U.S. put in an average of 65 hours a week, according to Schor. She says this figure is conservative and would be much higher for women with young children, women in professional positions, and women whose

²⁴⁸ Schor, 1991, op. cit., pp. 28-29.

wages are so low that they moonlight. She says that for these women, average work hours would likely be between 70-80 hours/week. She cites two other studies, one of which calculated average total work hours for employed mothers to be 87 hours a week. The other provided a range of 76-89 hours/week.²⁴⁹

According to Statistics Canada's General Social Survey, when both paid and unpaid work hours were tallied, full-time employed mothers in Canada were working 73.2 hours a week in 1998.²⁵⁰

Two studies have examined and questioned Schor's results. Barry Bluestone and Stephen Rose (1997) point out the inaccuracies that are characteristic of work-estimate surveys but conclude that the trend in work hours is "decidedly upward."

On the other hand, Robinson and Godbey's time use data do not support Schor's thesis, and lead the authors to the opposite conclusion.²⁵¹ Detailed time diaries dating back to the 1960s indicate that Americans actually gained almost five hours of free time every week. How is it that different data sets could lead to such varying results on a very basic question? If people are working longer hours and are feeling more time-squeezed, how can leisure time also be increasing? And, from a deeper social perspective, how is it possible to have a society that is overworked and underemployed at the same time?

A detailed examination of these differing uses and interpretations of data, alternative data choices, and conflicting results can be found in the Appendix of this report. Included there is Schor's response to the criticisms levelled against her use of data, and how the controversy largely waged in the U.S. also applies here in Canada.

Today, efforts to reduce work hours continue. These efforts have been most concentrated and most successful in Europe, which provides numerous examples of reduced work time options in practice. One of the leading proponents of new work schedules in Canada is Anders Hayden. In his seminal book *Sharing the Work, Sparing the Planet*, Hayden notes that working people have pushed for reduced hours since the start of the industrial revolution. He argues that, while historically their motivations have been to create more jobs and to "live dignified and healthy lives," today, these two reasons have been "joined by a powerful new motivation: the increasing recognition of ecological limits."²⁵² The idea of infinite growth is no longer an option at a time when current levels of consumption in industrialized countries have become unsustainable. The promise of the benefits of technological advance and growth have also not been realized. Hayden writes:

"Many of the employed are working longer hours, resulting in high levels of stress, poorer health, and a lack of time for the things that make life worth living. Many young people are losing hope of ever finding decent jobs. The costs of unemployment – such as

²⁴⁹ Schor, 1991, op, cit., p. 20.

²⁵⁰ Statistics Canada. 1999b. "General Social Survey: Time Use." *The Daily*. November 9, 1999. Statistics Canada. Available from <http://www.statcan.ca/Daily/English/>. Accessed April 30, 2003.

²⁵¹ Robinson, John P. and Geoffrey Godbey. 1997. *Time for Life. The Surprising Ways Americans Use Their Time*. The Pennsylvania University Press. Pennsylvania. p. 50.

²⁵² Hayden, Anders. 1999. *Sharing the Work, Sparing the Planet. Work time, consumption and ecology*. Between the Lines. Toronto. pp. 1-2.

*unemployment benefits, social assistance, and health-related expenses – drain the public treasury. Economic insecurity provides fodder for a politics of intolerance, in which immigrants, minorities, and the poor become scapegoats for society's failures. Technological advance, which once promised to bring on an "Age of Leisure," instead seems to be depositing a downsized and devastated scrap heap of humanity in its wake.*²⁵³

Equating economic growth with wellbeing and prosperity is a pervasive but dangerous illusion. As previously noted, the GDP does not present an accurate or comprehensive picture of social wellbeing, and may well send misleading signals to policy makers. Many of the negative effects of economic growth and technological advance detailed in Hayden's book – including health-related expenses and natural resource depletion – do not count as costs in our conventional system of accounts. Instead such expenses are added to the GDP, and characterized as progress.

There is no doubt that the way work is configured in our lives has changed dramatically over the last several hundred years and that these changes have produced consequences. While our conventional measures of progress chronicle the widely accepted benefits of these changes, including higher levels of income and consumption, they have less successfully documented the costs. The following section of this report will detail some of the important trends in work over the last several decades in Nova Scotia and in Canada. Where appropriate, comparisons will be made with other countries. In Part 2 we will then look at some of the hidden social costs of these trends.

²⁵³ Ibid. pp. 6-7.

Chapter 3. Trends in Work Hours

3.1 Reduction, Stabilization, Polarization.

"Good nature is, of all moral qualities, the one the world needs most, and good nature is the result of ease and security, not of a life of arduous struggle. Modern methods of production have given us the possibility of ease and security for all; we have chosen, instead, to have overwork for some and starvation for the others...there is no reason to go on being foolish forever."

– Bertrand Russell²⁵⁴

Within the last century, hours of work have gone through three phases: reduction, stabilization, and polarization.²⁵⁵ As previously discussed, the first 60 years of the 1900s saw dramatic reductions in paid work hours with standard weekly hours falling in Canada from about 60 hours in 1900 to 40 hours in 1957.²⁵⁶ By the 1960s, 70% of full-time workers worked standard hours, and many who thought the downward trend had momentum foresaw a 32-hour week on the horizon.²⁵⁷ Instead, standard hours have not changed much in the last 40 years. Figure 2 illustrates this levelling off. For all Nova Scotian and Canadian employees (both full-time and part-time), average weekly work hours decreased by 2.5 hours and 2 hours respectively in the 25-year period from 1976 to 2001.²⁵⁸ By contrast, between 1901 and 1941 weekly hours in Canada dropped by 11 hours or 18%. Likewise between 1941 and 1961, there was an additional 18% decline in just 20 years.²⁵⁹ The 5% decline evident over the last quarter century suggests work hours in Canada are stabilizing.

According to Sunter and Morissette, supply and demand-side explanations might help explain this apparent stabilization of work hours in Canada. On the supply side: Perhaps most importantly, since the mid-1970s the wages of full-time full-year workers has stagnated, and so workers have "no potential wage gains to exchange for added leisure." Workers have also been investing more time and money in education, so that when they do enter the labour market they are less likely to trade wage gains for shorter hours. In addition, Sunter and Morissette note that rather than taking their share of increased productivity in shorter work hours, workers have generally preferred to take such gains in non-wage benefits, such as vacation time, health and dental care, and pension programs, as well as in the benefits provided through mandatory programs such as Employment Insurance, Workers' Compensation, and Canada Pension Plan.

²⁵⁴ Russell, Bertrand. 1935. *In Praise of Idleness*. George Allen and Unwin Ltd. London. p. 29.

²⁵⁵ Morissette and Sunter, 1994, op. cit., p. 4.1.

²⁵⁶ In the United States the average workweek was 58.4 hours in 1901. By 1948 it had dropped to 41.6 hours. Between 1948 and 1977 work hours hardly changed. The average workweek by the end of the 1970s was 41.3 hours. Taken from White, Michael. 1987. *Working Hours. Assessing the Potential for Reduction*. International Labour Organization. Geneva. p. 4.

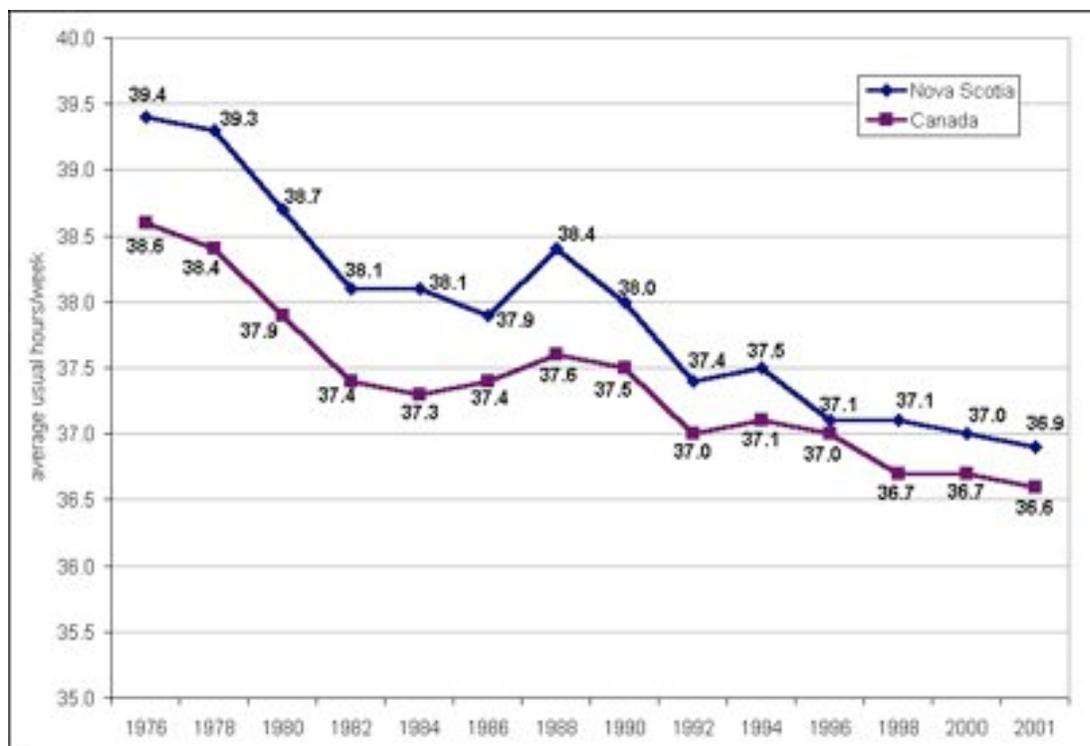
²⁵⁷ Morissette and Sunter, 1994, op. cit., p. 4.2.

²⁵⁸ Unless otherwise stated, work hours refers to "usual hours" as discussed in the Appendix of this report.

²⁵⁹ Calculations derived by author but data obtained from Sheridan, Mike, Deborah Sunter and Brent Diverty. 1996. "The Changing Workweek: Trends in Weekly Hours of Work." *Canadian Economic Observer*. Statistics Canada. Catalogue No. 11-010-XPB. Ottawa. p. 3.3.

Employers' payroll contributions will be discussed later in greater detail, but here it is sufficient to note that workers may have chosen such non-wage benefits over shorter workweeks. On the demand side: There was little incentive for employers to reduce the standard workweek further since "further reductions were unlikely to yield a proportionate increase in productivity." Because of this, employers were not likely to reduce hours without a proportionate reduction in wages, which workers would likely have found unpalatable.²⁶⁰

Figure 2. The Stabilization Phase: Average Usual Hours Worked per Week, Total Employed (full-time and part-time), Canada and Nova Scotia, 1976-2001.



Notes:

- Annual averages are calculated in the following way: Total usual hours in the reference week are divided by the total employed in the reference week to get average usual hours per week. The annual average is calculated by creating a new numerator and a new denominator. The numerator is the 12 values (or monthly averages) for average usual hours divided by 12 and the denominator is the 12 values (or monthly averages) for the number employed divided by 12. The new numerator is divided by the new denominator to give the annual average. Bowlby, Jeff. Statistics Canada. Head of Labour Force Survey. Personal communication. July 30, 2003.
- Total employed includes all employees and all self-employed workers.

Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB.

²⁶⁰ Sunter, Deborah and Rene Morissette. 1994. "The Hours People Work." *Canadian Economic Observer*. Statistics Canada. Catalogue no. 11-010. Ottawa. pp. 4.4-4.6.

Table 2. Annual Hours Worked per Person, Selected Industrialized Economies, 1980-2000.

Country	1980 (hours)	2000* (hours)	% Change
France	1,794	1,604	- 11
Germany	1,573	1,480	- 6
Netherlands	1,581	1,365	-14
Norway	1,512	1,376	- 9
United Kingdom	1,769	1,720	- 3
Spain	2,003	1,812	- 10
Canada	1,805	1,767	- 2
Japan	2,121	1,842	- 13
Sweden	1,503	1,624	+ 8
United States	1,883	1,834	- 3
New Zealand	1,820	1,817	- 0.2

* Data for 2000 were available for all countries except in the cases of France (1998), Netherlands (1997), UK (1999), Canada (1998), and Japan (1999). The ILO reports that its data on annual hours for Canada are derived from Statistics Canada's Labour Force Survey, supplemented by the Survey of Employment, Payroll and Hours, the annual Survey of Manufacturers, and the Census of Mining.

Note: Initial ILO data for annual work hours in 2000 suggested U.S. workers toiled on average 1,979 hours per year, higher than the Japanese. This figure was subsequently changed by the ILO to the figure of 1,834 hours per year, which is used in the Table above.

Source: International Labour Organization. Key Indicators of the Labour Market. Table 6b. Available from <http://www.ilo.org/public/english/employment/strat/kilm/table.htm>.

According to the ILO, this stabilization in work hours occurred in many industrialized countries. As Table 2 above suggests work patterns in the U.S. show a slight decline in annual work hours of 3%. Japan experienced a substantial reduction in work hours of about 13% between 1980 and 1999. By contrast, countries such as France and Germany have progressively reduced work hours, and in 2000 worked 230 fewer hours/year and 354 fewer hours/year (respectively) than in the U.S. In the Netherlands, which has the shortest average work hours of any industrialized country (1,365 hours per year), workers put in 469 fewer hours/year than U.S. workers (1,834 hours per year), the equivalent of 11.7 fewer full-time workweeks, or nearly three months less work per year. Reasons for this dramatic difference will be examined later.²⁶¹

At the time of the original research and writing of this report only 2000 numbers were available. However, at the time of publication, ILO had just released 2002 numbers and found that hours worked in the U.S. had declined further since 2000, dropping from 1,834 to 1,815 in 2002. More significant declines were found during the same period in Norway (from 1,376 to 1,342);

²⁶¹ Calculations derived by author from ILO data: International Labour Organization. 2002. *Key Indicators of the Labour Market*. Table 6b. Available from <http://www.ilo.org/public/english/employment/strat/kilm/table.htm>. Accessed July 4, 2002. It should be noted that at the time of publication of this report new data had been released by the ILO reporting 2002 work hours data. The Netherlands still had the lowest hours worked of all economies for which data were available. The report also found that South Korea ranked highest with 2,447 hours. International Labour Organization. 2003a. *New ILO Study Highlights Labour Trends Worldwide: U.S. Productivity up, Europe Improves Ability to Create Jobs*. Press Release. September 1, 2003. ILO. Geneva. Available from <http://www.ilo.org/public/english/bureau/inf/pr/2003/40.htm>. Accessed October 25, 2003.

Sweden (from 1,624 to 1,581); France (from 1,587 to 1,545); Canada (from 1,807 to 1,778); and Germany (from 1,463 to 1,444). Japan and the U.S. are on par in terms of the number of hours worked per year, says the ILO. South Korea reported the longest hours worked at 2,447 hours per year – 26% more than people in the U.S. and 46% more than the Netherlands, which had the lowest hours worked of all the economies for which data were available.²⁶²

In 1994, Human Resources Development Canada commissioned the Advisory Group on Working Time and the Distribution of Work to study work trends in Canada. It proposed that the slow decline in hours since the 1960s could be due to an increase in the average length of annual paid vacation.²⁶³ If the decline in average usual hours is due to an increase in paid vacation time, then the average Canadian's normal workweek may not have changed at all, since usual weekly hours are calculated on the basis of annual averages.

Since Statistics Canada does not collect specific information on annual vacation time actually taken, it is difficult to estimate the trend for this indicator. Nevertheless, there have been some estimates that provide an indication of likely trends. Since the 1960s additional paid statutory holidays have given Canadians between five and nine paid holidays a year, depending on the province.²⁶⁴ For instance, in 1994, federal employees were guaranteed nine paid statutory holidays and two weeks paid vacation after one year of service.²⁶⁵ This means that workers in 1994 could enjoy about 19 days of paid holidays – or nearly four weeks a year. This is in line with figures cited in a Conference Board of Canada report indicating that, between 1965 and 1985, workers saw their annual paid vacation increase from an average of 2.9 weeks to 4.3 weeks – resulting in a decline in the net standard workweek of three hours a week.²⁶⁶

By contrast, in most European countries the average number of paid vacation days doubled from 2-3 weeks in the mid-1950s to 4-6 weeks in the early 1980s. In the U.S. the corresponding change during this period was only from 1.5 weeks to 2.5 weeks a year.²⁶⁷ Today, the U.S. enjoys the "stingiest vacation allotment in the industrialized world." A recent Washington Post article reported that on average Americans take 8.1 days of vacation after one year of service and 10.2 days after three years. "Vacations are going the way of real bakeries and drive-in theatres, fast becoming a quaint remnant of those pre-downsized days when so many of us weren't doing the jobs of three people."²⁶⁸

²⁶² International Labour Organization. 2003a. *New ILO Study Highlights Labour Trends Worldwide: US Productivity up, Europe Improves Ability to Create Jobs*. Press Release. September 1, 2003. ILO. Geneva. Available from <http://www.ilo.org/public/english/bureau/inf/pr/2003/40.htm>. Accessed October 25, 2003.

²⁶³ In 1994, the Advisory Group on Working Time and the Distribution of Work released an important report commissioned by Human Resources Development Canada. The Advisory Group was asked to assess whether shorter working time and a more equitable distribution of work could contribute to job creation. Advisory Group on Working Time and Distribution of Work. 1994. *Report of the Advisory Group on Working Time and the Distribution of Work*. Human Resources Development Canada. Hull.

²⁶⁴ Advisory Group on Working Time and the Distribution of Work, 1994, op. cit. p. 14. For instance, most provinces had nine statutory holidays in 1994, while Nova Scotia and New Brunswick had six and PEI and Newfoundland had five.

²⁶⁵ Ibid. p. 81.

²⁶⁶ Benimadhu, Prem. 1987. *Hours of Work: Trends and Attitudes in Canada*. Conference Board of Canada. Ottawa. p. 4.

²⁶⁷ Organization for Economic Co-operation and Development. 1998. *Employment Outlook*. OECD. Paris. p. 154.

²⁶⁸ Based on Data from the U.S. Bureau of Labor Statistics. Robinson, Joe. "The Shrinking American Vacation." *The Washington Post*. July 27, 2003. p. B01.

Statistics Canada does not provide data on the average work year, only actual/usual hours/week, and so it was not possible to create a trend line for annual work hours up to the present. However, in a report for Statistics Canada, Sunter and Morissette cite figures from Frank Reid, of the University of Toronto, which show that the average annual vacation time in Canadian manufacturing rose from 2.7 weeks in 1959 to 3.6 weeks in 1979. Paid statutory holidays also increased over that time period from 7.8 to 11.1 days per year, for a total of almost six weeks a year of paid holidays and vacation.²⁶⁹ These numbers are higher than the Canadian average estimated above for 1994, which is likely due to the fact that Reid's numbers are based on manufacturing jobs, which are often unionized. In any case, it is clear that, on average, paid holidays and vacation time have increased in Canada in the last 40 years, thereby reducing the overall work year and annual hours worked.

In his 1987 Conference Board of Canada Report, Prem Benimadhu analyzed average workweeks since 1966 and attributed their decline to:

- the growth of the service industry with shorter average working hours.
- a continued decline in agricultural employment, with its very long work hours.
- the changing composition of the workforce – the increased participation of women and youth, and the rapid expansion of part-time work.²⁷⁰

The dramatic increase in female labour force participation and part-time work in the last three decades may result in declining average individual hours of paid work, but an increase in average *household* work hours, total work burden, and time crunch. In 1976, 42% of all women were employed. By 2001, 56% of all women were employed. During the same period, male employment fell from 73% to 67%. Since the early 1960s, women have doubled their rate of labour force participation. About 70% of part-time workers in Canada are women, who also constitute two-thirds of involuntary part-timers and 60% of casual workers. About 27% of all employed women in Canada work part-time, compared to 10% of men. The sharp increase in dual earner families, from 30% of all families in 1967 to 65.6% in 2000 indicates that average individual hours of work could be falling due to the sharp increase in female employment and part-time work, while total household paid work hours are climbing. When the relatively unchanging total unpaid household work burden is added, total paid plus unpaid household work hours (and consequently time squeeze) is also increasing.

In the U.S., while there is no consensus regarding the magnitude of the increase in work hours, there seems to be general agreement at least that workweeks and work years are getting longer.²⁷¹ According to Juliet Schor, both longer weekly schedules and more annual weeks of work are producing longer work years. "As long as work is available, people are on the job more steadily throughout the year. This factor accounts for over two-thirds of the total increase in

²⁶⁹ Frank Reid's estimates are cited on p. 4.5 of Sunter and Morissette. Original source: Reid, F. 1985. "Reductions in Work Time: An Assessment of employment sharing to reduce unemployment." In *Work and Pay: The Canadian Labour Market*. W.C Ridell (ed). pp. 141-169. University of Toronto Press. Toronto.

²⁷⁰ Benimadhu, 1987, op. cit., p. 4.

²⁷¹ The one exception to this is the work of Robinson and Godbey, based on time diary estimates. See discussion in the Appendix of this report.

hours."²⁷² According to Schor, the main factors that are pushing work hours up are moonlighting, more overtime, and the "shrinking vacation."²⁷³

"The number of hours worked is one important indicator of a country's overall quality of life," says ILO Director-General Juan Somavia. He adds that "while the benefits of hard work are clear, working more is not the same as working better."²⁷⁴

It is hard to argue with Somavia's point. In fact, as noted in the introduction, it is precisely *because* work hours are a key indicator of overall quality of life that they are a core component of the Nova Scotia Genuine Progress Index. However, quantifying the number of paid work hours alone paints a very incomplete picture of what is actually taking place. Figure 5 above, for example, tracks the weekly averages in hours worked in the last 25 years in Canada and Nova Scotia, but it says nothing about what is taking place within those averages, nor does it reveal growing disparities among different groups of workers. In other words, the steady or declining average may be hiding or masking other trends. In the next section of this report some of these trends will be discussed.

3.2 Hours Polarization: The Long and Short of it

While the standard workweek (35-40 hours) is still the most commonly reported workweek in OECD countries, its dominance is on the decline.²⁷⁵ This is a key characteristic of the third phase in work hours trends – polarization. Hours polarization is essentially a decline in the proportion of workers working standard hours, coupled with increases in the proportions working long and short hours.²⁷⁶

By 2001, only 59% of paid workers in Canada put in 35-40 hours per week, down from 66% in 1976. In Nova Scotia the percentage of workers working standard hours fell from 65% in 1976 to only 57% in 2001. Figure 3 shows how the proportion of people working standard workweeks reached its low point in 1996, when only 55% of paid workers in Canada and 52% in Nova Scotia worked a standard week of 35-40 hours. The overall drop, especially between 1976 and 1996, was largely due to the sharp reduction in the hours worked by youth. In this time period, the proportion of 15 to 24-year-olds working fewer than 35 hours/week more than doubled in Canada, from 26% in 1976 to 54% in 1996.²⁷⁷ In Nova Scotia the trend was similar, but even

²⁷² Schor, 1991, op. cit., p. 30. As noted previously, Schor estimated an average 163-hour increase per year, equivalent to an extra month of work every year. Two-thirds of this would be 108 hours, or about two-and-a-half additional weeks a year.

²⁷³ Ibid. pp. 31-32.

²⁷⁴ Quote excerpted from International Labour Organization. 1999. *Americans Work Longest Hours among Industrialized Countries, Japanese Second Longest*. Press Release. September 6, 1999. Available from <http://www.ilo.org/public/english/bureau/inf/pr/1999/29.htm>. Accessed July 4, 2002. p. 1.

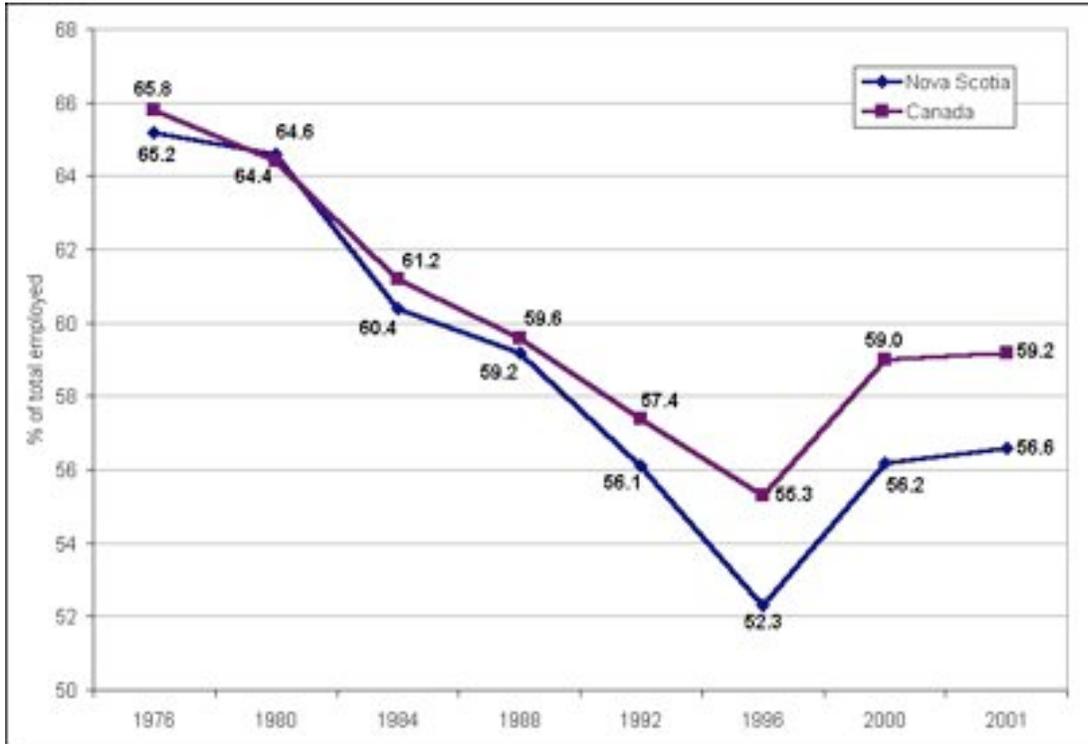
²⁷⁵ Organization for Economic Co-operation and Development. 1998. *Employment Outlook*. OECD. Paris p. 153.

²⁷⁶ According to Morissette and Sunter (1994), most of the decline in the standard workweek in Canada took place between 1981 and 1993, coinciding with the last two recessions. p. 14.

²⁷⁷ Sunter, Deborah and Rene Morissette. 1994. "The Hours People Work." *Canadian Economic Observer*. Statistics Canada Cat. No. 11-010. Ottawa. p. 4.3. While the overall trend and analysis remain the same, the figures cited above in this report text are not the same as the figures cited in the aforementioned article by Sunter and Morissette. Instead, the numbers cited here were derived from the revised data for usual hours available in Statistics Canada's Labour Force Historical Review. Every five years or so all Statistics Canada data are revised because of new census

more pronounced. In 1976, 24.6% of young people worked fewer than 35 hours a week. By 1996 this proportion had more than doubled to 58.7%. By 2001, 51.4% were working short hours, indicating that more young people have found full-time work in recent years.²⁷⁸

Figure 3. The Shrinking Middle: % of Total Employed Working Standard (35-40 hour) Workweeks, Main Job, Nova Scotia and Canada, 1976-2001.



Notes:

- Total employed includes all employees and the self-employed.
- When a respondent to the LFS holds down more than one job or business, the job or business involving the greatest number of usual hours worked is considered to be the main job. Full and part-time status and industry and occupation information available from the survey refer to the main job, as does information for employees on wages, union status, job permanency, and workplace size.

Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB.

When trying to determine trends in paid work hours there are two kinds of hours data available from Statistics Canada's Labour Force Survey – usual hours and actual hours. These are discussed in detail in the Appendix of this report but essentially, usual hours worked are defined as normal paid or contract hours, not counting overtime. By contrast, actual hours are the number

population information which is used as a benchmark. Bowlby, Jeff. Statistics Canada. Head of Analysis for The Labour Force Survey. Personal communication. July 30, 2003.

²⁷⁸ Please refer to the *Appendix* of this report for an in depth discussion about *Data Considerations*.

of hours actually worked by the respondent during the reference week, and include paid and unpaid overtime.²⁷⁹

Work hours statistics can be calculated using a number of permutations, which will ultimately affect the result. For example, since actual hours include overtime hours, trend lines constructed using actual-hours data tend to be more dramatic than trend lines using usual-hours data. To illustrate this point, it is possible to construct a trend line showing that work hours in Canada over the past 25 years has declined (see Figure 2). Using average usual hours, the proportion of employed people (including part-time and full-time) who worked 50 hours or more in 2001 was 9.6%. When we look at usual hours of the full-time employed only, we find that 11.7% worked 50 hours or more in 2001.

When actual hours, which include overtime, are used the trends are more dramatic. In Canada between 1976 and 2001 there was a 15% increase in the proportion of full-time workers clocking 50 hours or more a week in their main job from 13% in 1976 to 15% in 2001, peaking in 1996 at 18%. When we look at moonlighters only – that segment of the working population that holds down more than one job – we find that on average 41% of Canadian moonlighters worked more than 50 hours per week in 2001.²⁸⁰

The two points that are being made here are that averages mask the fact that for some segments of the working population work hours are increasing while for others they are decreasing. Second, the data can be manipulated in countless ways in order to downplay an existing trend, or to highlight a trend.

Unless otherwise stated, usual hours have been used to construct the following charts. The reasons for this are outlined in the Appendix of this report. In some cases, however, actual hours data were more useful in capturing overtime hours worked and in those instances actual hours data were used.

Figure 4 clearly shows how standard hours and short hours have mirrored each other over the 25-year period from 1976 to 2001. As standard hours have fallen during this period, short hours have risen.

In addition to there being more young people working short hours, there was also an overall polarization in hours that peaked around 1996 in both Canada as a whole and in Nova Scotia in particular.²⁸¹ In recent years, there has been a decline in this polarization of hours, and a trend

²⁷⁹ Morissette, Rene and Deborah Sunter. 1994. *What is Happening to Weekly Hours Worked in Canada?* Statistics Canada. Household Surveys Division. Analytical Research Branch. Ottawa. p. 2.

²⁸⁰ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

²⁸¹ In addition to Statistics Canada sources, other references that verify this trend in Canada include: Advisory Group on Working Time and Distribution of Work. 1994. *Report of the Advisory Group on Working Time and the Distribution of Work*. Human Resources Development Canada. Hull; Battle, Ken and Sherri Torjman, eds. 1999. *Employment Policy Options*. Caledon Institute of Social Policy. Ottawa; Benimadhu, Prem. 1987. *Hours of Work: Trends and Attitudes in Canada*. Conference Board of Canada. Ottawa.; Hayden, Anders. 1999. *Sharing the Work, Sparing the Planet. Work time, consumption and ecology*. Between the Lines. Toronto; Jackson, Andrew and David Robinson. 2000. *Falling Behind. The State of Working Canada, 2000*. Canadian Centre for Policy Alternatives.

back towards standard work hours, though the proportion of the work force working standard hours is still considerably less than it was 25 years ago. According to Statistics Canada analyst Jeff Bowlby, there were likely a number of factors influencing the movement of hours after 1996. He says there has been a trend toward more part-time work and more employment in the service sector. Gains by youth in finding work have also biased the numbers toward shorter hours. In addition Bowlby says the aging population may be working fewer hours. He stresses that the trend lines would not be the result of changes made to the definition of usual hours, coincidentally, in 1997.²⁸²

Figure 4. Short Hours Worked, % of Total Employed, Main Job, Nova Scotia, 1976-2001.



Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB.

The polarization of hours also reflects the gender division of labour, both in the market and household economies. While roughly the same proportion of men and women worked standard hours in Nova Scotia in 2001 (57% and 54% respectively), 2.7 times as many women worked short hours (1-34 hours a week) than men (37.9% vs. 14.2%), while nearly four times as many men worked long hours (50 or more hours a week) as women (17.7% vs. 4.9%).²⁸³ The situation

Ottawa; Reid, Frank and Morley Gunderson. Forthcoming. *Worksharing and Working Time Issues in Canada*. Institute for Research in Public Policy. Montreal.

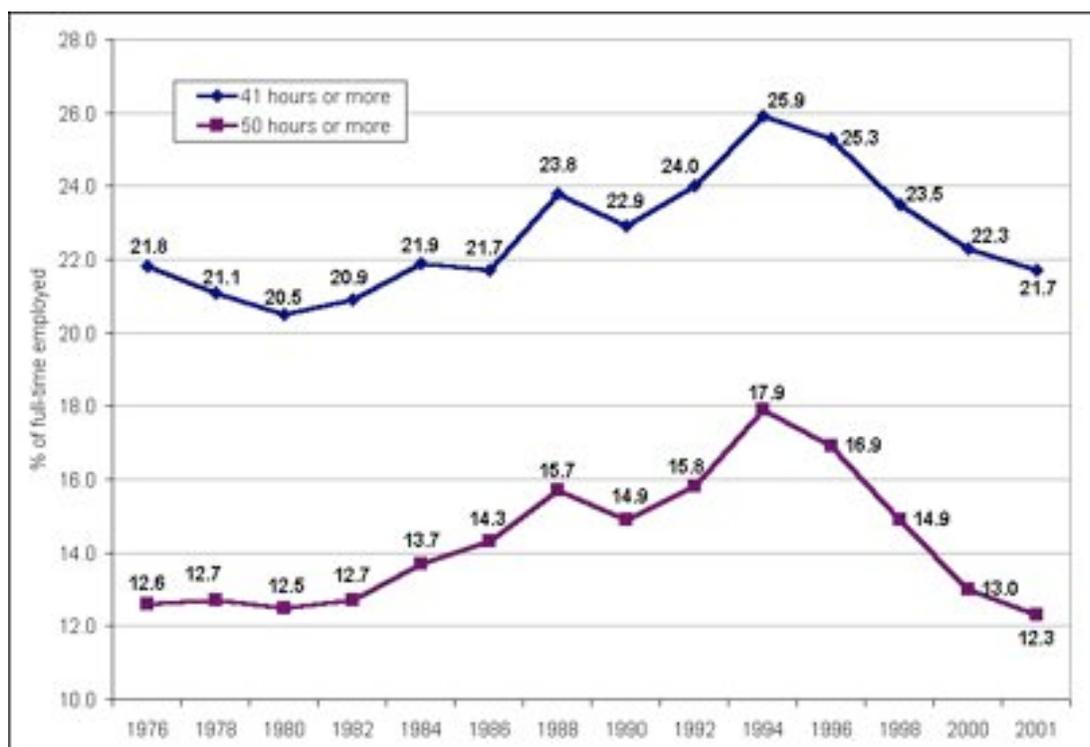
²⁸² Bowlby, Jeff. Statistics Canada. Head of Analysis for The Labour Force Survey. Personal communication. July 30, 2003.

²⁸³ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB.

was similar for Canada as a whole. This reflects the fact that Canadian women still do almost two-thirds of unpaid household work and child-care.²⁸⁴

At the same time, there was a sharp increase in both short and long hours for both men *and* women in Nova Scotia between 1976 and 2001. Figure 4 above and Figure 5 below illustrate the polarization in work hours when both sexes are combined. Figure 6 illustrates the same trends toward long and short hours for both men and women in Canada overall, with 1995 (long hours) and 1997 (short hours) as peak years.

Figure 5. Long Hours Worked, % of Full-time Employed, Main Job, Nova Scotia, 1976-2001.



Note: Full-time employed includes employees and the self-employed.

Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB.

Figures 7, 8, 9 and 10 illustrate this increase in both short and long hours by sex between 1976 and 1996, followed by a subsequent decline in non-standard hours between 1996 and 2001. By 2001, however, levels of both short and long hours for both men and women were still higher than they had been in 1976.²⁸⁵

²⁸⁴ Colman, Ronald. 2003. *A Statistical Profile of Women's Health in Canada*. GPI Atlantic. Prepared for Women's Health Bureau. Health Canada. March, 2003. Available from www.gpiatlantic.org.

²⁸⁵ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB.

Figure 7 illustrates the sharp increase in long hours for full-time employed men in Nova Scotia, particularly between 1976 and 1994, when numbers peaked. In 1994, 24.4% of full-time employed men in Nova Scotia worked 50 or more hours/week, up from 16.6% in 1976. The proportion of Nova Scotia men working long hours has fallen in recent years to 17.7% in 2001.²⁸⁶

Figure 8 presents a similar trend for women. Between 1976 and 1996, the proportion of full-time employed women working 50 hours or more per week increased from 4.1% to 8.6%. It fell in recent years to 4.9% in 2001.

Figures 9 and 10 illustrate how the proportion of employed men and women in Nova Scotia working short hours increased between 1976 and 1996 and then fell between 1996 and 2001. The proportion of employed women working short hours in 2001 was 37.9%, up from 29.7% in 1976. The numbers peaked in 1996 when more than 40% of employed women in Nova Scotia worked fewer than 34 hours a week.²⁸⁷

Figure 6. Long and Short Hours Worked in Canada: % of Total Employed (Short Hours) and % of Full-time Employed (Long Hours), Main Job, Canada, 1976-2001.



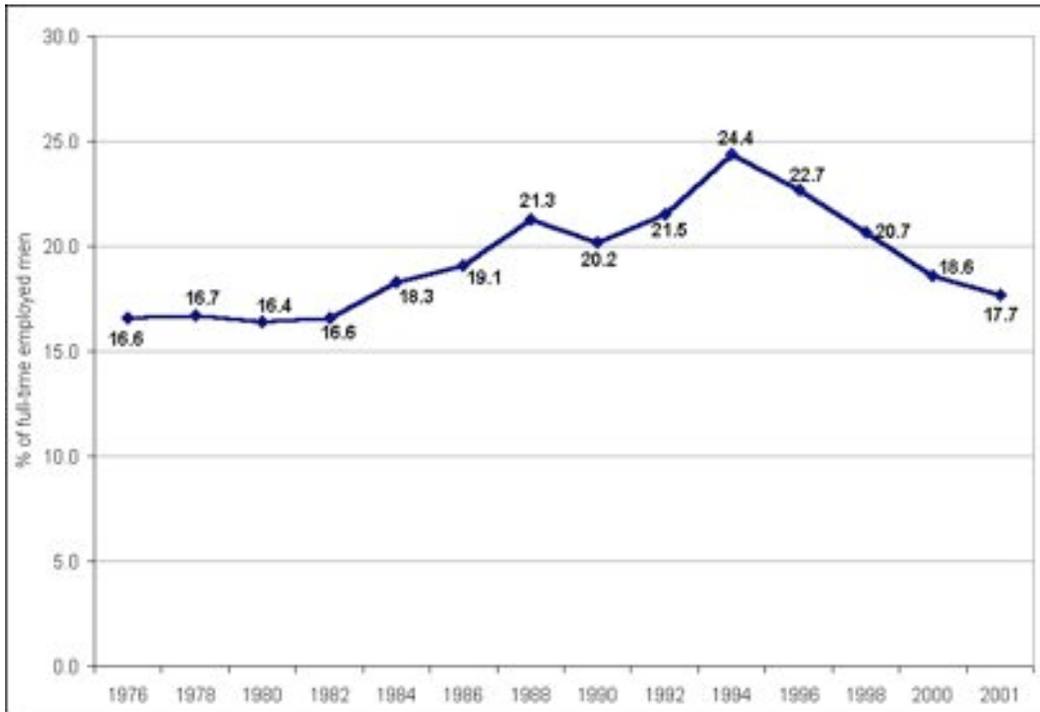
Note: Total employed includes employees and self-employed. Full-time employed include employees and self-employed.

Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB.

²⁸⁶ Idem.

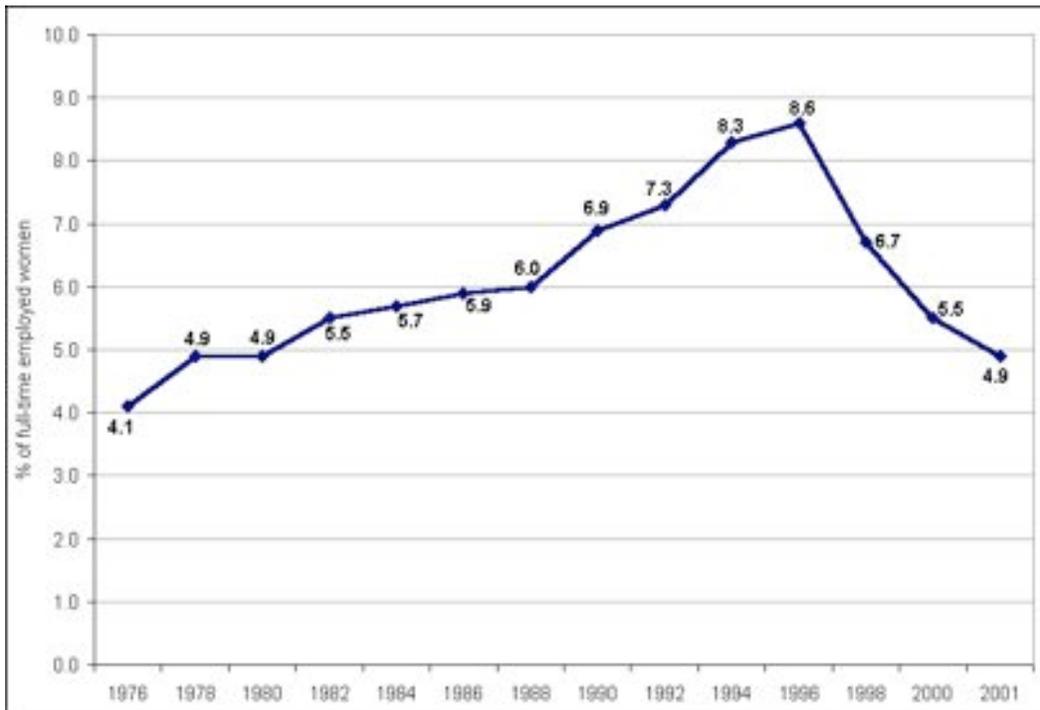
²⁸⁷ Idem.

Figure 7. Men Working Long Hours (50 or More Hours/Week), % of Full-time Employed Men, Main Job, Nova Scotia, 1976-2001.



Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB.

Figure 8. Women Working Long Hours (50 or More Hours/Week), % of Full-time Employed Women, Main Job, Nova Scotia, 1976-2001.



Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB.

Figure 9. Men Working Short Hours in Nova Scotia, % of Total Employed Men, Main Job, Nova Scotia, 1976-2001.



Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB.

Figure 10. Women Working Short Hours in Nova Scotia, % of Total Employed Women, Main Job, Nova Scotia, 1976-2001.



Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB.

In her book, *The Overworked American*, Juliet Schor found that in 1990, one quarter of all full-time workers in the U.S. spent 49 or more hours on the job each week. Of these, almost half were at work 60 hours or more.²⁸⁸

In 1976 one-quarter of all Canadian workers in full-time jobs worked 41 hours or more. In 2001 nearly one-third were working 41 hours or more, a proportion that has remained relatively unchanged since the mid-1990s (Table 3).

In Nova Scotia the proportion of full-time employed working long hours (50 hours or more) increased by 29% between 1976 and 2001 from 12.7% to 16.4%. Overall, in 1976 roughly one in five full-time workers clocked more than 41 hours a week. By 2001 nearly one in three workers was doing so. Full-time employed men saw a 35% increase in long work hours during this time period. In 2001 22.4% of men worked 50 hours or more a week, up from 16.6% in 1976. In the same time period there was also a very substantial increase in the proportion of full-time employed women in Nova Scotia who were working more than 41 hours per week, up from 12.2% in 1976 to 20.3% in 2001. Among full-time employed women, 4.5% worked 50 hours or more a week in 1976 compared with 8.4% in 2001.²⁸⁹

Table 3. Number (thousands) and Proportion (%) of Full-time Workers Working Long Hours, Actual Hours, Main Job, Canada, 1976-2001.

	1976	1986	1996	2001	% Increase: 1976-2001
41-49 hours	926 (11%)	1,114 (11%)	1,212 (11%)	1,621 (13%)	18%
50 hours or more	1,104 (13%)	1,466 (15%)	1,915 (18%)	1,905 (15%)	15%
Total full-time employed	8,549	9,938	10,834	12,345	

Notes:

- Part-time employment consists of people who usually work fewer than 30 hours a week at their main job or only job. Full-time employment consists of people who usually work 30 hours or more per week at their main or only job.
- The figures above are strictly the proportion of full-time workers working long hours. Full or part-time status in the Labour Force Survey refers to the main job. In other words, the definition of part-time or full-time is based only on the main job, not all jobs. Main job refers to the job involving the greatest number of usual hours worked. Data therefore include actual hours worked by both sexes, 15 years and over, in their main jobs. All numbers have been rounded.
- Full-time employed include self-employed and employees.

Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB.

In 2001, 31% of all workers in Canada put in fewer than 35 hours a week, up from 28% in 1976. The proportion working fewer than 30 hours increased from 16% in 1976 to 21% in 2001 (Table

²⁸⁸ Schor, 1991, op. cit., p. 30.

²⁸⁹ Based on actual hours, 15 years and over, main job. Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB.

4). This reflects sharp increases both in female employment, where the proportion of part-time work is nearly three times as high as among men, and in the percentage of youth working part-time.

Table 4. Number (thousands) and Proportion (%) of Total Employed Working Short Hours, Actual Hours, Main Job, Canada, 1976-2001.

	1976	1986	1996	2001	% Change
1-29 hours	1,555 (16%)	2,250 (19%)	2,728 (20%)	3,118 (21%)	+ 31%
30-34 hours	1,144 (12%)	1,125 (9%)	1,253 (9%)	1,516 (10%)	- 17%
Total employed	9,776	11,979	13,463	15,077	

Notes:

- Percent increase is calculated using the number of workers in each category, expressed as a percentage of the total work force employed that year. Data include actual hours worked by both sexes, 15 years and over, in main job. All numbers have been rounded.
- Total employed includes self-employed and all employees.

Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB.

In Nova Scotia in 2001, 31% of all workers clocked fewer than 35 hours a week, up slightly from 29% in 1976. Within this group, however, the proportion working fewer than 30 hours a week increased by 28% from 16% in 1976 to more than 20% in 2001.²⁹⁰ Actual-hours data indicate that short hours were most prevalent among employed women in Nova Scotia, but that over the 25-year period there was little change overall. In 1976, 27.3% of employed women worked fewer than 30 hours a week compared with 29% in 2001. Roughly two out of every five employed Nova Scotian women worked fewer than 35 hours a week in 2001 and in 1976. In 2001 one in five employed Nova Scotian men worked fewer than 35 hours a week – relatively unchanged from 25 years earlier.

As indicated above, women and youth account for a disproportionate number of short-time workers. By contrast, those working longer hours represent a more diverse cross-section of workers (Table 5).

According to a 1994 study by Canada's Advisory Group on Working Time and Distribution of Work: "The paradox of our times is that many Canadians today work long hours while many others have no work at all."²⁹¹

²⁹⁰ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB.

²⁹¹ Advisory Group on Working Time and Distribution of Work. 1994. *Report of the Advisory Group on Working Time and the Distribution of Work*. Human Resources Development Canada. Hull. p. 15.

Table 5. Who Works Long Hours in Canada?

	Comments
Men and women with university degrees	The proportion of university educated men working long hours rose from 25% in 1976 to 32% in 1995. For women with degrees it increased from 13% to 18%.
Managers in white and blue-collar occupations (men and women)	Between 1985 and 1995, there was an 8.3% decrease in the proportion of managers working standard hours, and a corresponding 8.2% increase in the proportion working more than 40 hours/week.
Blue-collar jobs that pay overtime	It is often more cost efficient for employers to pay overtime than to hire/train new workers. Due to ceilings on Employment Insurance, Canada Pension Plan, and Workers Compensation Board contributions, employer-fixed costs increase less by working existing employees overtime than by hiring new employees.
White collar jobs with a high level of responsibility	There is an increasingly competitive employment market in this area. Therefore, salaried employees are often expected to put in hours of unpaid overtime. In addition, layoffs in this area have led to increasing amounts of job insecurity, where employees are afraid to refuse overtime, and many employees are forced to take on the work of laid-off co-workers.
Service sector	While many service-sector jobs are associated with part-time, temporary, and casual work, long work hours are prevalent for: <ul style="list-style-type: none"> • women in business services and education; • men working in transportation, storage and communications, business services, educational services, and public administration.
Goods-producing sector	In general, longer hours are more prevalent for both men and women in the goods-producing sector than in the service sector.
Multiple Job Holders (moonlighters)	This group tends to have long work hours since they are working more than one job. This group has grown as a proportion of overall employment since the mid-1970s.
Workers in low-skilled, low-paying jobs	The Advisory Group on Working Time and the Distribution of Work pointed to a "cluster" of workers – usually women – who typically work long hours. They are forced to work long hours at low-paying jobs just to make ends meet. ²⁹²
Self-employed	The self-employed were three times as likely as paid employees to work more than 40 hours a week in 1995. This group has also increased in the last decade. Between 1976 and 1998 self-employment doubled in Canada. In fact, nearly 80% of jobs created in the first eight years of the 1990s were created in the self-employment sector. ²⁹³

Sources: Statistics Canada. 1997. Labour Force Update: Hours of Work. Vol. 1, No. 2. Minister of Industry. Ottawa. pp. 14-16; Advisory Group on Working Time and the Distribution of Work, 1994, op. cit., pp. 18-19.

In the U.S., Bluestone and Rose address this same paradox in their 1997 paper titled *Overworked and Underemployed: Unraveling an Economic Enigma*. Their paper begins by noting that Schor's analysis of simultaneous overwork and underwork had been challenged by critics.

²⁹² AGWTDW, 1994, op. cit., pp. 18-19.

²⁹³ Of the 775,000 total net job growth (1990-1998), nearly 600,000 were in the self-employment sector. From Lin, Zhengxi, Garnett Picot and Janice Yates. 1999. *The Entry and Exit Dynamics of Self-Employment in Canada*. Research Paper Series. Analytical Studies Branch. Statistics Canada. No. 134. Minister of Industry. Ottawa. p. 1.

Bluestone and Rose reviewed Schor's estimates of overwork and found that, while their new estimates based on longitudinal data were lower than Schor's, Americans were still working longer than they once did. Bluestone and Rose also confirmed Schor's hypothesis on the growing polarization of hours, but noted that the polarization may not only be occurring between different groups of workers. In many cases, they suggested, the *same* individuals might be working very long hours during some periods and be unemployed or underemployed during others.

*"Many Americans are both overworked and underemployed. Because of growing job instability, workers face a "feast and famine" cycle: They work as much as they can when work is available to compensate for short workweeks, temporary layoffs, or permanent job loss that may follow. What's more, while American families as a whole are putting in more time, that work isn't producing significant increases in living standards."*²⁹⁴

Bluestone and Rose found compelling evidence to indicate that many individual workers in the U.S., particularly men, went through bouts of full-time work interspersed with years of part-time work. "In both the 1970s and 1980s, more than one-quarter of men experienced a decade in which they worked at least one year of "overwork" (more than 46 hours per week) and at least one year of "underemployment" (less than 35 hours per week)."²⁹⁵

*"The reason for this overwork, ironically, turns out to be underemployment. Men are working overtime to compensate for expected job loss in the future. Women have expanded their work effort to cover for what otherwise would be a sharp reduction in family living standards."*²⁹⁶

Bluestone and Rose conclude:

*"Americans will not find a better balance between work and leisure, between earning a living and spending time with loved ones, between wage earning and civic engagement, until the economy provides long-term employment security and rising wages."*²⁹⁷

In Canada, work hours have also shifted towards the poles, with a simultaneous growth in both short and long workweeks accompanied by a growing inequality in both employment opportunities and earnings. According to the Advisory Group on Working Time and Distribution of Work: "Hours of work are increasing for some full-time workers while, for others, only part-time work is available. This increased labour market polarization raises the stakes of winning and losing in the employment lottery."²⁹⁸ Growth in part-time jobs exceeded the growth in full-time jobs in the 1990s, contributing to the growth in short hours.²⁹⁹ In 2002 the shift to part-time

²⁹⁴ Bluestone and Rose, 1997, op. cit., p. 2.

²⁹⁵ Ibid. p. 13.

²⁹⁶ Ibid. p. 14.

²⁹⁷ Bluestone and Rose, 1997, op. cit., p. 14.

²⁹⁸ Advisory Group on Working Time and Distribution of Work, op. cit., p. 15.

²⁹⁹ Manser, Marilyn E. and Garnett Picot. 1999. "Self-employment in Canada and the United States." *Perspectives*. Vol. 11. No. 3. Statistics Canada. Catalogue no. 75-001-XPE. Minister of Industry. Ottawa. p. 43. Manser and Picot do not cite a specific time period other than the 1990s.

jobs was also reported in *The Globe and Mail*. At that time, full-time jobs fell by 20,000 while the number of part-time jobs increased by 53,000.^{300, 301}

The increase in long work hours, particularly between 1976 and 1997, could be partially due to the fact that between 1989 and 1997, self-employment accounted for about 80% of net employment gain in Canada.³⁰² The self-employed typically tend to work long hours.

According to Statistics Canada labour market analyst Andrew Heisz, hours polarization may also be due in part to a large decline in seasonal employment. Some workers who used to work full-time for part of the year now work part-time full-year.³⁰³

According to Statistics Canada there were three "labour market phenomena" in the 1980s and 1990s that contributed to the overall trend in hours polarization: growth in moonlighting, growth in self-employment, and growth in school attendance coupled with growth in part-time jobs during school.³⁰⁴ These will all be discussed in greater detail later in Part 1, so they will only be touched on here.

3.2.1 Polarization and Three 'Labour Market Phenomena'

Moonlighting

Multiple job holding, or moonlighting, contributes to the increase in long workweeks when hours are measured on a person rather than on a job basis. Since moonlighters in Canada accounted for a larger share of employment in 2001 (4.7%) compared with 25 years earlier (2.1%), their tendency to work long hours contributed to the overall growth in long workweeks. However, while the incidence of moonlighting is increasing, the number of hours worked by moonlighters is not. For example, in 2001 in Nova Scotia, 65.4% of all moonlighters worked 41 hours or more per week – 25% working 41-49 hours and the remaining 40.4% working 50 or more hours. In 1976, 80% of moonlighters were working above standard hours and in 1988 the figure was 73%. This drop in the proportion of moonlighters working long hours can be attributed to the fact that moonlighters in 2001 were more likely to be younger, and holding down two part-time jobs that together may not add up to be one standard job. As a result, the influence of moonlighters on the upper end of hours distribution may have declined since 1995.³⁰⁵

³⁰⁰ Little, Bruce. "Economy Pumps out Jobs. Big fall in full-time hires is a concern." *The Globe and Mail*. November 9, 2002. p. B1.

³⁰¹ According to Andrew Heisz of Statistics Canada, there have been employment gains made by men and women between 25-54 years of age. Between 1976 and 2001, employment increased by 10% for this group, and two-thirds of this was in full-time employment. Heisz, Andrew. Senior Research Economist, Business and Labour Market Analysis Division, Statistics Canada. Reviewer comments. Received October 23, 2003.

³⁰² Manser and Picot, 1999, op. cit., p. 39; Donner, Arthur and Fred Lazar. 1999. "Restructuring Canada's Labour Market for the New Millennium." In *Employment Policy Options*. Ken Battle and Sherri Torjman (eds). The Caledon Institute of Social Policy. Ottawa. pp. 107-148.

³⁰³ Heisz, Andrew. Senior Research Economist, Business and Labour Market Analysis Division, Statistics Canada. Reviewer comments. Received October 23, 2003.

³⁰⁴ Sheridan, Sunter and Diverty, 1996, op. cit., p. 3.5.

³⁰⁵ Sheridan, Sunter and Diverty, 1996, op. cit., 3.5 discuss the changes in moonlighters' hours based on 1995 data – the most recent data available at the time. Here comparisons are made with 2001 data – the most recent data currently available. See Section 3.5 on Moonlighting for more detail.

Among employed women, the incidence of moonlighting in Canada over this time period increased by 35%. In Nova Scotia, the incidence of women holding down more than one job jumped by more than 50%.

Section 3.5 will deal with Moonlighting in Canada and Nova Scotia in greater detail.

Self-employed

The incidence of self-employment in the labour market has also contributed to hours polarization, especially in contributing to long workweeks. In Nova Scotia about 13% of working people were self-employed in 2001, compared to 11% in 1976. In Canada overall, 15% were self-employed in 2001, up from 12% in 1976.

In 2001, the self-employed in Canada were seven times more likely to work long hours (50 hours or more) than paid employees (35% vs. 5%).³⁰⁶ In Nova Scotia the situation is similar, but not quite as dramatic. In 2001, self-employed Nova Scotians were about 4.5 times more likely than paid employees to work more than 50 hours a week, and nearly three times more likely to work 41 or more hours a week.³⁰⁷

While self-employed Canadians tend to work long hours, there has also been an increase in the proportion of self-employed workers putting in short hours. According to Statistics Canada, this downward shift in hours worked has been characteristic of self-employed workers in agriculture, trade, construction, and business services.³⁰⁸

See Section 3.6 on the self-employed in Canada and Nova Scotia for greater detail.

Youth

More young people were in school in 1995 than a decade earlier, and this number continues to grow. The rising costs of university tuition and other educational expenses are pushing more of these students into the labour market. In 1976, the employment rate for full-time students in Canada was 26%.³⁰⁹ By 2001 it had increased to 38%. Similarly, 33% of full-time students in Nova Scotia were employed in 2001, up from 22% in 1976. Full-time students tend to work part-time to balance their work/school responsibilities, contributing to the increase in the proportion of employees working short hours. However, according to Statistics Canada, short workweeks have become more common among both student and non-student groups. For instance, in 1995, three out of 10 employed youths who had left school worked a short workweek – triple the proportion of 1976.³¹⁰

³⁰⁶ If long hours are defined as 41 or more hours, then the self-employed in Canada are four times more likely to work long hours than paid employees (43% vs 11%). All data are taken from Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB.

³⁰⁷ Here we are comparing the work hours of the self-employed with hours of employees. In other places in this report long hours are calculated for full-time employed persons, which includes the self-employed.

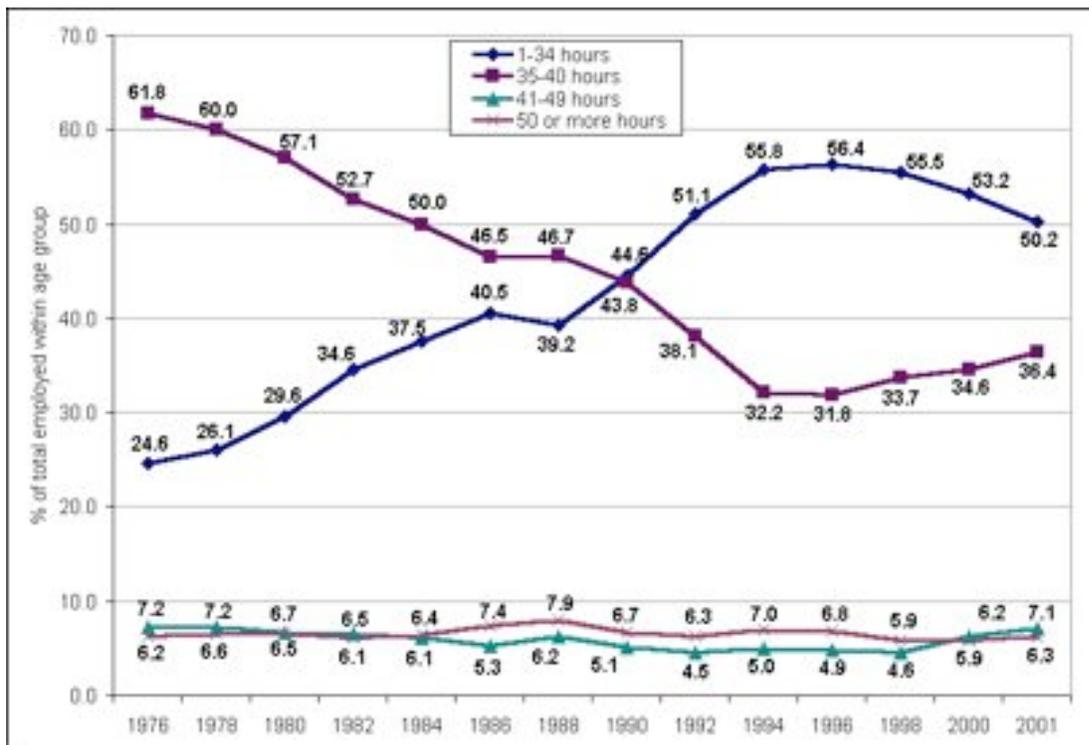
³⁰⁸ Sheridan, Sunter and Diverty, 1996, op. cit., p. 3.6.

³⁰⁹ Statistics Canada defines "employment rate" as the number of persons employed expressed as a percentage of the population. In this case, the population is 15-24 year-olds.

³¹⁰ Sheridan, Sunter and Diverty, 1996, op. cit., p. 3.6.

Figure 11 illustrates how short hours (1-34 hours per week) and standard hours (35-40 hours per week) have mirrored each other between 1976 and 2001 for youth in Nova Scotia. Short hours have increased at the expense of standard hours. In 1976, 25% of youth worked less than 35 hours per week. This increased to 50% in 2001. By contrast, in 2001, 36% of 15-24 year-olds worked a standard workweek, down from 62% in 1976. Using actual hours data, in 1976, 38% of youth worked less than 35 hours per week. This increased to 54% in 2001. By contrast, in 2001, only 27% of 15-24 year old Nova Scotians worked a standard workweek, down from 41% in 1976.

Figure 11. Working Hours of Youth (15-24 year olds), % of all employees within that age group, Nova Scotia, 1976-2001.



Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB.

Other Causes of Hours Polarization

In addition to the entry into the labour force of larger numbers of women and youth willing to work part-time, employers have their own reasons both to favour the creation of part-time work, and to work their core full-time employees for longer hours. It is often less expensive for employers to hire part-timer workers at lower wages, and without benefits, than it is to hire full-time workers. It is also cheaper to require full-time employees to work longer hours than to hire and train new staff. Because of ceilings to Employment Insurance, Canada Pension Plan, and Workers Compensation contributions, employers' fixed costs do not rise when existing full-time employees work longer hours. By contrast, new employees require employer contributions to these benefits. These factors and others will be addressed in detail in Chapter 4.

According to Statistics Canada, the increase in moonlighters, the self-employed, and youth working part-time clearly affect the overall distribution of hours and contribute to hours polarization. But they are not the only factors influencing the shift away from the standard workweek. In fact, when these so-called "special groups" are removed from the analysis, hours polarization persists.³¹¹

Analysis done by Statistics Canada shows that polarization can also be attributed to other factors:³¹²

- The shift to long hours is most pronounced among male adult workers (25 years and over), especially among employees in the 45-54 and over 55 age groups. This is consistent with the fact that managerial/professional positions with seniority are concentrated in these age groups and that these positions have been particularly associated with long work hours.
- For all employed women there has been a decline in the standard workweek, but the drop has been most dramatic for women aged 25-34 and over 55. In the 25-34 group, hours have become more polarized, while in the 55+ age group the shift is toward short hours.
- Men and women without post-secondary education have seen the largest shift into short hours, whereas university graduates, particularly men, have experienced a marked shift toward long hours.
- There has been a decline in the standard week generally for all industries (goods or service-producing). In general, there is a shift toward longer work hours in the goods-producing sector, while hours in the service-producing sector are polarizing.
- Those industries where hours are decreasing tend to be characterized by a relatively unskilled work force.
- Shorter hours have become more prevalent in occupations in the service and clerical industries, which also tend to be low paying and have lower skill requirements.

In Nova Scotia, the evidence indicates that employed men over 45 years of age have experienced a polarization in their hours over the last 25-year period (Figure 12). The decline of the standard workweek, particularly between 1976 and 1996, has been accompanied by an increase in both short and long hours for this demographic group. In 2001, 10.5% of employed men over 45 years of age were working short hours (1-34 hours), compared to 6% in 1976. Similarly, 20% were working long hours (50 hours or more) in 2001, up from 17.8% in 1976. Long hours peaked for this age group in 1996 at 24.9%. Among full-time employed men in this age group, 23% were working long hours (50 hours or more) in 2001, up from 16% in 1976. In 1976, 26.4% of full-time employed men over 45 were working more than 41 hours a week compared with 38% in 2001.³¹³

For men over 55 years of age the shift was even more dramatic. The proportion of men in this age group working standard workweeks (35-40 hours) dropped nearly 10 percentage points from 1976 to 2001 (from 62.9% to 51.2%), while hours grew more polarized. Figure 13 illustrates this

³¹¹ Ibid. p. 3.7.

³¹² Ibid. pp. 3.9-3.17. These trends are for the period 1976-1995.

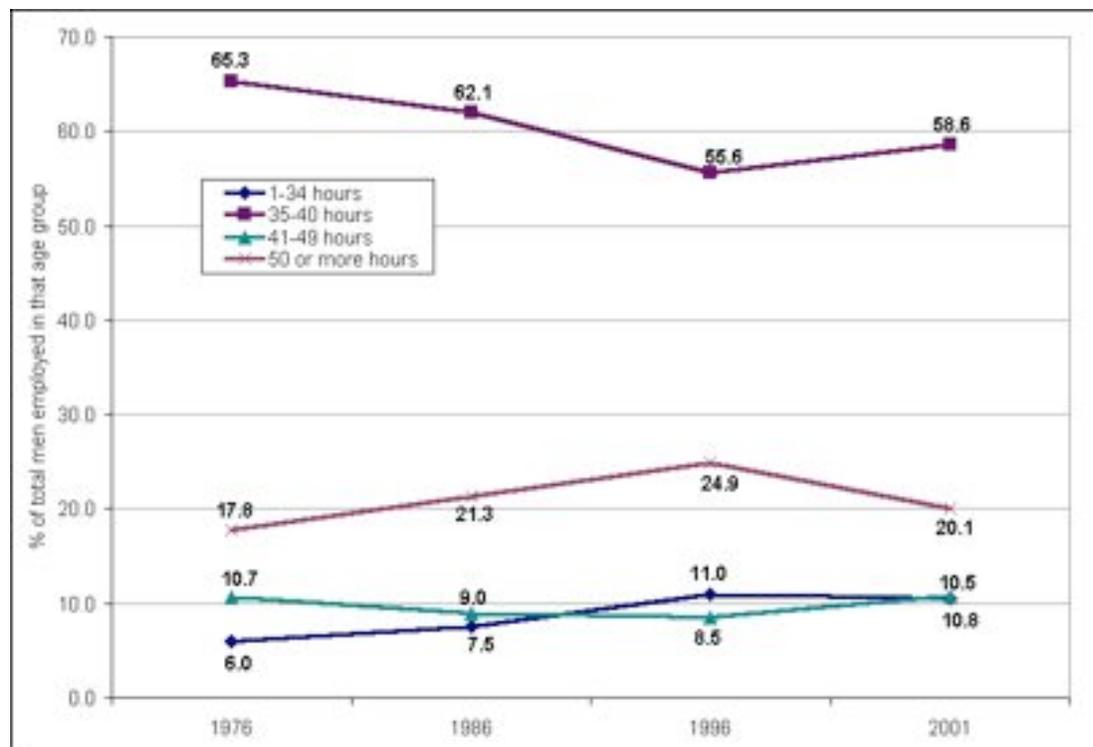
³¹³ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB.

shift. In 2001, nearly 18.8% of employed men in this age group were working short hours, compared to just 10.6% in 1976. As well, 20.3% were working long hours in 2001, up from 13.9% in 1976. In 1976, 23.4% of full-time employed men 55 years and over were working more than 41 hours a week compared with 33.4% in 2001.

Employed women between 25 and 44 years of age (Figure 14) have also seen a decline in the standard workweek (35-40 hours), from 63.4% of employed women in 1976 to 58.7% in 2001. Among these women, there was a shift towards shorter work hours (1-34 hours/week) from 28% in 1976 to 31% in 2001. Among full-time employed women in Nova Scotia in this age group, the incidence of long hours (50 or more) increased sharply from 4.6% to 8% in this time period. In 1976, 12.3% of this group worked more than 41 hours a week compared with 20% in 2001.

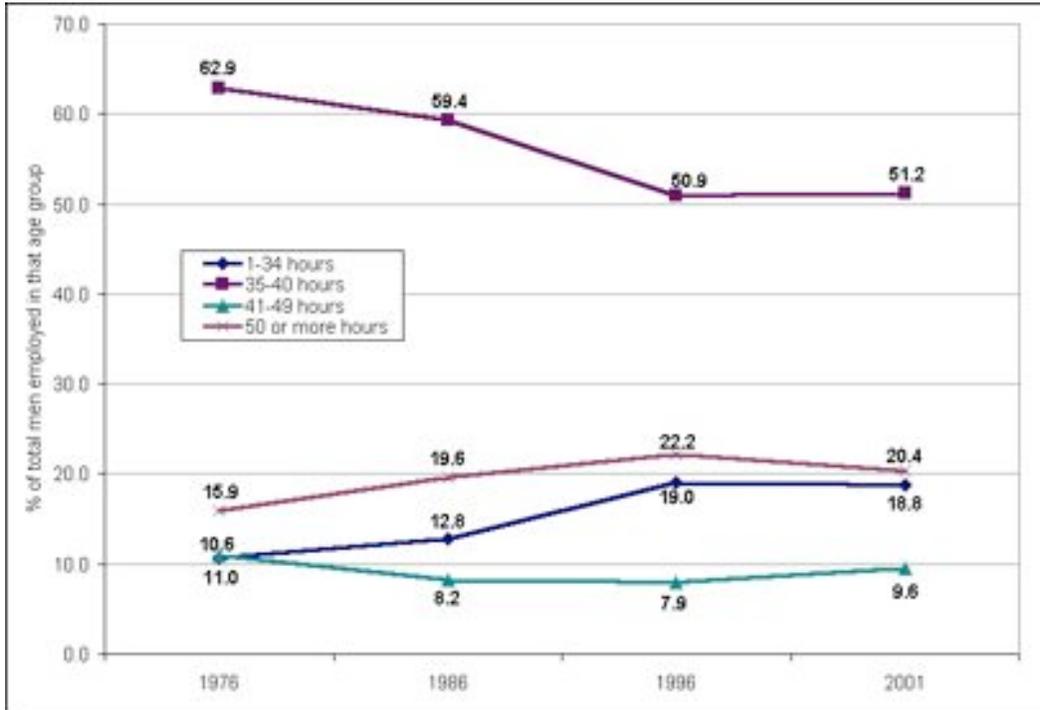
Nova Scotian women 55 years and over have seen an even more dramatic drop in the standard workweek, and a particularly large shift to short hours. Figure 15 shows how the proportion of older women working a standard week fell from 58.6% in 1976 to 45.9% in 2001. This shift was accompanied by a sharp increase in the proportion of older women working short hours and long hours. Between 1976 and 2001, the incidence of short hours increased from 30.2% to 44.8%, while the incidence of long hours (50 or more) among full-time employed women in this older age group also increased from 6.4% to 10.4%. In 1976, 13.8% of full-time employed women 55 and over worked more than 41 hours/week compared with nearly 22% in 2001.

Figure 12. Working Hours of Men, 45 and over, % of Total Employed Men aged 45 and older, Nova Scotia, 1976-2001.



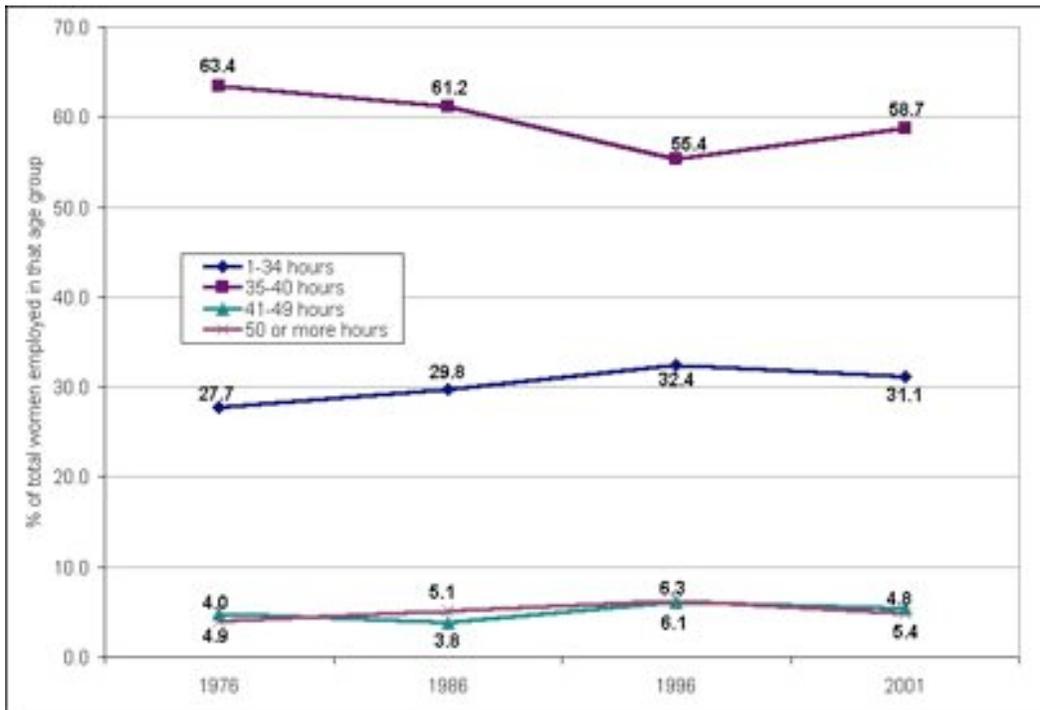
Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB.

Figure 13. Working Hours of Men, 55 and over, in Nova Scotia, % of Total Employed Men aged 55 and over, Nova Scotia, 1976-2001.



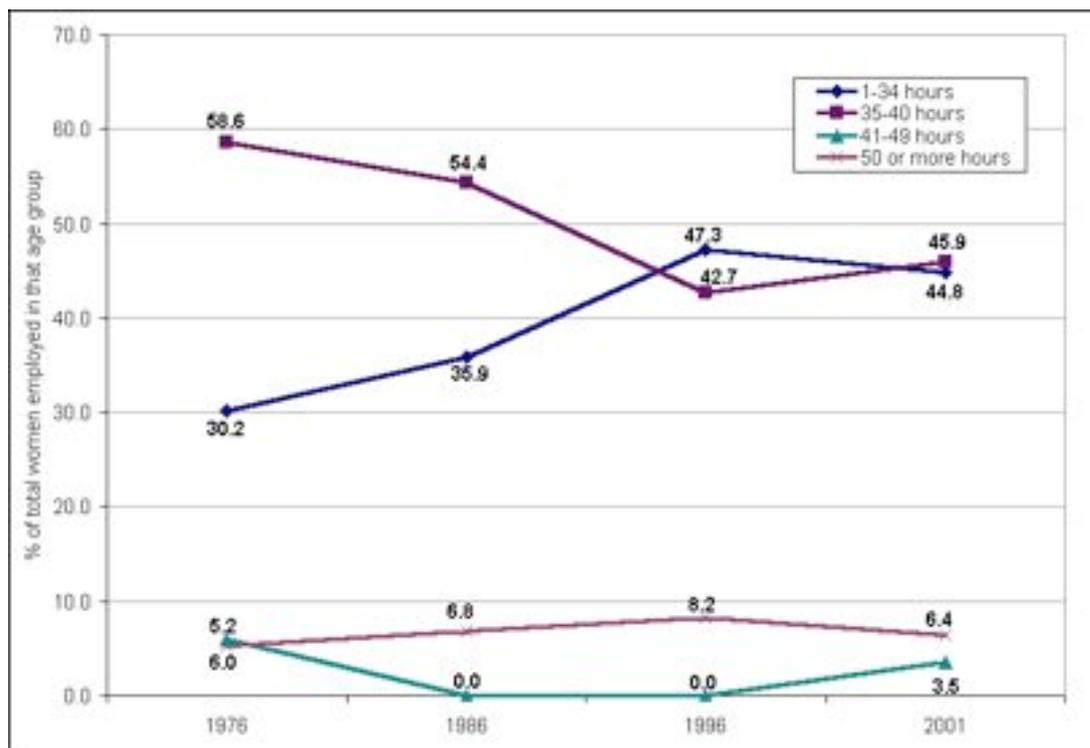
Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB.

Figure 14. Working Hours of Women, 25-44, % of Total Employed Women aged 25-44, Nova Scotia, 1976-2001.



Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB.

Figure 15. Working Hours of Women, 55 and over, in Nova Scotia, % of Total Employed Women aged 55 and older, Nova Scotia, 1976-2001.



Note: According to the Labour Force Historical Review, in 1986 and 1996 the number of female employees aged 55 and older working usual hours of 41-49 hrs./week in NS was zero.

Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB.

In their essay *Restructuring Canada's Labour Market for the New Millennium*, Donner and Lazar contend that it is essential to understand the underlying causes of hours polarization before policy options can be proposed. They suggest some of the following causes:

- Employers use overtime because it provides them with the flexibility to meet changes in demand. With the "increasing adoption of just-in-time and lean production methods," there is a need to be able to adjust quickly to changes in demand.
- Both overtime and casual short-hours work are associated with practices such as outsourcing, subcontracting, and the use of contingent, just-in-time workers to meet the requirements of these new production structures and changing demand fluctuations.
- Because of a tilt in labour costs toward fixed or quasi-fixed costs (and away from variable costs), it costs more to hire and train new workers than to encourage long hours by current staff.³¹⁴

³¹⁴ Donner, Arthur and Fred Lazar. 1999. "Restructuring Canada's Labour Market for the New Millennium." In *Employment Policy Options*. Ken Battle and Sherri Torjman (eds). The Caledon Institute of Social Policy. Ottawa. pp. 123-124.

These and other reasons contributing to hours polarization will be discussed in more detail in the following sections. In addition, when hours polarization over the last 25 years is considered in the context of high rates of unemployment in Canada and in many European countries, the need to address this trend becomes more urgent, as a redistribution of work hours may also help reduce unemployment.

The polarization of work hours also has direct implications for inequality in earnings and is contributing to the widening gap between rich and poor. Statistics Canada found that the increase in earnings inequality that took place in the 1980s and 1990s occurred in conjunction with changes in distribution of annual and therefore weekly hours worked. As Part 1 of this report confirmed, the standard workweek (35-40 hours) is shrinking while the proportion of workers working long hours (50 hours or more) and short hours has risen. Morissette found that inequality in weekly earnings was tied to three factors: 1) The decline in the real hourly wages of young workers. 2) The decline of the standard workweek coupled with hours polarization. 3) A growing tendency for workers with high wages to work longer hours and for lower-wage workers to work below-average hours.³¹⁵ According to Anders Hayden the trend is leading to "a growing social polarization between an increasingly poor, 'redundant' underclass and a small, rich, technical-professional elite."³¹⁶

In addition to this gap, there is also a growing gap among the long-hours workers themselves. According to the Advisory Group on Working Time and Distribution of Work, there are generally two groups of people who work too much. One group, populated by professionals and managers, work long hours and are likely to have high incomes. Unionized workers who get paid for overtime also tend to be well paid. But there is a "second cluster" of workers, usually women, who are forced to work long hours at low-paying jobs because they need to make ends meet. Many of them hold down more than one part-time job.³¹⁷

3.3 Overtime and the Long Hours Culture

3.3.1 Trends

"Perhaps it is this specter that most haunts working men and women: the planned obsolescence of people that is of a piece with the planned obsolescence of the things they make. Or sell. It is perhaps this fear of no longer being needed in a world of needless things that most clearly spells out the unnaturalness, the surreality of much that is called work today."

– Studs Terkel³¹⁸

³¹⁵ Morissette, Rene. 1995. *Why has Inequality in Weekly Earnings Increased in Canada?* Statistics Canada. No. 80. Ottawa. p. 5.

³¹⁶ Hayden, Anders, 1999, op. cit., p. 33.

³¹⁷ Advisory Group on Working Time and Distribution of Work, 1994, op. cit., pp. 18-19.

³¹⁸ Terkel, Studs. 1972. *Working. People Talk About What They Do All Day and How They Feel About What They Do.* Pantheon Books. New York. p.xviii.

"We make good money but what's it worth when you're dying? You work for the quality of life, not to do your life in."

– Joe Williams³¹⁹

In 2001, an average of 1.2 million Canadians were out of work. At the same time, 2.4 million Canadians, or about 20% of the workforce, clocked about 21 million hours of overtime every week. In Nova Scotia in that same year, 72,200 employees (about 21% of the workforce) worked about 643,000 hours of overtime each week, while 45,600 people were jobless.^{320 321}

As shown in Figure 16 the incidence of overtime in both Canada and Nova Scotia increased between 1997 and 2001 by 15%. Among those who work overtime in this province, nearly 38% get paid for it, while a striking 59% don't. In other words, in a typical week in 2001, roughly 373,000 hours were worked free of charge in Nova Scotia.³²²

Statistics Canada analyst, Doreen Duchesne, looked at Canadian overtime data collected in 1997, the first year overtime information was collected from the Labour Force Survey. She presented her findings in an article published in Statistics Canada's *Perspectives* that same year.³²³ Apart from changes in the actual percentages, many of the following key findings from 1997 were still applicable in 2001.³²⁴

- Men were more likely than women to work extra hours. In 1997, 20% of male employees reported overtime, versus 14% of female employees. Men's overtime hours also tended to be longer than women's.
- Women were less likely to be paid for their extra labour. Half of men were compensated for overtime hours, whereas only one in three women were.

³¹⁹ Williams is a millwright who worked at Lafarge Inc., a cement-making company in Bath, Ontario, for 24 years. His union local (CEP) recently went on strike because workers were tired of having to work 300 to 400 hours of overtime a year. The workers cited concerns about safety, fatigue, injuries, and increased exposure to dust. The strikers noted that at least 20 new workers could be hired at the Bath plant if overtime stopped. The company wants *more* access to overtime, not less. Communications, Energy and Paperworkers Union of Canada. 2003. *CEP Shorter Work*. Available from http://www.cep.ca/swtime_e.html. Accessed June 20, 2003.

³²⁰ The unemployment figures cited here are the official figures. They do not include discouraged workers or the underemployed. See Chapter 5 on The Collapse of Work for a discussion about the "hidden unemployed," and for information on Statistics Canada's more comprehensive "supplementary unemployment" statistics.

³²¹ Statistics Canada's Labour Force Survey began collecting information on paid and unpaid overtime in January 1997. These LFS data will be supplemented by other sources where possible.

³²² This is based on 42,400 workers clocking unpaid overtime hours in Nova Scotia and averaging 8.8 hours of unpaid overtime per week. Data are from Statistics Canada's Labour Force Historical Review 2001. Paid overtime is defined by Statistics Canada as overtime hours for which the employee was paid or otherwise compensated (time off in lieu). Unpaid overtime is overtime hours not paid for or otherwise compensated. In addition, 2,400 employees in Nova Scotia worked *both* paid and unpaid overtime hours in 2001 – or approximately 3% of the total number of employees working overtime.

³²³ Duchesne, Doreen. 1997. "Working Overtime in Today's Labour Market." *Perspectives*. Statistics Canada. Catalogue no. 75-001-XPE. Minister of Industry. Ottawa. pp. 9-23.

³²⁴ Much of the analysis provided in Duchesne's 1997 article was based on special runs and custom tabulations of the LFS data, and was not possible to do here for 2001 because the published overtime data provided in the *Labour Force Historical Review 2001* (2002) were not publicly available in this detail. For this reason this detailed analysis of the characteristics of overtime workers has not been possible here for Nova Scotia. Future updates of this report could include such an analysis if resources become available for special custom tabulations of the LFS data for Nova Scotia.

- The majority (more than 60%) of overtimers were between 25-44 years of age. Young and older workers were underrepresented.
- The younger the overtime worker the more likely it was they were paid for overtime hours. Seventy percent of overtime workers aged 15-24 were paid for their extra hours, compared with only 47% of 25-34 year olds and 36% of 45-54 year olds.
- Three-quarters of those who worked overtime lived in husband-wife families, with or without children, reflecting their proportion of all paid workers.
- Unattached individuals were more likely to report overtime than workers living in families (21% vs. 16%).
- Only 13% of workers from lone-parent families worked overtime.
- Overtime workers with less formal education were almost always paid for extra hours. For instance, 86% of overtimers with only primary school education received pay compared with half of those with a postsecondary certificate or diploma. Only 16% of overtimers with university degrees were paid for their extra labour.
- Of all occupations considered, teachers were the most likely to put in overtime (28%) and almost always for free (95% were not paid for their overtime hours).
- Managers and administrators also tended towards extra hours (28%), followed by professionals in natural sciences, engineering, and math (27%). Most of their extra hours were also unpaid.
- The prevalence of overtime hours was higher than the national average among miners and machinists (23% in each of these job categories worked overtime). In these occupations overtime hours were mostly paid (in 86% and 94% of cases respectively).
- Unionized workers were generally more likely to be paid for overtime hours than their non-unionized counterparts (53% vs. 41%).
- Only 12% of those employed on a temporary or casual basis reported overtime, while 17% of those with permanent jobs reported extra hours.
- Workers were less likely to report overtime (13%) if they worked in a small company (fewer than 20 employees) than if they worked in a firm with more than 500 employees (21%).
- Overtimers tended to earn more money (excluding their overtime pay) on average (\$610 per week) than those not reporting any overtime (\$530 per week). The fact that overtimers generally have higher pay even without their overtime hours is important in considering the potential for converting overtime hours to extra jobs, as such conversions will reduce the gap between rich and poor and further social equity.
- Overtimers who worked free of charge tended to have higher weekly wages (\$840) on average than non-overtime workers (\$530). This likely reflects the fact that overtime is more common among full-time workers and in occupations that are often associated with higher pay.
- Overtime was more prevalent in Nova Scotia than in Newfoundland, PEI, New Brunswick and Quebec. Nova Scotia had a higher rate of overtime than the national average. In 2001, Nova Scotia had the fourth highest percentage (21.4%) of workers putting in overtime hours in the country, ranking above the Canadian average (20.5%).³²⁵

³²⁵ Higher than Nova Scotia in 2001 were Alberta (26.5%), Manitoba (23.4%), and both Ontario and Saskatchewan (22.2%). Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB.

- On average, overtime hours in Canadian cities among workers putting in overtime hours were longest in Windsor, Ontario (10.1 hours/week), Edmonton (10 hours) and Halifax (9.7 hours).

In addition, more unionized workers than non-unionized workers regularly work overtime. In 2000, roughly 23% of those covered by collective agreements worked overtime each week, compared to 19% of those without union coverage.³²⁶

While a detailed analysis of overtime work in Nova Scotia based on published LFS data is not possible, it is clear from the available evidence that what is true for Canada is largely true for this province. Since overtime data are only available since 1997, it is not possible to construct a long-term trend line for overtime hours to assess whether the incidence of overtime is increasing, whether overtime hours are getting longer, or whether there has been a shift from paid to unpaid overtime.³²⁷ Nevertheless, in the short term, there appears to have been a sharp rise in the incidence of overtime both in Canada and in Nova Scotia since 1999 (Figure 16 below). In Nova Scotia, the incidence of overtime rose from 18.6% of all employees in 1997 to 21.4% in 2001.

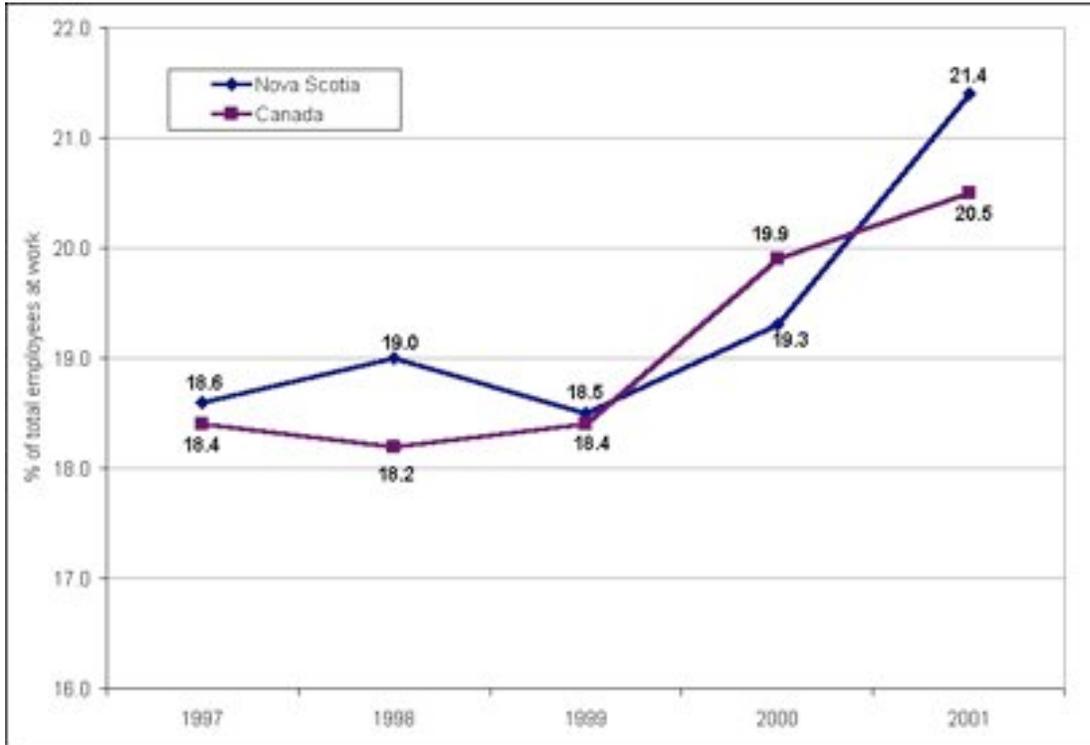
Although the level of detail in Duchesne's 1997 analysis cannot be replicated at the provincial level from the publicly available 2001 Labour Force Survey data, some basic breakdown of the 2001 overtime data is possible for Nova Scotia.

- Figure 17 shows breakdown for paid and unpaid overtime in Nova Scotia in 2001. Overall, 59% of all overtimers did so for free, while 38% were compensated for their extra work. 3% were both paid and unpaid.
- In 2001, 24% of all male employees worked overtime and 18.5% of all female employees worked overtime. In total, there were more male employees working overtime than female employees.
- In 2001, women working overtime were less likely to be compensated for their extra labour. 52% of all male employees working overtime were working unpaid overtime while nearly 68% of all female employees working overtime did so for free. Overall, there were almost the same number of men and women working unpaid overtime (21,900 men vs. 20,500 women).
- The propensity to work overtime was highest in the 45-and-over age group at 23.6%. Among 25 to 44-year-old employees, 18.9% worked overtime and 8.6% of 15 to 24-year-old employees worked overtime (Figure 18).
- Among older workers, more women worked overtime without pay than men. See Figure 19 for a breakdown of unpaid overtime by sex and age.

³²⁶ Statistics Canada's Labour Force Survey cited as unpublished data from 2000 in White, Julie. 2002. "A New Look at Shorter Hours of Work in the Communications, Energy, and Paperworkers Union." *Just Labour*. Vol. 1. Toronto. pp. 41-49.

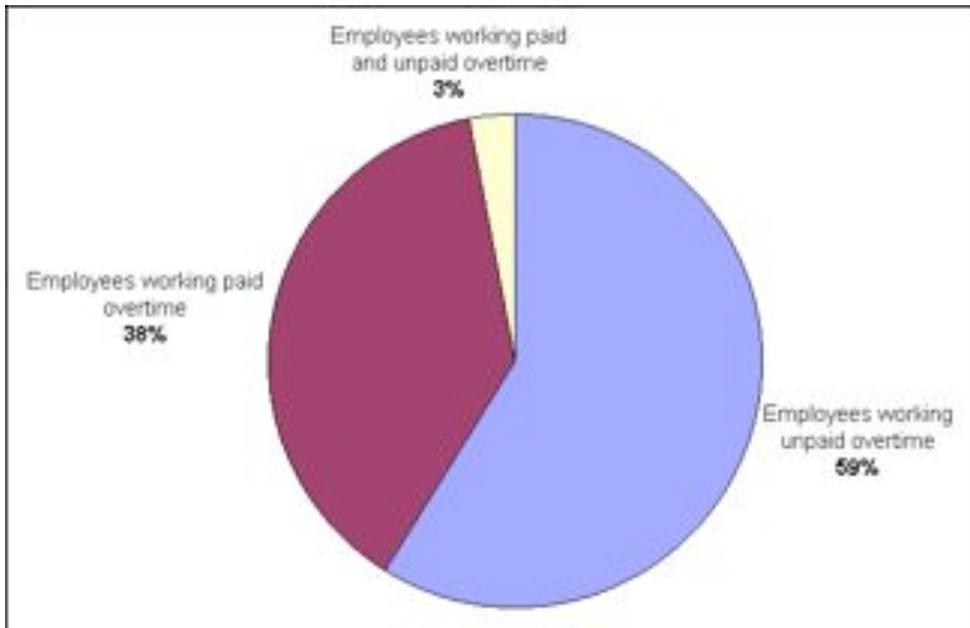
³²⁷ According to Andrew Heisz of Statistics Canada, the increase in overtime between 1997 and 2001 may be a cyclical phenomenon rather than a long-term trend. Heisz, Andrew. Senior Research Economist, Business and Labour Market Analysis Division, Statistics Canada. Reviewer comments. Received October 23, 2003. GPI Atlantic acknowledges that constructing a long-term trend is preferable but Statistics Canada does not have comparable data available for earlier points in time.

Figure 16. Employees Working Overtime in Nova Scotia and Canada, % of Total Employees at Work, 1997-2001.



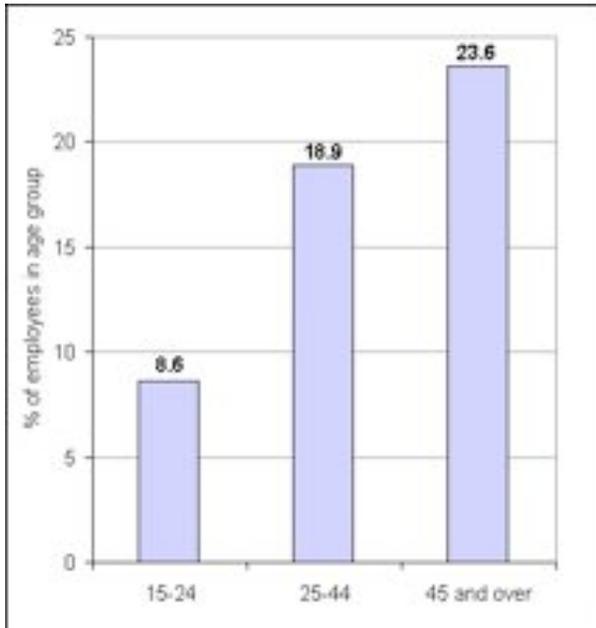
Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB.

Figure 17. Paid and Unpaid Overtime Worked in Nova Scotia, % of Total Employees working overtime, 2001.



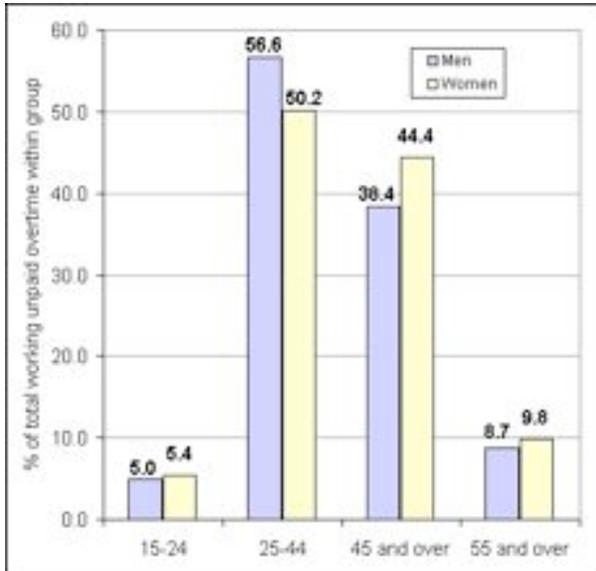
Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB.

Figure 18. Overtime by Age Group, % of Employees Within Age Group, Nova Scotia, 2001.



Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB.

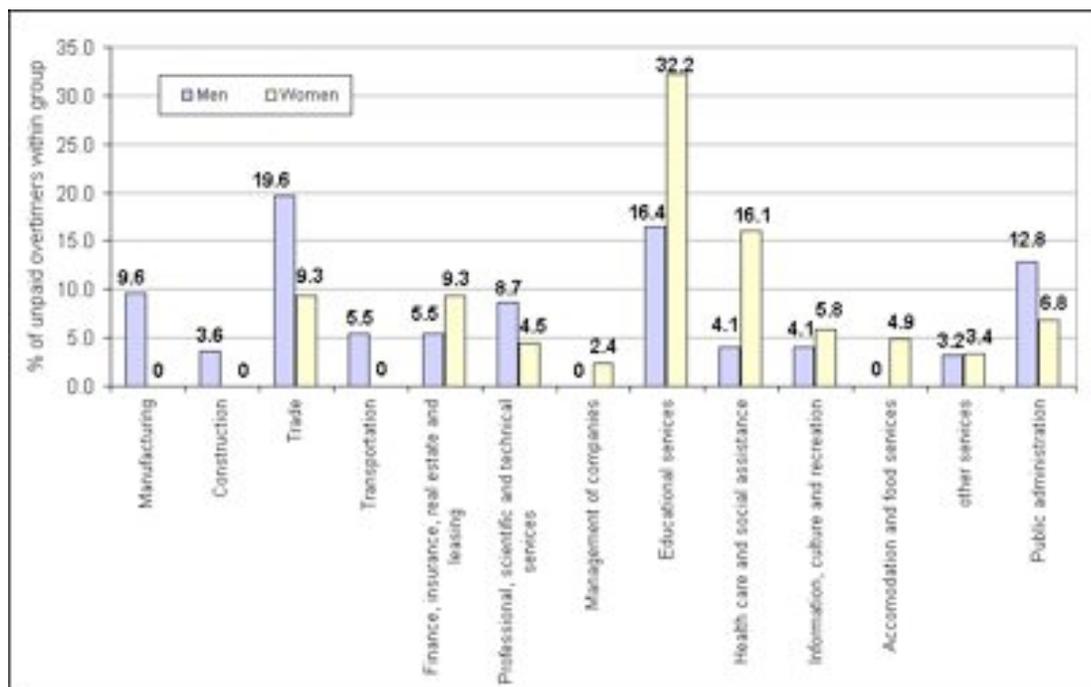
Figure 19. Who is Working Overtime without Pay in Nova Scotia? % of Total Employees Working Unpaid Overtime Within Age Groups, 2001.



Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB.

For Nova Scotia men, most unpaid overtime was worked in trade, educational services, and public administration. For Nova Scotia women, educational services, health care, and social assistance are the source of most unpaid extra hours. See Figure 20 for a breakdown by industry.

Figure 20. Unpaid Overtime by Industry and Sex, Nova Scotia, 2001 (% of unpaid overtime within group).



Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB.

Between 1997 and 2001, working extra hours in Canada and in Nova Scotia in particular became more common. Other countries have also experienced an increase in overtime use. In the U.S., during the economic expansion of the 1990s, employers were more likely to work their employees for longer hours than to hire more people. As a result, average weekly overtime hours in manufacturing in 1997 reached an all-time high of 4.9 hours (averaged over all manufacturing employees, including those who did not work overtime) – the highest level since the Bureau of Labor Statistics began collecting these data in 1956.³²⁸ By the end of the 1990s, manufacturing workers were putting in an average of 25% more overtime hours than a decade earlier.³²⁹

According to a *Fortune* Magazine Poll cited by Bluestone and Rose, there is also a tendency among CEOs toward more work. Sixty-two per cent of CEOs reported their executives were working longer hours in 1990 than they had 10 years before. They reported that in 1990, 90% of their top executives and 75% of middle managers were working more than 50 hours a week.³³⁰

³²⁸ Hetrick, Ron L. 2000. "Analyzing the Recent Upward Surge in Overtime Hours." *Monthly Labor Review*. Bureau of Labor Statistics. Washington. p. 30. Average overtime hours are calculated by dividing the total number of overtime hours in a given industry by the number of production workers in that industry, including those that work no overtime.

³²⁹ Golden, Lonnie and Helene Jorgensen. 2002. *Time after Time. Mandatory Overtime in the U.S. Economy*. Briefing Paper. Economic Policy Institute. Washington. p. 1.

³³⁰ Bluestone and Rose, 1997, op. cit., p. 2.

In the United Kingdom the incidence of long work hours has been increasing in recent years. In 2002 the U.K. Department of Trade and Industry reported that one in six workers was working more than 60 hours a week, compared with one in eight two years earlier. One in eight women was working more than 60 hours in 2002, more than double the number in 2000. In Canada, by contrast, recent years have seen a decline in the incidence of long work hours, reversing the trend towards longer hours that occurred through most of the 1990s. In 2001, 15% of the full-time employed in Canada worked 50 hours or more, compared with 17% in 1998. In Nova Scotia the situation was similar, with 16.4% of all full-time employed working 50 hours or more compared with 17.6% in 1998.³³¹

When it comes to overtime, three-quarters of all employees in the U.K worked overtime in 2002. Of those, only one-third was paid.³³²

In Japan, long work hours have long been a cultural imperative. According to one 1994 time-use study that compared time-use data in Japan, Canada, the U.S., the U.K, Netherlands, Denmark, and Finland, Japan ranked the highest in the amount of time allocated to paid work. The U.S. and Canada ranked slightly lower and weekly work-time in Europe was considerably less than in either Japan or North America. In Japan, working a six-day week is still the norm and Japanese men in 1994 were putting in 11 hours more paid work per week than their western counterparts.³³³

However, this is changing. International Labour Organization statistics indicate that annual paid work hours in Japan fell by 13% between 1980 and 1999, the second sharpest drop of any industrialized country, while in the United States annual work hours dropped by 3% during the same period (Table 2 above). According to the ILO's most recent numbers for 2002, annual work hours in the U.S. dropped further to 1,815, leaving Japan and the U.S. on par in terms of work hours per year. In Canada, work hours also dropped from 1,807 in 2000 to 1,778 in 2002.³³⁴

Declines in annual work hours were also found during the same period in Norway (from 1,376 to 1,342); Sweden (from 1,624 to 1,581); France (from 1,587 to 1,545); and Germany (from 1,463 to 1,444). South Korea reported the longest hours worked at 2,447 hours per year – 26% more

³³¹ Calculations based on actual-hours data, main job, both sexes, 15 years and over. Full-time employed include employees and the self-employed. Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

³³² Hewitt, Patricia. "UK Working Hours Rise Sharply." *BBC News*. August 29, 2002. Available from <http://news.bbc.co.uk/2/low/business/2223653.stm>. Accessed October 18, 2002.

³³³ Work hours here refer to paid work only. Broadcasting Culture Research Institute. 1994. *Cross National Comparison of Japanese Time Use*. Tokyo. p. 109.

³³⁴ International Labour Organization. 2002. *Key Indicators of the Labour Market*. Table 6b. Available from <http://www.ilo.org/public/english/employment/strat/kilm/table.htm>. Accessed July 4, 2002; and International Labour Organization. 2003a. *New ILO Study Highlights Labour Trends Worldwide: US productivity up, Europe Improves Ability to Create Jobs*. Press Release. September 1, 2003. ILO. Geneva. Available from <http://www.ilo.org/public/english/bureau/inf/pr/2003/40.htm>. Accessed October 25, 2003. It should be noted that the ILO originally reported that work hours in the U.S. for 2000 were 1,979 hours. However, it has since revised and lowered the U.S. work hours data for 2000 to 1,834, making the Japanese the highest in hours worked that year among industrialized countries.

than people in the U.S. and 46% more than the Netherlands, which had the lowest hours worked of all the economies for which data were available.³³⁵

European unions and governments are working together to create a powerful movement toward diminishing what was at one time a long-hours culture. France brought in a 35-hour week and all workers in that country are entitled to 25 days of annual paid leave. In Germany, as well, a 35-hour week is very common, with all workers entitled to 29 days of paid leave per year. Paid leave in the Netherlands is even higher at 31 days per year.³³⁶

Clearly another way is possible. These shorter work time models will be discussed in greater detail in Part 3.

3.3.1.1 Workaholism

In Canada, a recent article published in *Canadian Social Trends* says that 27% of Canadians report themselves as being workaholics, as compared with the U.S. where approximately 30% of the population say they are "addicted" to work.³³⁷

Statistics Canada notes that experts are not in agreement about what makes someone a workaholic, with much of the debate revolving around motivations for working long hours. One expert quoted in the *Canadian Social Trends* article argues that the workaholics' compulsive drive to work is motivated by the desire to "free them from experiencing emotional pain, hurt, guilt and fear." Other researchers have found workaholics to be high achievers who derive a lot of satisfaction from their work. Another view is that many workaholics work long hours for financial reasons while others are forced into a workaholic lifestyle because the corporate culture demands it.³³⁸

Anders Hayden cites a 1998 study showing that only 58% of Canadians planned on taking a summer holiday, down from 76% in 1992.³³⁹ The "work-obsessed," he says, suffer from a "respectable addiction" in our society. According to one commentator, workaholics can "binge" on work all day and never feel guilty for doing it. On the contrary, they can feel "virtuous" indulging their addiction.³⁴⁰

³³⁵ International Labour Organization. 2003a. *New ILO Study Highlights Labour Trends Worldwide: US Productivity up, Europe Improves Ability to Create Jobs*. Press Release. September 1, 2003. ILO. Geneva. Available from <http://www.ilo.org/public/english/bureau/inf/pr/2003/40.htm>. Accessed October 25, 2003.

³³⁶ European Industrial Relations Observatory (EIRO). 2003. *Working Time Developments – 2002*. Available from <http://www.eiro.eurofound.ie/2003/03/Update/TN0303103U.html>. Accessed June 16, 2003. pp. 11-13.

³³⁷ Canadian data are based on a question in the 1998 General Social Survey in which respondents were asked if they considered themselves a workaholic. Kemeny, Anna. 2002. "Driven to Excel: A Portrait of Canada's Workaholics." *Canadian Social Trends*. Statistics Canada. Catalogue no. 11-008. Minister of Industry. Ottawa. p. 4. U.S. data cited in Statistics Canada article from Robinson, B.E. 1998. *Chained to the Desk: A Guidebook for Workaholics, their Partners and Children, and the Clinicians who Treat them*. New York University Press. New York. p. 2.

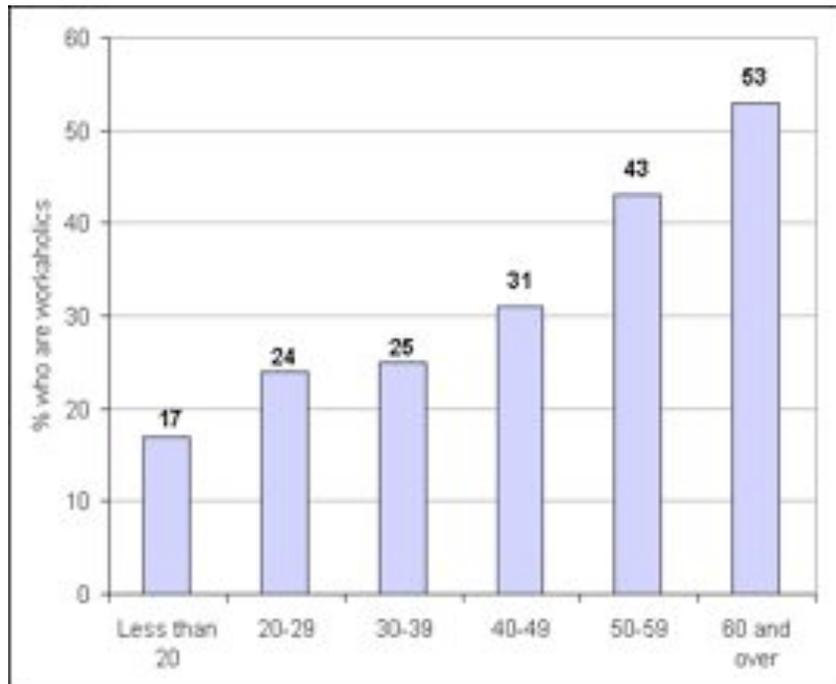
³³⁸ Ibid. p. 3.

³³⁹ Mitchell, Alanna. "Kids Face a Summer of all Work and No Play." *The Globe and Mail*. July 21, 1998. Toronto. p. A1. Cited in Hayden, 1999, op. cit., p. 99.

³⁴⁰ O'Hara, Bruce. 1993. *Working Harder isn't Working*. New Star Books. Vancouver. Cited in Hayden, 1999, op. cit., p. 99.

Figure 21 illustrates the relationship between the objective and subjective evidence and indicates, not surprisingly, that people who work long hours are more likely to consider themselves workaholics than people working shorter hours. Fifty-three percent of those who worked more than 60 hours a week at a paid job reported being workaholics, compared with only 17% of those who worked fewer than 20 hours a week.

Figure 21. Workaholism and Long Work Hours, Canada, 1998.



Source: Kemeny, Anna. 2002. "Driven to Excel: A Portrait of Canada's Workaholics." *Canadian Social Trends*. Statistics Canada. Catalogue no. 11-008. Minister of Industry. Ottawa. p. 5. Original data from Statistics Canada, General Social Survey, 1998.

"Working excessively long hours does not generally lend itself to a healthy, balanced way of living. Workaholics tend to invest all their energies into their particular area of work to the exclusion of many other parts of life."³⁴¹ Part 2 of this report will examine the costs associated with long work hours in terms of health, family, and society in general.

3.3.2 Reasons for Overtime

The long-work-hours culture that is emerging in some industrialized countries is influenced by a number of factors, not the least of which is that it often makes practical sense from the perspective of both the employer and the employee. Unpaid overtime is clearly advantageous to employers, who benefit from more work without having to pay for it. But what motivates workers to work for free? Paying overtime premiums (often time-and-a-half or even double-

³⁴¹ Kemeny, Anna. 2002. "Driven to Excel: A Portrait of Canada's Workaholics." *Canadian Social Trends*. Statistics Canada. Catalogue no. 11-008. Minister of Industry. Ottawa. p. 2.

time) costs firms money. Yet for many employers, paying the overtime premium, which was intended to act as a disincentive, is still more appealing than hiring more staff. But why? The following evidence indicates the main arguments for overtime, from the perspective of both the employer and the employee.

Management Reasons³⁴²

1. An increased demand for labour due to short-run temporary needs may result from:

- increased demand for a product;
- machinery breakdown;
- absent workers (due to illness/vacation etc.).

The days when companies had inventories built up for weeks and months are over. Today, 'just-in-time' delivery is the norm with inventories reduced to a bare minimum, so that inventories can no longer be used as a buffer against increased demand. Instead, overtime is used as a buffer for demand changes. Using overtime to respond to increases in demand, unlike the hiring of new employees, is easily reversed in response to a subsequent reduction in demand.

2. Labour Costs

The Ontario Task Force on Hours of Work and Overtime identified labour costs as a major deterrent to new employment. It is generally cheaper for an employer to work existing employees longer hours than to hire new people. This is largely because of what are called non-wage labour costs – labour costs incurred by the employer above and beyond wages, including vacation pay, holiday pay, sick leave, employer contributions to health care or life insurance plans, and government imposed payroll taxes used to finance social programs such as WCB, EI, and CPP. In addition, hiring, recruiting and training new workers also adds to employer costs.

Overall, between 1953 and 1996 non-wage benefits as a percentage of direct labour costs in Canada increased by 175% from 15.1% to 41.6%. The two fastest-growing components have been pension and payments required by law (WCB, EI, and CPP).³⁴³ For this reason, many employers argue it is cheaper to work their current employees overtime than hire new workers. In Part 3 of this report we will look at the structure of non-wage benefits, and payroll taxes in particular, and what can be done in reforming the existing structure to curb current high rates of overtime.

However, a study done by the Communications, Energy, and Paperworkers (CEP) Union that looked at the relative costs associated with using overtime or hiring new workers at B.C. pulp and paper mills found that it was not in fact cheaper for employers to use overtime than to hire

³⁴² Several of the reasons listed here are cited in Ontario Task Force on Hours of Work and Overtime. 1987. *Working Times: The Report of the Ontario Task Force on Hours of Work and Overtime*. Ministry of Labour. Toronto. pp. 77-81.

³⁴³ Benjamin, Dwayne and Morley Gunderson, W. Craig Riddell. 1998. *Labour Market Economics Theory, Evidence, and Policy in Canada*. McGraw-Hill Ryerson. Toronto. p. 199.

new workers. The CEP study found that the cost of hiring a new worker was less than employer costs in paying time-and-a-half for overtime. The hiring costs considered in the CEP study included the cost of benefits, taxes, and other employer expenses.³⁴⁴ The study concluded that when the overtime premium is time-and-one-half, hiring new workers in effect costs employers nothing. When overtime is paid at the rate of double-time, the study found that hiring more workers would bring "substantial savings" to the firm. The study concluded that B.C. pulp and paper companies would save \$11 million by replacing half of their current overtime with full-time workers.³⁴⁵

The study argues that the reason employers are willing to pay the more costly overtime rates is because of a "trend to downsize." In a globalized, competitive climate, "being profitable is regarded as virtually synonymous with having the fewest possible workers." Essentially, the fewer the workers, the "better off you are from a business perspective." The CEP study claims to disprove this assumption.³⁴⁶

3. Skill shortages

The unemployed or those who have been laid off might not have the skills required by a company to meet increases in demand, especially if the increase is only temporary. Skill shortages are most serious in cases where jobs require an extensive training period. The potential mismatch between skills and available jobs has been suggested as one of the key reasons why the job-creation potential of overtime is limited.

4. Uncertainty

The Ontario Task Force on Hours of Work and Overtime identified a number of areas where firms had been experiencing uncertainty, including uncertainty associated with foreign competition, technological changes, energy price changes, de-industrialization, and input price changes. As a result, they tend to be reluctant to make permanent investments in anything, including workers.

In 1986 the Canadian Federation of Independent Business conducted a survey of approximately 5,000 of its members regarding their reasons for scheduling overtime. Table 6 presents a summary of the survey findings. The most common reason for using overtime was to deal with peak periods. Saving on the costs associated with new hiring did not rank very high among respondents, with only 6% of firms citing it as a reason for overtime use.³⁴⁷

³⁴⁴ The costs accounted for in the CEP study include wages, statutory holiday pay, pension plan, disability/health insurance, training, safety, tools, and non-negotiable benefits such as employer contributions to CPP, EI, and Workers Compensation.

³⁴⁵ Communications, Energy and Paperworkers Union of Canada. 1999. *Working Less for More Jobs. A Study of Hours of Work and Job Creation in the B.C. Pulp and Paper Industry*. CEP. Ottawa. pp. 11-12.

³⁴⁶ Idem.

³⁴⁷ Canadian Federation of Independent Business, cited in Ontario Task Force on Hours of Work and Overtime, 1987, op. cit., pp. 83-89.

Table 6. Reasons for Scheduling Overtime, Ontario Small Businesses, 1986.

Reason	% of firms
to handle peak periods	84.1
absenteeism, vacation, sickness	27.3
difficult to hire/train	26.3
employees want extra income	13.5
to fill in until more staff hired	12.9
to save costs of taxes, benefits, hiring	6.0
other	13.8

Note: Total adds to more than 100% because firms could specify more than one reason.

Source: Canadian Federation of Independent Business, cited in Ontario Task Force on Hours of Work and Overtime, 1987, op. cit., pp. 83-89.

5. Poor management

A study of B.C. pulp and paper mills found that sometimes it was easier for management to use overtime than to plan the work carefully. In a survey conducted by the Communications, Energy and Paperworkers Union, 5% of workers said that poor management was the number one reason for overtime in their departments.³⁴⁸

Employee Reasons

1. Fear Factor

In today's economic climate, repeated rounds of "downsizing" and "restructuring" have left many workers feeling that they could be next in line to be cut if they do not accede to management demands and if they do not work additional overtime hours for free. As well, the loss of co-workers through downsizing often means that those who are left behind must pick up the slack, and maintain or improve production quotas with fewer staff. In those circumstances, overtime may become unavoidable.³⁴⁹

Fear of losing one's job therefore persuades many employees to work longer hours, even if those additional hours are unpaid. In a climate of uncertainty and economic insecurity, employees often feel they have to prove their commitment or loyalty to the firm. Long work hours are seen as evidence of this commitment. Insecurity may also cause a worker to seek overtime voluntarily in order to "cushion the blow of depressed income from future joblessness.... Or he may work extra hours because he has to pay off credit card debts that accumulated in the last bout of underemployment." This is the "feast or famine" cycle noted by Bluestone and Rose in their analysis of the causes of alternate bouts of overwork and underemployment.³⁵⁰

³⁴⁸ Communications, Energy and Paperworkers Union of Canada. 1999. *Working Less for More Jobs. A Study of Hours of Work and Job Creation in the B.C Pulp and Paper Industry*. CEP. Ottawa. p. 12.

³⁴⁹ Jackson, Andrew and David Robinson. 2000. *Falling Behind. The State of Working Canada, 2000*. Canadian Centre for Policy Alternatives. Ottawa. p. 86.

³⁵⁰ Bluestone and Rose, 1997, op. cit., p. 12.

A large-scale U.S. study conducted in 1984 found that fewer than one in six workers could refuse overtime without creating problems for themselves.³⁵¹ While the incidence of overtime abuse on the part of employers is not known, there have been recent reports of large-scale abuse. For example, hundreds of thousands of Wal-Mart employees who say they were pressured to work overtime have sued the retail giant for unpaid overtime in 40 class-action law suits spanning 30 U.S. states. The workers claim that not only were they not paid time-and-a-half, but their overtime hours were erased from their time records so that Wal-Mart would not be obligated to pay the overtime premium. In addition, the workers claim that if they refused the unpaid overtime they were threatened with demotions, fewer hours, and docked pay.³⁵²

In Oregon alone, where more than 400 employees from 24 Wal-Mart stores are involved in the lawsuit, the jury found Wal-Mart guilty of forcing employees to work unpaid overtime.³⁵³

In July, 2002, Starbucks Coffee Company announced it would pay up to \$18 million to settle a lawsuit filed by more than 1,000 managers in its California stores. Again, they claimed they were forced to work long hours off-the-clock.³⁵⁴

Until the fall of 2003 the Labour Standards Code in Nova Scotia stated that where an employee was required to work more than 48 hours in a seven-day period, the extra hours were considered overtime and subject to the premium of time-and-a-half of minimum wage.³⁵⁵ However, the overtime premium did not apply to everyone, and depended entirely on how much one was paid in the first place. The *Minimum Wage Order* required that anyone working for minimum wage (\$6.00/hour) had to be paid \$9.00/hour after 48 hours of work.³⁵⁶ If someone made more than \$9.00/hour there was no requirement to pay overtime. So, for example, if a worker made \$10.00/hour and worked 50 hours in a week, he or she would simply be paid the normal hourly wage for the extra two hours of work. A worker making \$8.50/hour would be paid \$9.00/hour for any overtime hours worked after 48 hours.³⁵⁷

In 1999, one in four paid workers earned less than \$8.00/hour.³⁵⁸ This means that roughly three quarters of all paid workers in Nova Scotia were not entitled to any overtime premium, and only a small number of very low paid workers qualified for the full time and a half premium. Most

³⁵¹ Study cited in Blyton, 1985, op. cit., p. 57.

³⁵² The Associated Press. "Jury: Wal-Mart Forced Employees to Work Unpaid Overtime." *Newsday*. December 19, 2001. Available from <http://www.newsday.com>. Accessed December 20, 2002. Wal-Mart is a \$218 billion retail company that employs 1 million workers in 3,250 U.S. stores.

³⁵³ Idem.

³⁵⁴ Hansen, Fay. "Longer Hours lead to Lawsuits over Pay." *Christian Science Monitor*. July 1, 2002. Available from <http://www.swt.org>. Accessed July 4, 2002.

³⁵⁵ Nova Scotia Department of Environment and Labour. *Labour Standards Code of Nova Scotia*. Available from <http://www.gov.ns.ca/enla/labstand/lstcode/>. Accessed December 2, 2002. Also Minimum Wage Order.

³⁵⁶ Only "experienced" employees make the minimum wage of \$6.00/hour. "Inexperienced employees," defined by the *Minimum Wage Order* as those who have not been employed by current or other employer for total of 3 months, are only entitled to \$5.55/hour.

³⁵⁷ Mitchell, Debbie. Intervention Officer. Department of Environment and Labour, Labour Standards. Personal communication. March 19, 2003. Verified by Trider, Theresa. Intervention Officer. Department of Environment and Labour, Labour Standards. Personal communication. August 9, 2003.

³⁵⁸ Workman, W. Thom and John Jacobs. 2002. *Undermining Wages in Nova Scotia: The Minimum Wage from 1976-2002*. The Canadian Centre for Policy Alternatives – Nova Scotia. Halifax. p. i.

Canadian provinces require that the overtime premium be paid after 40 or 44 hours. But, as Table 7 indicates, very few provinces have any limits on overtime, or any laws that guarantee workers the right to refuse overtime. Nova Scotia has no restrictions of any kind. A forthcoming report by the Canadian Centre of Policy Alternatives in Nova Scotia is asking there be a 40-hour limit to the workweek in Nova Scotia, after which overtime must be paid.³⁵⁹

Table 7. Overtime Provisions and Right to Refuse Overtime under Labour Standards Legislation, Various Canadian Jurisdictions, 1994.

Jurisdiction	Over-Time Rate	Hours after which Overtime Premium must be Paid		Hours After Which Right To Refuse Overtime	
		Daily	Weekly	Daily	Weekly
Federal**	1.5X regular	8	40	none	none
British Columbia*	1.5X regular	8	40	none	none
Alberta	1.5X regular	8	44	none	none
Saskatchewan	1.5X regular	8	40	none	44
Manitoba	1.5X regular	8	40	8	40
Ontario	1.5X regular	none	44	8	48
Quebec	1.5X regular	none	44	none	none
New Brunswick	1.5X minimum wage	none	44	none	none
Prince Edward Island	1.5X regular	none	48	none	none
Nova Scotia***	1.5X regular	none	48 or 55	none	none
Newfoundland and Labrador	1.5X minimum wage	none	40	none	none
Northwest Territories	1.5X regular	8	40	none	none
Yukon	1.5X regular	8	40	none	none

* British Columbia's Employment Standards Act says that employees will receive double their regular rate of pay after 11 hours in a day and 48 hours in a week.

** Federal labour standards are contained in Part III of the Canada Labour Code and in the related Labour Standards Regulations. The Code applies to all federally regulated undertakings or businesses, including industries operating in interprovincial and international rail, road, air, and marine transportation; telecommunications; broadcasting; banks (excluding trust companies and credit unions); and certain Crown corporations. Firms that are not federally regulated are covered under similar provincial or territorial labour standards laws.

*** See below for more information regarding recent amendments made to the N.S. Labour Standards Code.

Note: Since 1994 Manitoba workers gained the right to refuse all overtime. From White, Julie 2002, op. cit., p. 43.

Sources: HRDC, based on Employment Standards Legislation of each jurisdiction from Reid and Gunderson, forthcoming, op. cit., tables 17 and 18; and Nova Scotia Department of Environment and Labour. 2003. *New Regulations to Clarify Overtime Provision*. Press Release. November 28, 2003. Available from <http://www.gov.ns.ca/news/details.asp?id=20031128002>. Accessed November 30, 2003.

³⁵⁹ Haiven, Larry. Associate Professor, Department of Management. St. Marys University. Personal communication. February 13, 2003.

As this report went to press, the Nova Scotia government had made amendments to new legislation that promised changes to Nova Scotia's labour laws so that overtime would be paid at time-and-a-half of a worker's hourly wage (vs. 1.5-times the minimum wage), after 48 hours a week. However, once the new legislation was introduced, the business community protested and argued the economic impact of paying overtime rates would be too severe. In response to the outcry from the business community, the government amended the overtime provisions by extending the workweek of the roadbuilding and construction industry to 55 hours, instead of 48. In other words, overtime at 1.5-times regular pay would only have to be paid after 55 hours of work per week in this sector. The new regulations also reinstated some pre-existing exemptions for professionals, managers and supervisors. The minimum wage order was also restored for the logging and forestry industry. The only other provinces in Canada that do not pay overtime of at least time-and-one-half of the regular wage are New Brunswick and Newfoundland, which pay one-and-a-half times the minimum wage.³⁶⁰ In addition the new legislation allows workers three weeks of vacation after eight years of employment (vs. current entitlement of two weeks no matter how long employed), plus three days of unpaid leave to be with a sick child or parent.³⁶¹

2. Wage Loss

The notion that increased work hours are buying an increased standard of living or greater affluence is misleading. Juliet Schor writes about the "squirrel cage" of capitalism which she describes as "an insidious cycle of work and spend" where people work long hours to keep up with the Joneses.³⁶² Bluestone and Rose found that most workers in the U.S. are working longer hours to maintain their existing standard of living on dwindling real incomes. They found that real hourly wages (adjusted for inflation) in the U.S. had declined by 13% since 1973. They also found that among prime age (25-44 years) working couples, combined real earnings rose by 18.5% between 1973 and 1988 and that "most of this modest increase did not come from improved wages, but from increased work effort." They noted that the 18.5% increase in real earnings was purchased with a 16.3% increase in hours worked. "Over the entire 15-year period, the combined average husband-wife hourly wage increased by only 1.8% – the equivalent of a real hourly wage increase of less than 30 cents over the entire period, or 2 cents each year!"³⁶³

Bluestone and Rose's analysis clearly demonstrates that, while American workers were on average putting in more time on the job, this was not translating into significant improvements in living standards. In fact, the extra hours were barely compensating for lower real hourly wages. As Bluestone and Rose conclude: "Most Americans are not working harder so they can afford a fancier minivan; they're just trying to make payments on their old car or cover the rent."³⁶⁴

³⁶⁰ Nova Scotia Department of Environment and Labour. 2003. *New Regulations to Clarify Overtime Provision*. Press Release. November 28, 2003. Available from <http://www.gov.ns.ca/news/details.asp?id=20031128002>. Accessed November 30, 2003.

³⁶¹ Smith, Amy. "NDP buys amended Sunday shopping bill." *The Chronicle-Herald*. October 25, 2003. p.A1. The bill also allows stores in Nova Scotia to open seven days a week during the six weeks leading up to Christmas and includes a plebiscite on the issue October, 2004.

³⁶² Schor, 1991, op. cit., p. 117.

³⁶³ Bluestone and Rose, 1997, op. cit., pp. 10-11.

³⁶⁴ Bluestone and Rose, 1997, op. cit., p. 11.

In addition, long hours do not necessarily translate into higher productivity. According to a U.S. Labor Department study of 34 manufacturing plants, long hours and overtime are not necessarily more productive than shorter hours. The study concluded that "for hours above eight per day and 48 per week, it usually took three hours of work to produce two additional hours of output when work was light. When the work was heavy it took about two more hours of work to produce one hour of additional output."³⁶⁵

Real wages of working Canadians fell in the 1990s by 3% before taxes and 7% after taxes.³⁶⁶ The real wages of those who are already earning the least have fallen more than the wages of those earning the most. For instance, between 1990 and 1998 the real average disposable household incomes in Nova Scotia fell by nearly 30% for the poorest 20% and by just over 1% for the richest 20%.³⁶⁷

Since 1998 there has been some improvement. Table 8 illustrates how between 1992 and 1997 real average disposable incomes in Canada declined for the poorest Canadian households while the richest 20% got richer. Between 1998 and 2001 (most recent data) there were increases in real disposable income for all income groups. See Chapter 8 for detail on income inequality in Canada and Nova Scotia.

However, further careful analysis is required to understand the full implications of these income shifts. For example, the most dramatic increase in disposable income in recent years has been for single mothers, who, in Nova Scotia, saw their incomes after taxes and transfers increase by a startling 44.6%, from \$18,229 in 1997 to \$26,352 in 2001 (constant 2001 dollars). As a direct result, the prevalence of low income among children of Nova Scotian single mothers fell by more than half, from 71% in 1997 to 40% in 2001.³⁶⁸

Table 8. Average Disposable Household Income by Quintile, Canada, 1992–2001 (\$2001).

Quintile	1992	1997	1998	2001	1992-97	1998-2001
Lowest	11,474	10,706	11,124	11,675	– 6.7%	+ 5.0%
Second	23,999	23,293	24,066	25,845	– 2.9%	+ 7.4%
Middle	36,413	35,488	36,413	39,372	– 2.5%	+ 8.1%
Fourth	51,492	51,595	53,058	57,187	+ 0.2%	+ 7.8%
Highest	84,849	88,844	92,475	101,628	+ 4.7%	+10.0%

Note: Households include economic families and unattached individuals.

Source: Statistics Canada. 2003f. *Income in Canada*. Table 7.2. Catalogue no. 75-202-X1E. Minister of Industry. Ottawa. p. 83.

³⁶⁵ From U.S. Department of Labor. 1947. *Hours of Work and Output*. Cited in Evans, 1975, op. cit., p. 69.

³⁶⁶ Stanford, Jim. 1999a. *Upside-down Economics: Unemployment Used to be Bad, but now it's Good for Business*. In *The CCPA Monitor*. December. Canadian Centre for Policy Alternatives. Ottawa. p. 26

³⁶⁷ Dodds and Colman, 2001, op. cit., p. 10.

³⁶⁸ Statistics Canada. 2003f. *Income in Canada 2001*. Catalogue no. 75-202-X1E. Tables 6.1 and 8.1. See also Colman, Ronald. 2003. *Women's Health in Atlantic Canada: 2003 Update, Vol. I: Social Determinants of Health*. GPI Atlantic and Atlantic Centre of Excellence for Women's Health. Halifax. pp. 17-22.

However, closer examination of the evidence shows that cuts in federal social transfers and provincial social assistance programs in the 1990s sharply reduced the real incomes of non-employed single mothers, and pushed an increasing number of them into the paid work force. The increase in average incomes for this demographic group is therefore entirely due to sharp increases in the numbers of single mothers working for pay. In 2001, 46% of Canadian single mothers with infants aged 0-2 were employed, compared to only 26% in 1993. For single mothers with children aged 3-5, the employment rate increased from 45% to 61% during that period.³⁶⁹

Canadian single mothers without jobs saw no improvement, with a low-income rate of 90% in 2001 – roughly 15% higher than in 1993. In fact, Canadian single mothers without jobs saw their real incomes after taxes and transfers fall by 8.8% since the first major cuts in social transfers in 1993. In Nova Scotia, single mothers without jobs saw their incomes after taxes and transfers drop from \$15,159 in 1997 to \$13,884 in 1998 and then up to \$15,156 in 1999 (most recently available provincial data).³⁷⁰

However, there is a clear trade-off between time and money here. Statistics Canada reports that full-time employed single mothers work an average of 75 hours a week when paid and unpaid work are combined, and are the most time-stressed demographic group. Because they come home from their jobs and then have all the shopping, cooking, cleaning and other unpaid household work to do alone, they also have considerably less dedicated time with their own children than their married and non-working counterparts. Robin Douthitt notes that when time poverty (insufficient time to accomplish basic household tasks) is included in poverty measures, poverty rates of working single mothers approach those of their non-employed counterparts. In addition, working single mothers spend three times as high a proportion of their incomes on paid child care than their married counterparts, so that even higher incomes are no guarantee that the earned money stays in their pockets.³⁷¹

In sum, increases in real disposable income must be seen in the larger contexts of:

- 1) total work burden, including paid and unpaid work, and time stress;
- 2) impacts on family;
- 3) costs of employment (including paid child-care, restaurant food, travel);
- 4) and social policy changes.

By contrast to the trends of the last decade, rising social assistance benefits in the 1980s acted as an employment disincentive for those single mothers who preferred to raise their own children and to avoid reliance on paid child care.³⁷²

³⁶⁹ Statistics Canada. 2002c. *Women in Canada: Work Chapter Updates*. Catalogue no. 89F0133-XIE. April 2002, p. 6 and 13. Table 6; and Colman, 2003, op. cit., pp. 45-46.

³⁷⁰ Statistics Canada. 2003f. *Income in Canada 2000*. Catalogue no. 75-202-XIE. Table 6.1. Minister of Industry. Ottawa. All figures are in 2001 constant dollars.

³⁷¹ Statistics Canada. 1999. *Overview of the Time Use of Canadians in 1998*. General Social Survey. Catalogue no. 12F0080X1E. Minister of Industry. Ottawa; Colman, 2003, op. cit., and Colman, Ronald. 1998. *The Economic Value of Unpaid Housework and Child Care*. GPI Atlantic. Halifax.

³⁷² Heisz, Andrew, A. Jackson, and G. Picot. 2002. *Winners and Losers in the Labour Market of the 1990s*. Statistics Canada. Catalogue no. 11F0019, no. 184. Ottawa. p. 26.

In Section 3.4 of this report, GPI Atlantic will look at the relationship between increased work effort and real wages for Nova Scotians.

3. 'Work and Spend' cycle

Many workers who regularly and systematically work overtime hours become accustomed to the extra money and consider it part of their overall salary. For these workers, cuts to overtime would be akin to a pay cut that, for many workers, could be substantial.

"Once a purely utilitarian chore, shopping has been elevated to the status of national passion," writes Schor. The average American is consuming more than twice what he or she consumed 40 years ago.³⁷³

Even our houses today are larger and emptier than they were 50 years ago. In 1950s the average size house was 750 square feet. By 1963 they were twice as large and by the end of the 1980s the average living space was 2,000 square feet. At the same time families got smaller.³⁷⁴

Schor writes:

*"As people became accustomed to the material rewards of prosperity, desires for leisure time were eroded. They increasingly looked to consumption to give satisfaction, even meaning, to their lives...Consumerism traps us as we become habituated to the good life, emulate our neighbours, or just get caught up in the social pressures created by everyone else's choices. Work-and-spend has become a mutually reinforcing and powerful syndrome – a seamless web we somehow keep choosing, without even meaning to."*³⁷⁵

Schor points out, however, that the work-and-spend "affliction" is not everyone's disease. The affluent – middle-class and upper-class – are the ones with enough disposable income to be on the treadmill in the first place. The rest of society is just trying to get by on their meagre, and often insufficient incomes. The reality is that many people in the lower income quintiles couldn't work more hours even if they wanted to, says Schor. Their jobs are often part-time, intermittent, temporary and insecure. They are working to subsist and pay their bills. But this doesn't mean they don't feel the pressure to consume:

"Even those with low incomes, however, are not free from pressures to consume. Television, advertising, peer competition, and the ubiquitous example of the economically more fortunate provide continual testaments to the value of high living. The poor are not so much adherents to an alternate (antimaterialist) set of values, as they are unsuccessful at the same game everyone else is playing. Middle-class culture has insinuated itself

³⁷³ According to Schor, between 1983 and 1987 alone, Americans purchased 51 million microwaves, 44 million washers and dryers, 85 million colour television sets, 36 million refrigerators and freezers, 48 million vcrs, 23 million cordless phones – all for an adult population of 180 million. From Schor, 1991, op. cit., p. 108.

³⁷⁴ Schor, 1991, op. cit., pp. 109-110.

³⁷⁵ Ibid. p. 112.

throughout the society. If they're not trapped in work-and-spend, it's more because they can't than they won't."³⁷⁶

The work-and-spend cycle is driven by productivity growth, says Schor. As productivity increases the increased wealth could be distributed among workers in the form of increased pay or increased time off.³⁷⁷ More often than not pay has gone up. Schor says this "sets off consumption cycles" and that additional income gets spent. "The individual then becomes habituated to this spending and incorporates it into his/her usual standard of living."³⁷⁸ When real wages stagnate, and living standards need to be maintained, people must work longer hours to make the same amount of money. Schor says the cycle is hard to break because it means being happy with a lower standard of living.

3.4 Total Work Hours

NOTE: The following Statistics Canada data have never before been publicly released. Statistics Canada's Labour Force Survey data currently available to the public provide information on actual and usual hours worked by Industry, Occupation, and Class of Workers. The data break down employees by age and sex. They do not, however, give hours of work by marital or parental status. In the following section these unpublished data will be compared and contrasted with the time-use data on paid work hours, provided by Statistics Canada's General Social Survey.

The following data from Statistics Canada's 2002 Labour Force Historical Review were commissioned and paid for by GPI Atlantic, and provide new information that is of vital importance to Canadian families and their quality of life.

3.4.1 Unpaid Work

Work performed in households is more essential to basic survival and quality of life than much of the work done in offices, factories and stores, and is a fundamental precondition for a healthy market sector. If children are not reared with attention and care and if household members are not provided with nutritious sustenance, workplace productivity will likely decline and social costs will rise.

Yet this huge contribution registers nowhere in our economic accounts. When we pay for child-care and housecleaning, and when we eat out, this adds to the Gross Domestic Product (GDP), and counts as economic growth and "progress." When we cook our own meals, clean our own houses, and look after our own children, it has no value in our current measures of progress.³⁷⁹

³⁷⁶ Ibid. p. 114.

³⁷⁷ Many argue that the increases in productivity are due to decreases in hours of work, not the other way around.

³⁷⁸ Schor, 1991, op. cit., pp. 126-128.

³⁷⁹ Colman, Ronald. 1998. *The Economic Value of Unpaid Housework and Child Care in Nova Scotia*. Genuine Progress Index Atlantic. Halifax. p. 19.

A 1998 study conducted by GPI Atlantic on the value of unpaid housework and childcare in Nova Scotia, using time-use data from Statistics Canada's General Social Survey (GSS), found that Nova Scotians 15 years and older each contributed on average 1,230 hours a year of unpaid household work to the economy, for a total of 941 million hours in that year. This is the equivalent of 490,000 full-year full-time jobs. It is also 25% more than the 707 million hours that Nova Scotians worked for pay in 1997. If this unpaid work were replaced for pay in the market economy it would be worth \$8.5 billion a year.³⁸⁰

When unpaid and paid work are combined we get an overall picture of the total amount of work performed by individuals and households, and of which demographic groups are likely to have the highest rates of work-related time stress.

3.4.2 *The Rise of the Dual-Earner Family*

In 2000, both partners worked in 65.6% of two-partner families in Canada.³⁸¹ In 1967 (the first year data were available) just over 30% of all two-partner families had both partners working. Between 1967 and the late 1980s, the proportion of two-partner families with dual-earners had steadily increased, reflecting the increased labour force participation of women. By the end of the 1980s this trend levelled off.^{382 383}

Due to the doubling of women's labour force participation in the last 40 years, and the fact that total household work hours have not markedly diminished since the turn of the century, dual-earner couples with children are working longer total (paid plus unpaid) hours today than their counterparts did 100 years ago. As noted in chapter 2, total work hours per week for couples with children increased substantially in Canada between 1900 and 2000 (Table 1).³⁸⁴ This increase was primarily due to the fact that married women with children only entered the paid workforce in large numbers after WWII.

In the U.S. the situation is similar. According to Juliet Schor, between 1979 and 2000 the total paid work hours of married couples between the ages of 25 and 54 years increased by 12%. Among middle-income earners, hours increased by more than 20%.³⁸⁵

Statistics Canada's time use surveys indicate that married couples (25-44 years of age) with children under 25 years of age spend an average of 67 hours a week on unpaid household work.

³⁸⁰ Idem.

³⁸¹ Statistics Canada. 2002b. *Income in Canada, 2000*. Catalogue no. 75-202-X1E. Table 9.2. Minister of Industry. Ottawa. p. 125.

³⁸² Statistics Canada. 1997a. "Earning Characteristics of Two-Partner Families." *The Daily*. August 26, 1997. Available from <http://www.statcan.ca/Daily/English/970826/d970826.htm>. Accessed June 8, 2003.

In 1995, 70.7% of all children in two-partner families had both parents working.

³⁸³ Data for Nova Scotia were not available from Statistics Canada without special request for a fee. The May/03 data release from the 2001 Census did not include information on dual-earners because it is not a standard release product. Future updates of this report should include data for Nova Scotia.

³⁸⁴ In Table 1, paid work includes both full-time and part-time work.

³⁸⁵ Schor, Juliet B. [Forthcoming]. "The (Even more) Overworked American." In *Take Back Your Time*. John deGraaf (ed). Berrett-Koehler. San Francisco. Data in advance of publication received via personal communication with J. Schor, May 29, 2003.

When combined with paid work, married couples with children have far less time for leisure than unmarried individuals or those without children.³⁸⁶ For this reason many couples with children today are constantly struggling to balance work and family life.

Using Statistics Canada's special tabulations prepared for GPI Atlantic, Figure 22 illustrates that the average employed married father in Nova Scotia works longer hours for pay than his non-parent counterpart. Employed married mothers, on the other hand, tend to work fewer hours for pay than their non-parent counterparts, though they put in considerably longer unpaid household work hours. In Canada overall the general pattern is similar, though married men and women both with and without children in Nova Scotia tend to work longer paid work hours than their counterparts in the rest of Canada. Figure 22 also shows that fathers are putting in about two hours per week less in paid work time than 25 years ago, while mothers are working about an hour longer.

As discussed in the previous sections, there was also an overall polarization in hours that peaked around 1996 in both Canada as a whole and in Nova Scotia in particular.³⁸⁷ In recent years, there has been a decline in this polarization of hours, and a trend back towards standard work hours, though the proportion of the work force working standard hours is still considerably smaller than it was 25 years ago. This trend is also evident overall in the paid work hours of men and women without children and men with children. According to Statistics Canada analyst Jeff Bowlby, there were likely a number of factors influencing the movement of hours after 1996. He says there has been a trend toward more part-time work and more employment in the service sector. Gains by youth in finding work have also biased the numbers toward shorter hours. In addition Bowlby says the aging population may be working fewer hours. He stresses that the trend lines would not be the result of changes made to the definition of usual hours, coincidentally, in 1997.³⁸⁸

According to Statistics Canada's LFS data, in 1994 about 20% of dual-earner couples (with or without children) worked at least 90 hours a week for pay. Approximately 70% worked between 60 and 89 hours and 10% worked less than 60 hours. Statistics Canada reported that in 1994 the average combined workweek of all dual-earner couples varied only slightly with the presence of children. The differences that did exist were solely attributable to the hours worked by the female members of these dual-earner couples. Women in dual-earner families without children worked

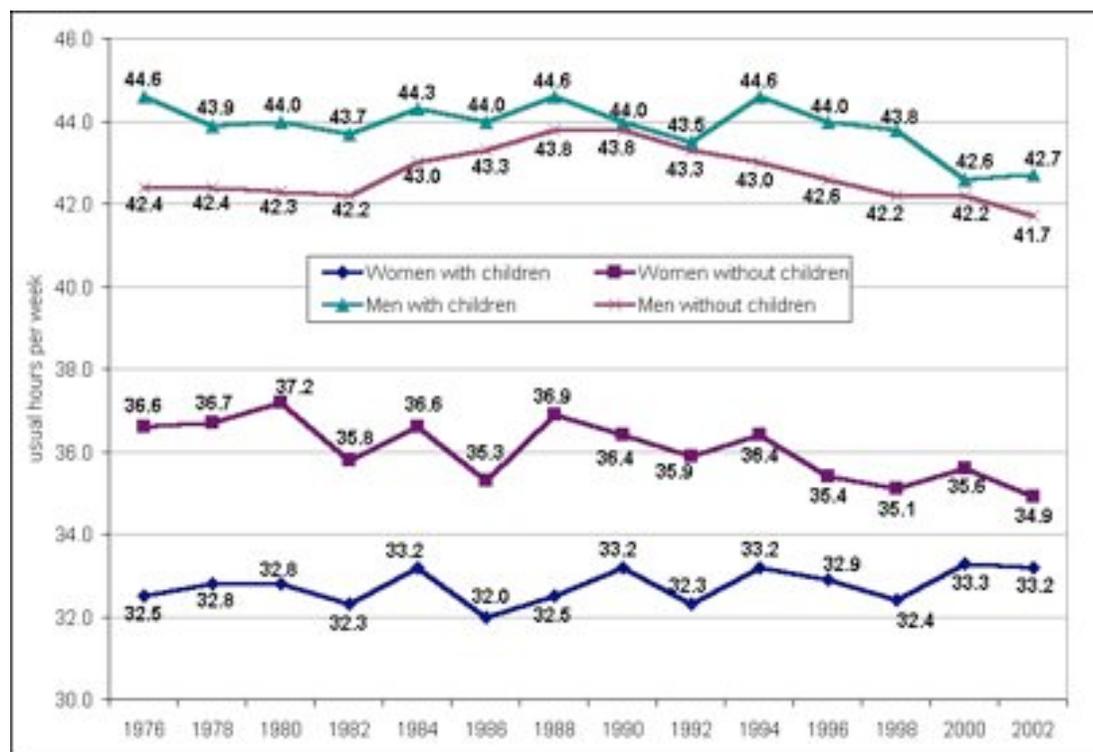
³⁸⁶ Fast, Janet, Judith Frederick, Nancy Zukewich and Sandra Franke. 2001. "The Time of our Lives." *Canadian Social Trends*. Statistics Canada. Catalogue no. 11-008. Ottawa. pp. 21-22. For a discussion on leisure time see Part 2 of this report. Also, Frederick, Judith A. 1995. *As Time Goes by...Time use of Canadians. General Social Survey*. Statistics Canada. Minister of Industry. Ottawa. pp. 7-8.

³⁸⁷ In addition to Statistics Canada sources, other references that verify this trend in Canada include: Advisory Group on Working Time and Distribution of Work. 1994. *Report of the Advisory Group on Working Time and the Distribution of Work*. Human Resources Development Canada. Hull; Battle, Ken and Sherri Torjman (eds). 1999. *Employment Policy Options*. Caledon Institute of Social Policy. Ottawa; Benimadhu, Prem. 1987. *Hours of Work: Trends and Attitudes in Canada*. Conference Board of Canada. Ottawa; Hayden, Anders. 1999. *Sharing the Work, Sparing the Planet. Work time, Consumption and Ecology*. Between the Lines. Toronto; Jackson, Andrew and David Robinson. 2000. *Falling Behind. The State of Working Canada, 2000*. Canadian Centre for Policy Alternatives. Ottawa; Reid, Frank and Morley Gunderson. Forthcoming. *Worksharing and Working Time Issues in Canada*. Institute for Research in Public Policy. Montreal.

³⁸⁸ Bowlby, Jeff. Statistics Canada. Head of Analysis for The Labour Force Survey. Personal communication. July 30, 2003.

an average of 35.6 hours. Among mothers whose youngest child was between 6-15 years, the average declined to 33.6 hours per week and for those with preschoolers, to 32 hours.³⁸⁹

Figure 22. Usual Paid Weekly Work Hours of Married Men and Women, aged 18-64, with Children under 18 and without Children, Nova Scotia, 1976-2002 (includes both full-time and part-time workers).



Note: Includes all employed (full-time and part-time) married men and women between 18 and 64 years of age with and without children.

Source: Statistics Canada. 2003a. *Labour Force Survey, 1976-2002*. Unpublished data, custom tabulation prepared for GPI Atlantic. Table V0603_16. Minister of Industry. Ottawa.

Labour Force Survey custom tabulations provided by Statistics Canada to GPI Atlantic show that when both full-time and part-time work are combined, married couples with children together tend to work about one hour less per week than married couples without children. But when only full-time employed couples are considered, the situation is reversed, with parents working slightly longer than non-parents.

Table 9 summarizes these findings for 2002. Couples between 25 and 44 years of age without children in Canada worked 77.2 hours per week. In Nova Scotia in that same year they worked 78.2 hours. In contrast, couples in that age group with children worked 75.1 hours per week in Canada overall and 76.1 hours in Nova Scotia.

³⁸⁹ Charette, Dan. 1995. "Hours of Working Couples." *Perspectives*. Catalogue no. 75-001E. Statistics Canada. Ottawa. pp. 9-10. Charette's evidence is from the 1994 Labour Force Survey.

By contrast, full-time employed parents between 25 and 44 years of age worked a combined 81.2 hours a week in Canada in and 82.6 hours in Nova Scotia in 2002. Their non-parent counterparts were employed 80.7 and 81.8 hours respectively.

Table 9. Usual Paid Weekly Hours of Prime age (25-44 year old) Dual-earner Couples with and without Children, Labour Force Survey, Canada and Nova Scotia, 2002.

Category	Combined paid hours/week
Full-time and part-time employed:	
<i>Canada</i>	
Couple with children	75.1
Couple without children	77.2
<i>Nova Scotia</i>	
Couple with children	76.1
Couple without children	78.2
Full time employed only:	
<i>Canada</i>	
Couple with children	81.2
Couple without children	80.7
<i>Nova Scotia</i>	
Couple with children	82.6
Couple without children	81.8

Source: Statistics Canada. 2003a. *Labour Force Survey, 1976-2002*. Unpublished data from Statistics Canada custom tabulation. Table V0603_16. Minister of Industry. Ottawa.

Figure 23 illustrates the fluctuations in the combined workweeks of prime age (25-44 years old), full-time employed dual-earner couples with and without children from 1976 to 2002. On average, couples in Nova Scotia are working longer hours than the Canadian average. Generally, paid work hours for dual-earner couples without children increased up until 1996, while they remained relatively stable for those with children during those 20 years. Since 1996, combined paid work hours for both groups have steadily declined. Paid work hours for couples with children in 2002 were about two hours a week less than they had been in 1976. For those without children, hours returned to 1976 levels.

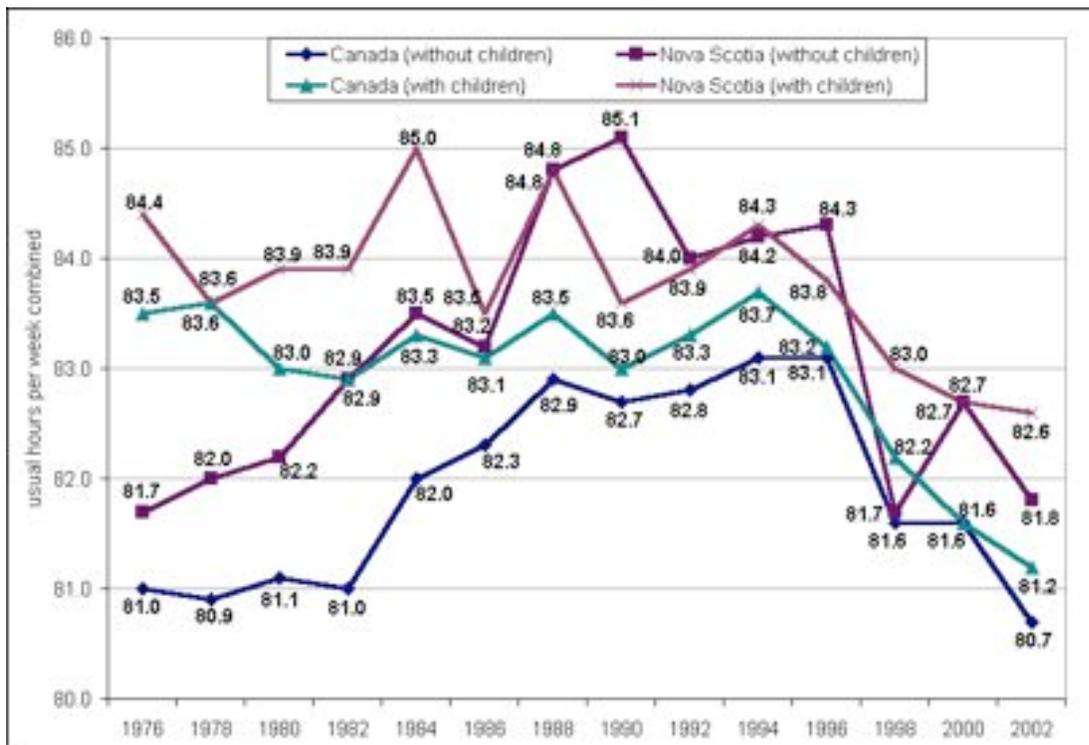
According to time-use data collected in Statistics Canada's 1998 General Social Surveys, using the time diary method rather than the time-estimate method of the Labour Force Surveys, full-time dual earner parents work a total of 87.4 paid hours a week when both their workloads are combined. This method yields results for paid work that are about six hours longer per week than those reported in the Labour Force Surveys.

According to the General Social Survey, *paid work and work related activities* include commuting to/from work, travel on the job, idle time before and after work, meals/coffee breaks, looking for work, and training on the job.³⁹⁰ This could account for the difference. If these

³⁹⁰ Statistics Canada. 1998. *The General Social Survey 1998 – Cycle 12 – Time-use Survey*. Appendix L. Activity Classification Structure. Minister of Industry. Ottawa. pp. 1-9.

activities were subtracted from paid work hours in the time-use approach, then the values would likely be lower than the LFS estimates. However, time constraints made it impossible to do this here. Future updates of this report should attempt to reconcile the LFS data with the GSS time-use data.

Figure 23. Usual Paid weekly hours of Prime-age (aged 25-44), Full-time Employed Couples with and without Children, Canada and Nova Scotia, 1976-2002.



Source: Statistics Canada. 2003a. *Labour Force Survey, 1976-2002*. Unpublished data from Statistics Canada custom tabulation. Table V0603_16. Minister of Industry. Ottawa.

When unpaid work hours are added, the total rises to 144.6 combined paid and unpaid hours weekly.³⁹¹ Table 10 summarizes the findings of the time-use data for 1998. The table shows that fathers employed full-time averaged 48.6 hours per week of paid work and work-related activities and mothers employed full-time averaged 38.8 hours per week. These figures are higher than the numbers cited in Table 1. This is because Table 1 includes part-time and full-time work hours whereas the higher figures above are for full-time only. This was an increase of 2.0 hours per week of paid work since 1992 for both men and women.

³⁹¹ Unpaid work includes household work (cooking, washing dishes, cleaning, laundry, etc.), child-care, shopping, helping others, volunteering, and civic activities. Statistics Canada only classifies unpaid “work” as those activities that can be replaced for pay in the market economy. Thus, for example, shopping for groceries is classified as unpaid work, because someone could be hired to perform that task, while having a haircut or visiting the doctor or dentist is not classified as unpaid work.

The Labour Force Survey data special run prepared by Statistics Canada for GPI Atlantic, as presented in Figure 23 above, does not demonstrate this increase in paid work hours for full-time employed mothers and fathers between 1992 and 1998. It is therefore possible that the increase reported in the time diary data resulted from increases in work-related activities like commuting and job training. Time and resources did not permit GPI Atlantic to investigate and resolve this discrepancy between the LFS and GSS data.

For many people in this group – full-time employed prime aged (25-44 year-old) parents – an increase in paid work was accompanied by an increase in unpaid work of about one-half hour per week more in 1998 than in 1992. Men spent an average of 22.8 hours a week on unpaid work and women 34.4 hours per week (Table 10).³⁹²

Table 10. Weekly Paid and Unpaid Work Hours of Full-time Dual-Earner Parents, aged 25-44, Based on Time-use Data, Canada, 1998.

	Hours of work/week	Total work Hours	Total combined hours
Paid work, fathers	48.6	71.4	144.6
Unpaid work, fathers	22.8		
Paid work, mothers	38.8	73.2	
Unpaid work, mothers	34.4		

Note: Total work hours of both men and women are 144.6 hours. It should be noted that this represents the hours of parents who both work full-time, and is therefore higher than the 137.2 hours cited previously in Table 1, which includes both full and part-time working parents.

Source: Statistics Canada. 1999b. "General Social Survey: Time Use." The Daily. November 9, 1999. Available from <http://www.statcan.ca/Daily/English/>. Accessed April 30, 2003.

It should be noted that these time-diary data from the GSS yield different results than the time-estimate data from the LFS. Thus, the time-use data show that full-time dual earner parents, aged 25-44, worked a combined paid workweek of 87.4 hours in 1998. Unpublished data from the Labour Force Survey, prepared as a special tabulation for GPI Atlantic, show that in that same year full-time employed parents between 25 and 44 years of age worked a combined paid workweek of 82.3 hours in Canada and 83 hours in Nova Scotia – about five hours less than reported in the time-use surveys.

Lone-parent mothers, aged 25-44, who were employed full-time, did slightly more combined paid and unpaid work (75 hours a week) than their married counterparts, and they had the least amount of free time of any demographic group.³⁹³

³⁹² According to Judith Frederick, a sign of gender equality would be an equal amount of time being spent on paid and unpaid work by men and women. She says the difference is a measure of the "gender gap in these activities." From Frederick, Judith A. 1995. *As Time Goes by... Time use of Canadians. General Social Survey*. Statistics Canada. Minister of Industry. Ottawa. p. 54.

³⁹³ Statistics Canada. 1999. *Overview of the Time Use of Canadians in 1998. General Social Survey. Catalogue no. 12F0080X1E*. Minister of Industry. Ottawa.

According to Robin Douthitt, lone-parent mothers who are employed experience a different kind of poverty than their non-employed counterparts. Douthitt defined "time poverty" as the time below the minimum necessary for basic household production, including food preparation and cleanup, house cleaning, laundry, and shopping. She found that, when time and income are both considered, poverty rates of working single mothers in Canada are 70% higher than official estimates, approaching the poverty rates of non-employed single mothers. When sleep deprivation is taken into account, she found that working single mothers experience nearly twice the absolute time-poverty rates of their non-employed and married counterparts. Recognizing the extraordinary time pressures on employed single mothers, Douthitt argued for the inclusion of "time poverty" in Canadian poverty measures.³⁹⁴ Indeed, the dramatic recent increase in employment rates among Canadian single mothers with infants aged 0-2 (from 25.7% in 1993 to 46% in 2001), and of those with very young children aged 3-5 (from 44.6% in 1993 to 60.8% in 2001) makes Douthitt's recommendation more urgent today than when her study was published in 1993.³⁹⁵

Of course it can be argued that some of the massive changes seen over the last 30 years in the labour market, particularly as they relate to women, mark positive progress. For instance, the increase in the labour force participation of women can be viewed as a positive development. However, as previously discussed, it has also resulted in an absolute loss of free time and increased stress levels due to the double burden of paid and unpaid work. In addition, the nationwide increase in female employment is not spread evenly among all age groups and educational levels. In fact, women with university degrees are more than twice as likely to have a job as women who have not completed high school. In 2001, 75.4% of female university graduates had a job, compared with 79.3% of male graduates. By contrast, women with less than a Grade 9 education are less than half as likely to be employed as their male counterparts – 13.6% of women compared to 29.4% of men.³⁹⁶

Another positive development over the last three decades has been the increasing educational attainment of women relative to men.³⁹⁷ In fact, there has been remarkable progress in closing the gender gap in formal educational attainment. There were over four times as many female

³⁹⁴ Douthitt, Robin. 1993. "The Inclusion of Time Availability in Canadian Poverty Measures." In *Time Use Methodology: Toward Consensus*. Istituto Nazionale di Statistica. Rome. Cited in Colman, Ronald. 2000. *Women's Health in Atlantic Canada. A Statistical Portrait. Vol. I*. GPI Atlantic. Halifax. p. 27.

³⁹⁵ Trends in employment rates of single mothers with infants and young children are from Statistics Canada. 2002c. *Women in Canada: Work Chapter Updates*. Catalogue no. 89F0133-XIE. Minister of Industry. Ottawa, pp. 6 and 13. For an analysis of these trends, see Colman, Ronald. 2003. *Women's Health in Atlantic Canada: 2003 Update, Vol. I: Social Determinants of Health*. GPI Atlantic and Atlantic Centre of Excellence for Women's Health. Halifax.

³⁹⁶ Colman, Ronald. 2003a. *A Statistical Profile of Women's Health in Canada*. GPI Atlantic. Halifax. Prepared for the Women's Health Bureau. Health Canada. Ottawa. Citing Statistics Canada. *Women in Canada: Work Chapter Updates*. Catalogue no. 89F0133-XIE. April 2002. pp. 5, 11. Table 3.

³⁹⁷ In his review of the GPI Work Hours Component, Andrew Heisz of Statistics Canada noted a number of "positive developments" in the labour market that should be included in the study. These included: "1) the rise in the service sector, 2) the rise in part-time work, 3) the increasing labour market participation of women, 4) the increasing educational attainment of women relative to men, and 5) the massive increases in the human capital attainment of the workforce as the first beneficiaries of the 1960s expansion in post secondary education mature in the workforce. Heisz, Andrew. Senior Research Economist, Business and Labour Market Analysis Division, Statistics Canada. Reviewer comments. Received October 23, 2003.

university graduates, aged 25 and over, in 1996 as there were in 1971. By contrast, men doubled their rate of university graduation during this period.³⁹⁸

However, despite this growing educational parity – a sign of genuine progress and growing equity – the gender wage gap persists. Women's hourly wages overall have remained at 81% of the male hourly wage over time despite these clear educational gains. Statistics Canada analysts found that after controlling for hours worked, educational attainment, work experience, job tenure, industry, occupation, supervisory role, and a wide range of other employment characteristics and socio-demographic factors, "roughly one half to three quarters of the gender wage gap cannot be explained." This unexplained component, says Statistics Canada, "is referred to as an estimate of the gender based labour market discrimination."³⁹⁹

The increased educational attainment of women has also been accompanied by education-job mismatches, increased student debt, and the raising of credentials for jobs that can be performed at lower levels of education.

3.4.3 Family Work Effort and Earnings

The notion that increased work hours are generally buying higher levels of affluence is a misleading one. Bluestone and Rose examined the available evidence in the U.S. and concluded that most of those working longer hours in that country are just trying to maintain their existing standard of living on dwindling real incomes. They found that real hourly wages in the U.S. have declined by 13% since 1973. They also found that among prime age working couples, aged 25-44, combined real earnings rose by 18.5% between 1973 and 1988 and that "most of this modest increase did not come from improved wages, but from increased work effort." Adjusting for business cycles, Bluestone and Rose documented the fact that the work effort of husband-wife working couples increased by an average of more than 32 hours per year each year during the 1970s and 1980s. By the end of the 1980s the average dual-earner couple was putting in about 684 more hours per year than in 1970, and spending the equivalent of an additional day and a half on the job every week.⁴⁰⁰ In other words, the increase in real earnings between 1973 and 1988 was "purchased" with a 16.3% increase in hours worked. "Over the entire 15-year period, the combined average husband-wife hourly wage increased by only 1.8% – the equivalent of a real hourly wage increase of less than 30 cents over the entire period, or 2 cents each year!"⁴⁰¹

Bluestone and Rose also discovered that the increases in family work effort were related to both race and education. The increase in work hours among white working couples was 60% greater than the increase for black couples – due mainly to a decline in the hours of black men and a sharp rise in the hours of white women. More educated working couples also increased their

³⁹⁸ Colman, Ronald. 2003a. *A Statistical Profile of Women's Health in Canada*. GPI Atlantic. Halifax. Prepared for the Women's Health Bureau. Health Canada. Ottawa. Citing Statistics Canada, 1996 Census: The Nation Series. Catalogue no. 93F0028SDB96001.

³⁹⁹ Idem. Citing Drolet, Marie. 1999. *The Persistent Gap; New Evidence on the Canadian Gender Wage Gap*. Income Statistics Division. Statistics Canada. Catalogue no. 75F0002M1E-99008. p. 13.

⁴⁰⁰ Bluestone and Rose, 1997, op. cit., p. 10.

⁴⁰¹ Bluestone and Rose, 1997, op. cit., pp. 10-11.

work hours more than their less educated counterparts, making the "overeducated the most overworked."⁴⁰²

Are Canadian trends analogous to those in the U.S. described by Bluestone and Rose? Has the increase in wages in Canada been purchased by increased hours?

Table 11 below shows that the average disposable income of dual-earner parents increased by 14% in Canada and 8.1% in Nova Scotia between 1980 and 2001.⁴⁰³

Table 11. Combined Average Disposable Income in 2001 constant dollars, of Two-parent, Dual-earner Families with Children, Canada and Nova Scotia, 1980-2001.⁴⁰⁴

	1980	1985	1990	1995	2001	% Increase
Canada	57,392	55,515	55,875	56,193	65,235	14%
Nova Scotia	49,878	51,195	51,683	49,341	53,903	8.1%

Note: Dollar figures have been converted to 2001 constant dollars for comparison purposes.

Source: Statistics Canada. *Average After-tax Income in 2001 Constant dollars, Canada, 1980-2001*. CANSIMII Table 202-0603.

As Table 12 below shows, during roughly this same period (1981-2000), the average combined annual paid work hours of dual-earner parents with children increased by 6% in Canada and by 4% in Nova Scotia. When we include 2001 data the increase is 3.4% and 3.1% respectively. In other words, in 2000, Canadian parents were actually working 206 more hours per year or 26 more days than they did in 1981 (based on an 8-hour work day). Nova Scotian parents were working 141 hours or 18 more days than they did in 1981.⁴⁰⁵ In the last two decades Canadian working parents increased their work effort by just over five weeks a year and Nova Scotian parents by nearly four weeks a year.⁴⁰⁶

Earlier (Figure 23) it was shown that since 1996, usual weekly hours had fallen for prime age full-time employed couples with and without children. Since 1996 actual hours have undergone similar trends. In Canada and Nova Scotia, actual weekly hours of prime age full-time employed couples with children were relatively stable from 1976 to 1996 and then dropped sharply

⁴⁰² Idem.

⁴⁰³ Statistics Canada. *Average After-tax Income in 2001 Constant dollars, Canada, 1980-2001*. CANSIM II Table 202-0603.

⁴⁰⁴ Disposable income is total income which includes government transfers, less income tax. Market income is defined by Statistics Canada as the sum of earnings (from employment and net self-employment), investment income, private retirement income, and other sources of income. It is equal to the total income minus government transfers. The choice to highlight disposable (after-tax) income over market income here was made since the purchase of necessities is made with after-tax income and this is more illustrative of a family's overall economic wellbeing.

⁴⁰⁵ Statistics Canada. 2003a. *Labour Force Survey, 1976-2002*. Unpublished data. Custom tabulation prepared by Statistics Canada for GPI Atlantic. Table V0603_16. Minister of Industry. Ottawa.

⁴⁰⁶ When we include 2001 data, Canadian couples with children worked 15 more days per year in 2001 than they did in 1981, and their Nova Scotian counterparts worked an average of 14 days more per year. This is because average work hours declined slightly for this segment of the population between 2000 and 2001.

between 1996 and 2002, to below 1976 levels. Actual working hours of couples without children increased sharply between 1976 and 1996 and then decreased, but were still above 1976 levels in 2002.⁴⁰⁷ It is unclear, however, why actual weekly hours for working couples overall are going up. As a general rule, annual average usual hours plus any extra hours (overtime) less time lost (due to holidays, illness, labour dispute, etc.) equal the annual average actual hours.⁴⁰⁸ When all working couples are combined, actual weekly hours were higher in 2002 than in 1976.

Table 12. Average Annual Paid Work Hours of Two-parent, Dual-earner Families with Children, Canada and Nova Scotia. 1981-2001.

	1981	1985	1990	1995	2000	2001	% Increase (1981-2000)	% Increase (1981-2001)
Canada	3,450	3,562	3,624	3,604	3,656	3,567	6%	3.4%
Nova Scotia	3,489	3,557	3,661	3,609	3,630	3,598	4%	3.1%

Notes:

- In this table, actual work hours/week of husband and wife are combined and multiplied by 52 weeks to give annual work hours. Average actual hours are typically lower than usual hours by about 2.5 to 3.5 hours a week, or 7% to 9% less, due to time away from work including vacations and holidays, illness, and family responsibilities. Actual work hours are used here because vacation time must be considered when hours are annualized. Actual hours also capture paid and unpaid overtime.
- Numbers have been rounded.
- Includes both full-time and part-time, all age groups (18-64 years).

Source: Statistics Canada. 2003a. *Labour Force Survey, 1976-2002*. Unpublished data, custom tabulation prepared by Statistics Canada for GPI Atlantic. Table V0603_16. Minister of Industry. Ottawa.

Thus, since actual hours include vacation time, the trend upward in actual hours could be caused by a trend downward in vacation time. Likewise, since actual hours include overtime, it can also be caused by a trend upward in overtime. Since Statistics Canada does not track vacation time it is not possible to draw such a conclusion from these data. Similarly, Statistics Canada has only been collecting data on overtime since 1997, and therefore drawing any conclusions based on a short time frame is also not possible. In any case, it does raise an important question which should be explored further in future updates of this report.

When compared to the findings of Bluestone and Rose, the increase in work effort in Canada (and Nova Scotia) is not as dramatic as in the U.S. However, the Statistics Canada data do indicate that Canadian dual-earner families are putting in more work hours.

As the data indicate, working parents in Canada had, on average, 14% more disposable income in 2001 than they did in 1980. In Nova Scotia, average disposable income rose by 8.1% in the

⁴⁰⁷ Statistics Canada. 2003a. *Labour Force Survey, 1976-2002*. Unpublished data. Custom tabulation prepared by Statistics Canada for GPI Atlantic. Table V0603_16. Minister of Industry. Ottawa.

⁴⁰⁸ Morissette, Rene and Deborah Sunter. 1994. *What is Happening to Weekly Hours Worked in Canada?* Statistics Canada, Household Surveys Division. Analytical Research Branch. Ottawa. p. 2.

same time period. Simultaneously, work hours increased by 3.4% in Canada and by 3.1% in Nova Scotia. Therefore, based on these data, it would appear that 24% of the increase in disposable income in Canada and nearly 40% of the increase in Nova Scotia was bought with increased work effort.

Data also indicate that the average market income of prime age working parents in Canada increased by 22% between 1981 and 2000.⁴⁰⁹ In Nova Scotia during this same time period market income increased by 20%.⁴¹⁰ Based on these data, it would appear that nearly 30% of the increase in market income in Canada and 20% of the increase in Nova Scotia was bought with increased work effort.

The increases in both disposable (after-tax) and market income purchased through increased work effort calculated here are underestimates because female labour force participation has risen sharply since the early 1980s. For most households this rise in women's participation in the labour force constitutes "increased work effort" that is not captured here. For these households, there is no question that the increased household income was purchased with longer household work hours. Therefore, the increased household work effort of the family switching from single-earner status to dual-earner status is missed in our comparison above.

The proper comparison would be to take the combined household work hours of a random universe of 1,000 households (single earner and dual earner) in 1981, and then (through longitudinal data sets) compare the household work hours of those same households in 2002. Ideally we'd look both at combined paid hours and at combined total hours (paid and unpaid). Some of those 1,000 households will have switched from single-earner to dual-earner status in the intervening 21 years. The average combined household work hours in 2002 and 1981 would then be a fair comparison of the increased work effort needed to maintain a given standard of living in 2002 compared to 1981, when the work hours are compared to combined household market and disposable incomes in 1981 and 2002.

Due to time limitations it was not possible to include this assessment here. It will be included in future updates of this report.

As Bluestone and Rose discovered, levels of increase in work effort depend on other factors including age, race, level of education, and full-time vs. part-time work. All the income data above are averages for all age groups and include both full and part-time work.

Income data and income trends for prime-aged (25-44) full-time employed couples could not be obtained at a reasonable cost. Therefore, among this age group in Canada, it was not possible to test Bluestone and Rose's hypothesis that "increases in income were largely bought with longer

⁴⁰⁹ In 1981 in Canada the combined average market income of two-parent, dual-earner families with children was \$63,308. In 2000 it was \$76,960, an increase of 22%. Both are in \$2001 constant dollars. Statistics Canada. *Average Market Income by Economic Family Types, Canada, 1981-2000*. Available at <http://www.statcan.ca/english/Pgdb/famil22d.htm>. Accessed June 5, 2003.

⁴¹⁰ In 1981 in Nova Scotia the combined average market income of two-parent, dual-earner families with children was \$53,260. In 2000 it was \$63,801, an increase of 20%. Statistics Canada. *Average Market Income by Selected Economic Family Types, Nova Scotia, 1981-2000*. CANSIM II. Table 202-0202.

hours.”⁴¹¹ Though financial constraints prevented this important correlation at this time, GPI Atlantic recommends that updates of this report explore work effort by age group and education in Canada.

3.5 Moonlighting

"One job will never be enough. In the new version of the law of supply and demand, jobs are so cheap – as measured by the pay – that a worker is encouraged to take on as many of them as she possibly can."

– Barbara Ehrenreich⁴¹²

In Canada, between 1976 and 1996 the number of people holding down more than one job tripled. When increases in total population and employment are accounted for, one in 20 workers held a second job or self-employed position in 1996, compared with just one in 50 workers two decades earlier. The fastest-growing group of moonlighters was women aged 25-54 years. In Nova Scotia the percentage of workers who are moonlighting more than doubled from 2.1% in 1976 to 4.4% in 2001. Since 1996, when nearly 5% of all employed were moonlighting, there has been a modest decline.⁴¹³ Figure 24 plots the increase from 1976 to 2001.

The composition of the moonlighting work force has changed over the last 25 years or so. In 1976 moonlighters were predominantly adult men (outnumbering women three to one) with regular full-time jobs. By the 1990s, many more women joined the ranks of multiple job holders, so that, by 1996, 51% of moonlighters were adult women, of whom the vast majority were part-timers in the service sector.⁴¹⁴

In Canada in 2001, 53.4% of employed moonlighters were women, while 46.5% were men. Similarly, in Nova Scotia, 18,800 workers were moonlighting in 2001, the majority of them women (54.2% women vs. 45.7% men), reversing the earlier gender balance. In 1987, 60.9% of moonlighters were men, and 39.8% were women. Figure 25 illustrates how moonlighting has become more prevalent among women in Nova Scotia. In 2001 5.1% of employed women were moonlighting, up from 3.3% in 1987. In 2001 3.9% of employed men were holding down more than one job, up only marginally from 3.8% in 1987, and down from 4.6% in 1996.⁴¹⁵

Figure 24. Multiple Job Holders in Nova Scotia and Canada, as % of Total Employed, 1976-2001.

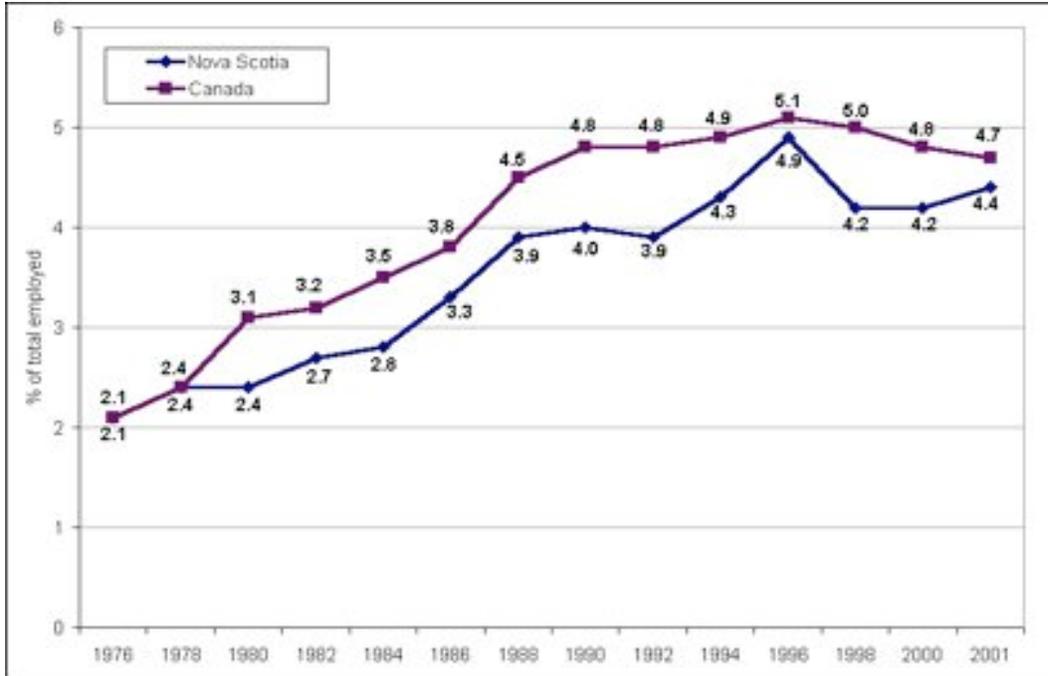
⁴¹¹ Statistics Canada quoted a cost of \$5,000 for only one year of data on market and disposable incomes of prime-aged full-time working couples. In order to investigate this issue fully and properly, GPI Atlantic would have required data dating back to at least 1980, in order to determine the trend in incomes (market and disposable) of prime-age, full-time working couples with and without children. The prohibitive cost of these custom tabulations therefore prevented GPI Atlantic from undertaking this very important investigation.

⁴¹² Ehrenreich, Barbara. 2001. *Nickel and Dime. Or (Not) Getting by in America*. Henry Holt and Company. New York. p. 60.

⁴¹³ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB.

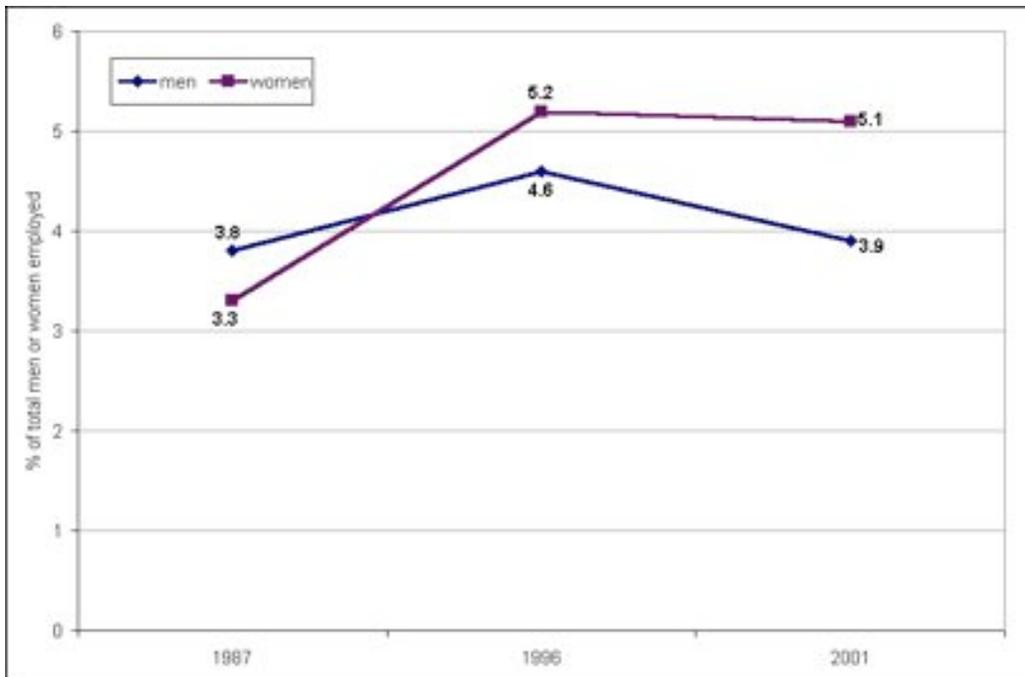
⁴¹⁴ Statistics Canada. 1997. *Labour Force Update: Hours of Work*. Vol. 1 no. 2. Catalogue no. 71-005-XPB. Minister of Industry. Ottawa. pp. 32-34.

⁴¹⁵ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.



Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

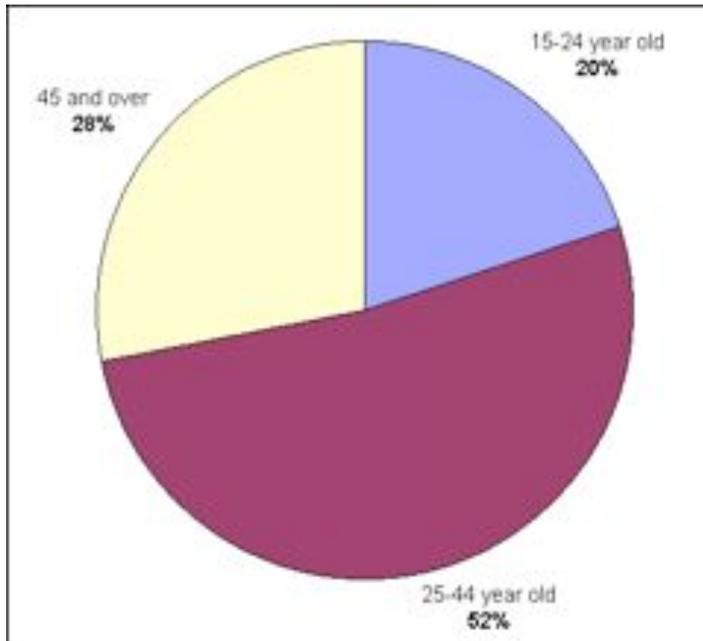
Figure 25. Moonlighting among Men and Women, % of Total Employed Men or Women, Nova Scotia, 1987-2001.



Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

Figure 26 shows the breakdown by age group among Nova Scotian moonlighters in 2001. The majority (52%) of moonlighters are between the ages of 25-44, with the remainder split between younger and older workers.

Figure 26. Multiple Job Holders by Age Group, % of all Multiple Job Holders, Nova Scotia, 2001.



Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

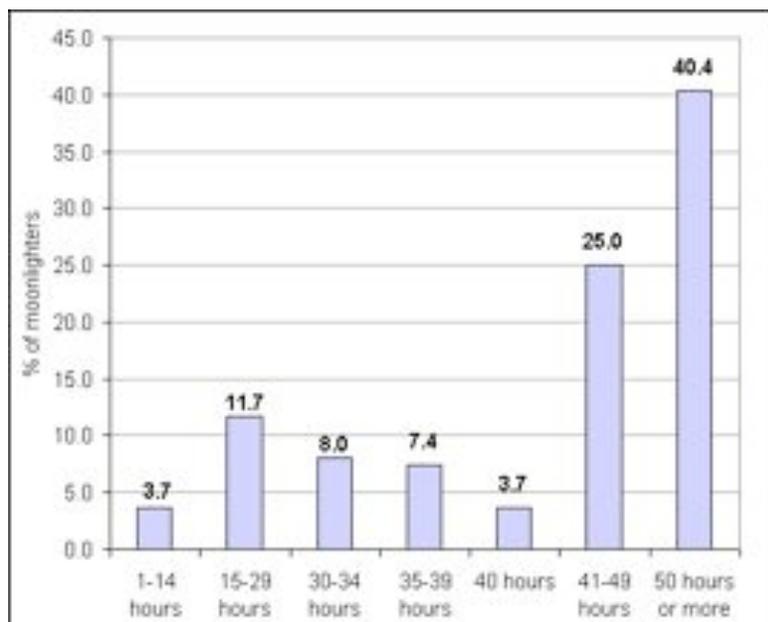
A 1998 Statistics Canada analysis of moonlighting, using 1997 Labour Force Survey data, found that moonlighters tend to be well educated. About 22% of Canadian moonlighters in 1997 held a university degree, which reflects the high rates of moonlighting in health and social services and in educational services. Moonlighters tend to hold their first job in health and social services, educational services, or primary industries. Their second job is most likely in either retail trade, health and social services, educational services, or accommodation, food and beverage services.⁴¹⁶

More than one job usually means longer work hours, though in some cases, especially for youth, two or more low-hours jobs often only add up to one full-time job. On average, Canadian moonlighters worked 46.2 hours a week in 1996.⁴¹⁷ Figure 27 shows that more than 65% of Nova Scotian moonlighters worked more than 41 hours per week in 2001.

⁴¹⁶ Sussman, Deborah. 1998. "Moonlighting: A Growing Way of Life." *Perspectives*. Statistics Canada. Catalogue no. 75-001-XPE. Minister of Industry. Ottawa. p. 25.

⁴¹⁷ Statistics Canada, 1997, op. cit., pp. 32-34.

Figure 27. Average Weekly Hours of Multiple Job Holders, % of all Multiple Job Holders, Nova Scotia, 2001.



Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

The 1998 Statistics Canada analysis of multiple job holding found no clear link between moonlighting and family responsibilities in the 1997 Labour Force Survey data. Both those who were married with children and those who were single had high rates of moonlighting. The workers who were least likely to moonlight were those with spouses who were unemployed or not in the labour force.⁴¹⁸

Not surprisingly, moonlighting and high levels of unemployment don't mix. According to Statistics Canada: "In provinces where even one job can be hard to find, it should not be surprising that second jobs are also scarce."⁴¹⁹ In comparison to other provinces, therefore, moonlighting rates in Nova Scotia (and Atlantic Canada in general) are below the national average, since unemployment rates in this region are higher than in other provinces.

In the U.S., moonlighting is also on the rise. In 1979, fewer than 5% of American workers reported working more than one job. In 1996 this proportion rose to 6.2%, with most of this increase among women, who represented nearly half of all moonlighters in that year.⁴²⁰

Bluestone and Rose cite a 1997 survey sponsored by the *Washington Post*, the Kaiser Family Foundation, and Harvard University, which found that 40% of families who needed extra money resorted to sending an additional family member into the workforce or else had an existing working member take on another job.⁴²¹

⁴¹⁸ Sussman, 1998, op. cit., p. 27.

⁴¹⁹ Idem.

⁴²⁰ 1979 figure from Bluestone and Rose, 1997, op. cit., p. 3. 1996 figure from Ehrenreich, 2001, op. cit., p. 45.

⁴²¹ Bluestone and Rose, 1997, op. cit., p. 3.

In 1989 the average number of hours worked per week by moonlighters in the U.S. was 52 to 55.8 hours for men and 47.1 hours for women. Fourteen percent of all moonlighters worked more than 70 hours a week – the equivalent of two full-time jobs.⁴²² According to Ehrenreich, 4% of employed men and 2% of employed women hold down two *full-time* jobs simultaneously.⁴²³

According to Bluestone and Rose and others, most of the increase in multiple job holding in the U.S. is a result of economic hardship.⁴²⁴ Here in Canada, people may take on a second job for a number of reasons. According to Statistics Canada, two jobs can provide more security than one, especially in cases where income from self-employment fluctuates, or where a job may only be temporary. According to Statistics Canada: "Companies are increasingly hiring and shedding workers as demand for their goods and services fluctuates. In response, more people are arming themselves with several jobs in the event that one disappears."⁴²⁵

Some may also be trying to supplement their income from their main job. In the case of youth, where skills may be limited, working more than one job may provide opportunities for greater work experience.⁴²⁶

Table 13 summarizes the findings of Statistics Canada's 1995 Survey of Work Arrangements on the main reasons why Canadians moonlight. The survey findings indicate that the majority (57%) of paid employees and 46% of self-employed workers do so for economic reasons.⁴²⁷

There also seems to be a close link between moonlighting and self-employment. If a business is seasonal or if income from self-employment is unstable, a second job may often help provide greater economic security and stability. In 1997, one in five moonlighters was self-employed in his or her first job, while about two in five were self-employed in their second jobs.⁴²⁸

See Section 3.6 for more detail about self-employment.

In this regard, it is also instructive that the 1998 Statistics Canada analysis of moonlighting found lower hourly wages and fewer job-related benefits to be associated with higher moonlighting rates. This can partly be explained by the fact that there is a higher proportion of part-time workers among moonlighters. However, according to Statistics Canada, moonlighters were still less likely to have job-related benefits even after adjustments were made for part-time work.⁴²⁹

⁴²² Yates, Michael, D. 1994. *Longer Hours, Fewer Jobs. Employment and Unemployment in the United States*. Monthly Review Press. New York. pp. 36-37. It is unclear why there is a range of hours provided for men but not for women.

⁴²³ Ehrenreich, 2001, op. cit., p. 45.

⁴²⁴ Bluestone and Rose, 1997, op. cit., p. 3; Yates, 1994, op. cit., pp. 36-37.

⁴²⁵ Sussman, 1998, op. cit., p. 24.

⁴²⁶ Idem.

⁴²⁷ "Economic reasons" include meeting regular household expenses, paying off debts, saving for the future, and "other: economic."

⁴²⁸ The "main job" or "first job" is the one that involves the greatest number of usual hours.

⁴²⁹ Sussman, 1998, op. cit., p. 30.

Table 13. Main Reason for Holding Multiple Jobs, % of Multiple Job Holders, Canada, 1995.

Reason	Paid employees (%)	Self-employed* (%)
Meet regular household expenses	29	24
Pay off debts	8	7
Buy something special	3	1
Save for the future	9	9
Gain experience	4	2
Build up a business	12	11
Enjoy the work of the second job	18	28
Other: economic	11	6
Other: work-related	7	12
Total	100	100

*Includes unpaid family workers, defined by Statistics Canada as someone who works without pay on a farm or in a business owned and operated by a family member living in the same dwelling.

Source: Sussman, 1998, op. cit., p. 28. Based on Statistics Canada's Survey of Work Arrangements, 1995.

3.6 Self-employment

In 1997 nearly 2.5 million Canadians reported working at their own businesses, more than double the number of self-employed 20 years earlier. In fact, 77% of all jobs created in the first eight years of the 1990s were created in the self-employment sector. This growth in self-employment is "unprecedented" since past job creation has typically and overwhelmingly been in the paid employment sector.⁴³⁰

Figure 28 illustrates how self-employment as a percentage of total employment has increased in Canada and Nova Scotia over the last 25 years, accelerating in the early 1990s, reaching a peak in 1996, and declining somewhat since then, though current self-employment rates are still much higher than 25 years earlier. About 15% of working people in Nova Scotia were self-employed in 1996, compared with 11% in 1976. By 2001 the rates had dropped to roughly 13%, still above 1976 levels. In Canada, self-employment accounted for 16.2% of the labour force in 1997 and 15.3% in 2001, up from just over 12% in 1976.⁴³¹

In Canada and in Nova Scotia, the self-employed are more likely to be men. Figure 29 shows how the male share of self-employment has declined somewhat in Nova Scotia since 1976, when nearly 73% of self-employed were men. By 2001, 64% of self-employed workers were men.

⁴³⁰ Of the 775,000 total net job growth between 1990 and 1998, nearly 600,000 jobs were in the self-employment sector. From Lin, Zhengxi, Garnett Picot and Janice Yates. 1999. *The Entry and Exit Dynamics of Self-Employment in Canada*. Research Paper Series. Analytical Studies Branch. Statistics Canada. No. 134. Minister of Industry. Ottawa. p. 1.

⁴³¹ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

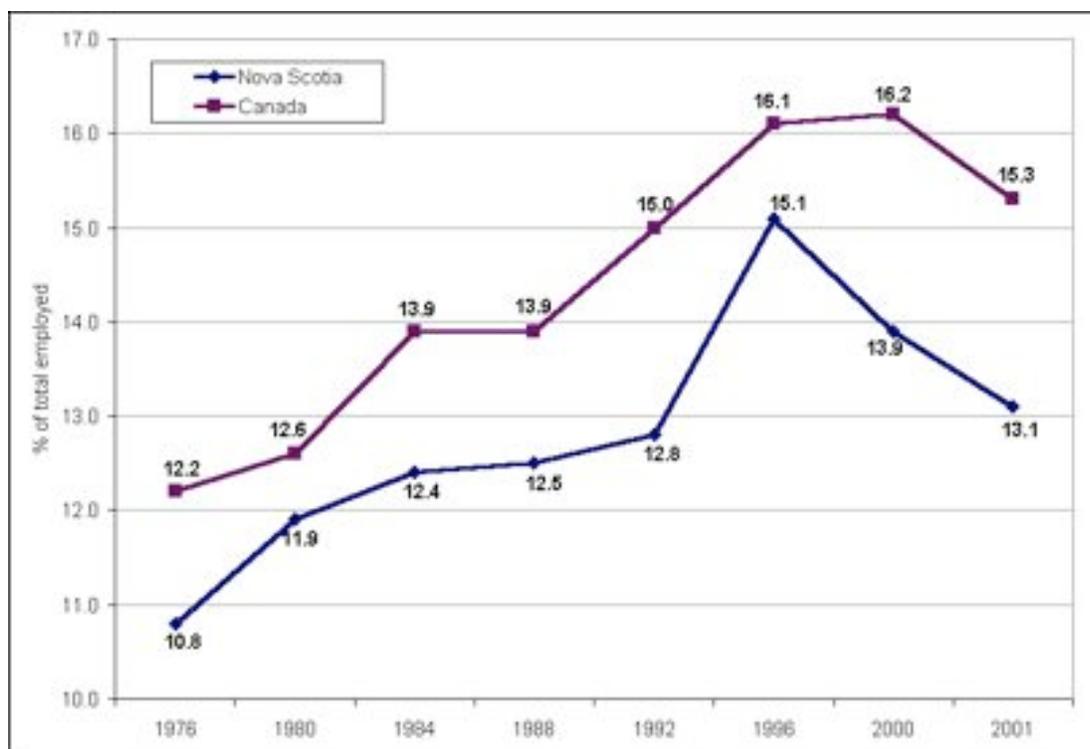
During the same time period the female share of self-employment has increased. In 2001, 36% of self-employed workers were women, up from 27% in 1976.⁴³²

According to the OECD, women are less likely than men to be self-employed because they tend to have limited access to credit, capital, land, and materials necessary to start a business. Also, in some countries, culture is a barrier for women, since being an entrepreneur is viewed as a man's domain not a woman's.⁴³³

In 1997, the self-employment rate was more than twice as high among older workers, aged 55-64, as among younger workers, aged 25-34. However, self-employed Canadians tend to be concentrated in the 35 to 44-year-old age group, which is also the largest group of workers.⁴³⁴

The growing prominence of self-employment in the labour market has contributed to hours polarization in Canada, mostly due to the propensity of the self-employed to put in long workweeks, but also, interestingly, through an increased incidence of short hours among the self-employed in particular sectors.

Figure 28. Self-employment Rate, % of All Employed, NS and Canada, 1976-2001.



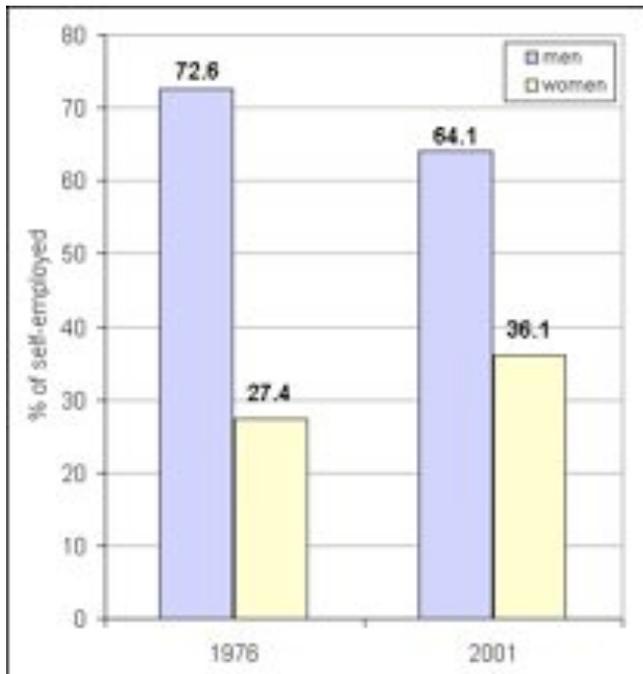
Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

⁴³² Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

⁴³³ OECD. 2002. *OECD Employment Outlook*. OECD. Paris. p. 112.

⁴³⁴ Manser, Marilyn E. and Garnett Picot. 1999. "Self-employment in Canada and the United States." *Perspectives*. Vol. 11. no. 3. Statistics Canada. Catalogue no. 75-001-XPE. Minister of Industry. Ottawa. p. 42.

Figure 29. Self-employment by Sex, % of total Self-employed, Nova Scotia, 1976 and 2001.



Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

In 2001, the self-employed in Canada were seven times more likely to work 50 hours or more per week than paid employees (35% vs. 5%).⁴³⁵ In Nova Scotia the contrast is similar, but not quite as dramatic. In 2001, self-employed Nova Scotians were about 4.5 times more likely to work over 50 hours a week than paid employees, and nearly three times more likely to work 41 or more hours a week.⁴³⁶

Figure 30 presents a breakdown of work hours for self-employed Nova Scotians in 2001. Roughly 40% of the self-employed worked long hours (41 or more hours), and 32% worked 50 or more hours.⁴³⁷

Among the self-employed there has also been a growth in the incidence of short hours in some sectors. According to Statistics Canada, this downward shift has been characteristic of Canadians self-employed in agriculture, trade, construction, and business services.⁴³⁸

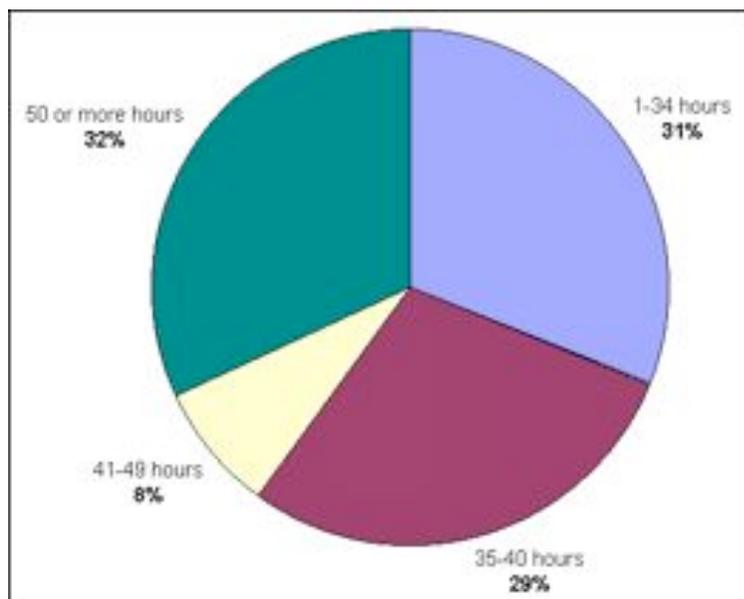
⁴³⁵ If long hours were defined as 41 or more hours, then the self-employed in Canada would have been four times more likely to work long hours than paid employees (43% vs 11%). Data are from Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

⁴³⁶ We are comparing the usual-work hours of the self-employed specifically with usual-work hours of all employees, including those who work part-time and full-time. In other places in this report, long-hours are calculated for full-time employed persons only, which includes the self-employed.

⁴³⁷ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

⁴³⁸ Sheridan, Mike, Deborah Sunter and Brent Diverty. 1996. *The Changing Workweek: Trends in Weekly Hours of Work*. Canadian Economic Observer. Statistics Canada. Catalogue No. 11-010-XPB. Ottawa. p. 3.6.

Figure 30. Average Weekly Work Hours of the Self-employed, % of Total Self-Employed, Nova Scotia, 2001.



Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

Since 1976, many more self-employed Nova Scotians have become incorporated – with the proportion rising from 16.5% in 1976 to 30% in 2001.

Figure 31 presents a breakdown of the types of self-employed in Nova Scotia in 2001. The proportion of unpaid family workers declined from 5.3% in 1976 to just 1% in 2001.⁴³⁹ The majority (53%) of the self-employed in 2001 were unincorporated with no paid help. In other words, they run one-person businesses. In Canada the overall trends were similar, with incorporation increasing from 21% in 1976 to 35.3% in 2001. Roughly half of all the self-employed in Canada in 2001 were unincorporated with no paid help, and the percentage of unpaid family workers dropped from 11% in 1976 to only 1.5% 25 years later.⁴⁴⁰

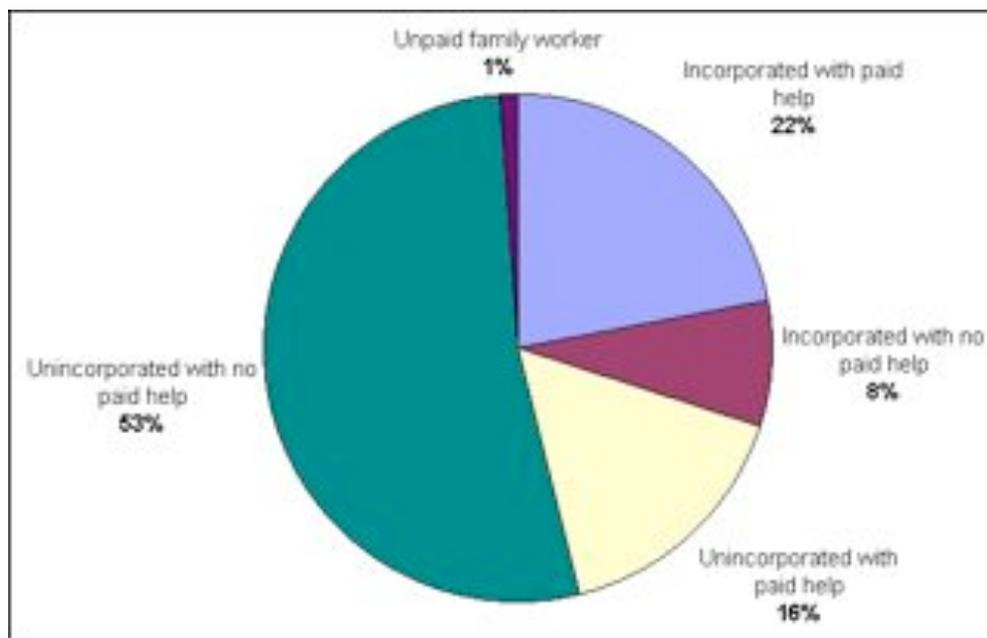
The unprecedented growth in self-employment in Canada has not been mirrored in the U.S. In fact, while self-employment accounted for the majority of the net job growth in the 1990s in Canada, it accounted for only 1% of net job growth in the U.S. between 1989 and 1997.⁴⁴¹

⁴³⁹ "Unpaid family worker" is defined by Statistics Canada as someone who works without pay on a farm or in a business owned and operated by a family member living in the same dwelling.

⁴⁴⁰ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

⁴⁴¹ Manser and Picot, 1999, op. cit., p. 39. U.S. and Canadian figures based on Canadian definition of self-employed. When the U.S. definition is used, growth accounted for by self-employment in Canada is 48.6% and in the U.S. it declined by 2.3%.

Figure 31. Types of Self-employment, % of Total Self-employment, Nova Scotia, 2001.



Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

In the U.S. most new jobs were full-time paid jobs, whereas in Canada new job growth was mostly in part-time paid jobs and in self-employment. While unemployment rates are lower in the U.S. than in Canada, poverty rates are higher and inequality is more pronounced in the U.S.⁴⁴² A Statistics Canada analyses of the dramatic differences between the two countries points to several factors that may play a role in influencing the higher rates of self-employment in Canada.⁴⁴³ These include:

- U.S. workers prefer paid work in order to obtain health benefits.
- The differences in immigration rates and incentives for immigrants to Canada to become self-employed.
- The differences in interest rates that make it easier to finance small business in Canada.
- More government and corporate "down-sizing" in Canada leading to an increased supply of experienced and skilled workers who are well equipped to start their own businesses.
- Different structural changes which in Canada resulted in shifts toward industries and occupations in which self-employment is more prominent.
- Contracting out by Canadian employers in response to trade globalization and increasing competition.
- Growth in income taxes in Canada, encouraging self-employment where earnings can be sheltered.
- Higher payroll taxes, which discourage paid job creation.
- Increasing uncertainty and instability in the Canadian wage and salary sector.

⁴⁴² Ibid. p. 43.

⁴⁴³ Lin, Picot and Yates, 1999, op. cit., p. 13; Manser and Picot, 1999, op. cit., p.43.

- Increasing entrepreneurial spirit in Canada.

In light of the growing importance of self-employment in Canada, Statistics Canada endeavoured in 1999 to analyze whether there was a relationship between unemployment and rates of self-employment, and whether self-employed jobs were stable ones, with low levels of turnover, or whether they were being used as "stop gap" measures during difficult economic times. It found no empirical evidence of an increase in self-employment at times that unemployment rises, and it concluded that the numbers of "newly unemployed who subsequently became self-employed [was] too small to render any conclusive evidence."⁴⁴⁴

However, shifts into self-employment when unemployment rises are only one possible indicator of stability and security in self-employment. Other indicators are necessary to assess whether a substantial proportion of the growth in self-employment consists of marginal work that substitutes for lack of adequate secure employment opportunities, and whether a portion of self-employment growth is disguised as underemployment. This is particularly true for the majority of self-employed workers (61% in Nova Scotia) who run one-person businesses with no paid help. For example, it is essential to compare the incomes of these workers with their employed counterparts to assess what proportion of self-employment is marginal. Time and resources did not permit such further analysis of the characteristics of the self-employed in this report, but it is hoped that future reports will provide further insight into the nature of self-employment in Canada and Nova Scotia.

As noted above, self-employment declined from 15% to 13% in Nova Scotia between 1996 and 2001, with a comparable drop in Canada, during a period when employment prospects improved and unemployment rates dropped sharply. Although time and resources did not permit a thorough analysis of the connection between these phenomena, it is highly likely that many workers abandoned insecure and unstable self-employment situations as soon as decent jobs became available.⁴⁴⁵

3.7 Productivity and Wellbeing

"The productivity issue begs the question: producing what? The pile of garbage...or less conspicuously, mile after mile of optical fibre overcapacity that can only be used for transactions between off-balance sheet entities?"

– Tom Walker⁴⁴⁶

⁴⁴⁴ Lin, Picot and Yates, 1999, op. cit., pp. 14-15. Others have argued that the rise in self-employment in Canada is not driven by a "push" out of the paid labour force. Instead, they have linked the rise in own-account self-employment to tax considerations which favour the self-employed. Heisz, Andrew. Senior Research Economist. Business and Labour Market Analysis Division. Statistics Canada. Reviewer comments. Received October 27, 2003. Citing Schuetze, H.J. 1998. *Taxes, Economic Conditions and Recent Trends in Male Self-employment: A Canada-U.S. Comparison*. McMaster University, Economics Department. Mimeo.

⁴⁴⁵ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB.

⁴⁴⁶ Walker, Tom. Shorter Work Time list serve swt-digest@swt.org. August 11, 2002.

"If it is allowed to become a form of leadership, efficiency will go straight for the throat of imagination and strangle it until no breath of life remains. Then the economic problems will begin."

– John Ralston Saul⁴⁴⁷

Put simply, labour productivity generally measures the quantity of goods and services produced in relation to each hour worked.⁴⁴⁸ But in reality there is nothing simple about measuring or even defining productivity. For example, Statistics Canada now supplements this traditional concept of "labour productivity" with new measures of "multifactor productivity" that include capital as well as labour inputs.

But as the two quotations above recognize, there are also deeper philosophical issues underlying the complex concept of productivity. First, it has been argued that being productive is an insufficient rationale for work itself. In *Person Planet*, Theodore Roszak maintains that humans have a right to "right livelihood" and that work should ultimately be fulfilling for the person pursuing his/her calling. He writes:

"The fundamental act of alienation during the Industrial Revolution was the subordination of work to money, so that work – any work and all work – came to be an abstract commodity valued only as a means of earning the wages that purchased subsistence and (perhaps) some leisure enjoyment."⁴⁴⁹

Rozsak argues that as long as work is "external" to the worker and not part of his/her "nature" then it cannot be fulfilling. "Our work life has been infiltrated by clever strategies invented by planners and managers to seduce our allegiance and manipulate our energy for the greater glory of the system."⁴⁵⁰

Thus, a discussion about productivity must first put the concept in perspective, in sharp contrast to most current discussions, which simply assume that higher rates of productivity are desirable in and of themselves.

Second, any discussion should consider the human, social, and ecological costs associated with the pursuit of higher labour productivity. For example, an unscrupulous employer may coerce workers to be more productive with threats of demotion or job loss, or even risk the health and safety of workers in the name of productivity.⁴⁵¹ This report cites arguments that work flexibility

⁴⁴⁷ Saul, John Ralston. 1994. *The Doubter's Companion. A Dictionary of Aggressive Common Sense*. Viking. Toronto. pp.117-118.

⁴⁴⁸ According to Marc Lee, labour productivity can also be measured by output per worker, but he says output per hour is a better measure because not every worker puts in the same number of hours. In Canada, for instance, much of the job growth in recent years has been in part-time work. From Lee, Marc. 1999. *A Primer on Canadian Productivity*. Canadian Centre for Policy Alternatives. Ottawa. p. 3.

⁴⁴⁹ Roszak, Theodore. 1979. *Person Planet. The Creative Disintegration of Industrial Society*. Anchor Press. New York. p. 213.

⁴⁵⁰ Idem.

⁴⁵¹ CBC Television's the *Fifth Estate*, *PBS Frontline* and *The New York Times* co-produced a documentary which aired January 8, 2003 about Alabama-based McWane Inc., a cast iron manufacturer, that was found guilty of more than 400 health and safety violations in workplaces in 10 states. Since 1995 alone, 4,600 workers at the company

and hours reductions can lead to increased productivity, which may either enhance or diminish the wellbeing of workers. In short, action to boost productivity must be evaluated in light of its impact on workers' lives.

Similarly, GPI Atlantic's Forest Accounts for Nova Scotia demonstrated that the increased mechanization of harvesting and timber processing has sharply improved forest industry productivity at the expense of employment and forest health. In fact, the loss of Nova Scotia's remaining old forests in the past four decades is directly related to the quest for improved labour productivity. These few examples indicate that productivity gains may in fact come at the cost of longer-term economic health that depends on the maintenance of human, social, and natural capital. In other words, productivity gains may improve short-term competitiveness, output, incomes, and profits, while depleting the human and natural wealth on which future production depends.⁴⁵²

For example, a recent article that appeared in the *Globe and Mail* reported that Americans were "more productive" than Canadians. When measured on an hourly basis Americans (in 2003) were about 10% more productive. However, the article noted that higher productivity could be achieved by cutting employees and instructing those remaining to take up the slack. It could also be achieved by replacing workers with computers and other high-tech equipment. Longer work hours may also contribute to higher productivity. In the U.S. in 2002 Americans worked on average 1,815 hours, compared with 1,778 hours in Canada and 1,340 hours in the Netherlands.⁴⁵³

Labour productivity (per hour) is calculated by taking the GDP (a measure of total output) over a given time period and dividing it by the total number of hours worked in that time period. In theory, the higher the output relative to the labour input, the higher the productivity. In other words, an economy is regarded as more productive if the current amount of goods and services can be created/produced in fewer hours or if more can be produced in the same number of hours.⁴⁵⁴

have been injured, and some of them were killed. In 1999 U.S. safety inspectors described the foundry in an official report and noted a direct connection to productivity pressures: "Many workers have scars or disfigurements which are noticeable from several feet away. Burns and amputations are frequent. Throughout the plant in supervisors' offices and on bulletin boards next to production charts is posted in big orange letters: REDUCE MAN HOURS PER TON." Today, McWane controls the Canadian market for cast iron pipes. It currently owns three foundries in Quebec, and, in 2001, one of these had the worst incidence of on-the-job injuries of all of McWane's foundries. CBC. *The Fifth Estate: A Toxic Company*. Available from <http://www.cbc.ca/fifth/pipes/mcwane.html>. Accessed March 14, 2003.

⁴⁵² For more detail on productivity as it relates to the forest industry please refer to Panno, Linda and Minga O'Brien. 2001. *The Forest Accounts. A Way Forward*. Vol. 2. GPI Atlantic. Halifax.

⁴⁵³ Chamberlain, Art. "Is Productivity all it's cracked up to be? Technology has led to greater efficiency in the United States, but that means fewer people are needed to do the job." *The Globe and Mail*. September 17, 2003. p. C6.

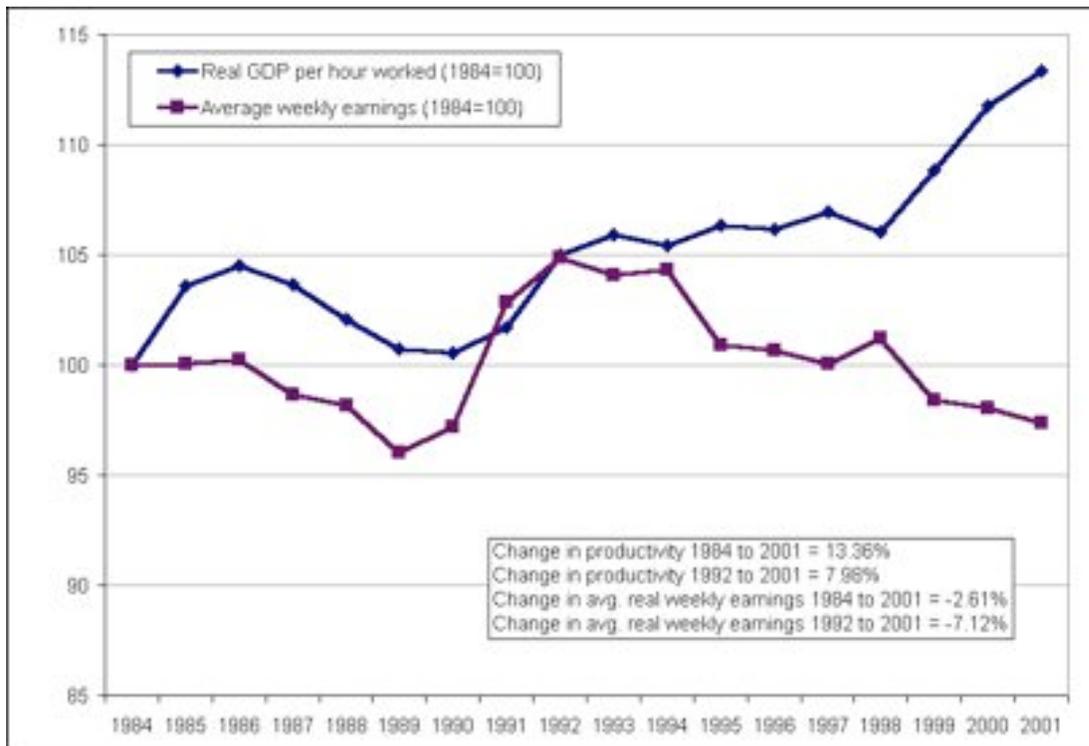
⁴⁵⁴ Schor, 1991, op. cit., p. 2. Note that this report considers only labour productivity – the most widely used measure of productivity. Statistics Canada also reports on multifactor productivity, which considers capital as well as labour inputs. For more information on the different measures of productivity, please see Statistics Canada, *Productivity Measures, Inputs and Outputs by Industry in Current and Constant Prices*. Available from <http://www.statcan.ca/english/sdds/1402.htm>. Recent multifactor productivity results are summarized in Statistics Canada. *The Daily*. July 10, 2003. Available from <http://www.statcan.ca/Daily/English/030710/d030710a.htm>.

Conventional wisdom tells us that productivity growth leads to a rising standard of living. In other words the more productive a country is, and the higher its GDP, the better off its population is. Statistics Canada establishes the link between productivity and living standards in the following way:

"An increase in productivity decreases the unit labour cost which leads to a decrease in the price of goods and services produced, a growth in domestic and foreign consumption (therefore more exports), and lastly, an increase in production. Initially, an increase in production will entail a greater use of equipment and, eventually, an increased demand for workers. This would lead to growth in employment and real wages and, consequently, in the standard of living."⁴⁵⁵

In actual fact, however, increases in productivity have not always followed this pathway, and may be accompanied by declines in living standards and quality of life. First, as previously discussed, the GDP does not provide an accurate picture of real progress in society, and so, while its numbers may be up, quality of life may actually be down. In Nova Scotia, for example, productivity and real earnings have moved in opposite directions since the early 1990s. Between 1992 and 2001, productivity increased by 8% while real earnings declined by 7% (Figure 32).

Figure 32. Productivity vs. Earnings, Nova Scotia, 1984-2001, (1984 = 100).



Source: Haiven, Larry and Jane Mullen. Forthcoming. *A Review of the Nova Scotia Labour Standards Code* (provisional title). Canadian Centre for Policy Alternatives. Halifax.

⁴⁵⁵ Galarneau, Diane and Cecile Dumas. 1993. "About Productivity." *Perspectives*. Statistics Canada. Catalogue no. 75-001E. Minister of Industry. Ottawa. p. 41.

In the U.S. the situation is similar. While productivity has gone up, wages have not. Between 1977 and 1992, for instance, workers were 30% more productive, while their real wages fell by 13%. These averages conceal marked differences in real wage trends according to educational attainment. High school dropouts saw their real wages decline by 20% in this time period, while workers with more than four years of college education saw their real wages increase by 8%.⁴⁵⁶

However, it should be kept in mind that standard of living does not only depend on real per capita wages. It also depends on how long we spend working, how long we have away from work, the quality of our work, and the availability of choices for the use of our time outside of work. It also depends on a wide range of social and environmental factors both within and outside the immediate workplace.

For example, the social context in which production takes place must clearly be considered in evaluating the impact of productivity gains. Menzies argues that increased productivity as a result of technological changes, for instance, may increase economic activity without creating better employment opportunities for most people. In fact, in Canada, much of this new productivity is taking the form of "jobless economic growth" – where state-of-the-art technology is boosting production and profits while jobs are being shed.⁴⁵⁷

In his paper titled *Economic and Social Aspects of Productivity*, Lars Osberg argues that our current measure of productivity involves the faulty assumption that all of its components have monetary value. Many inputs into the production process are not assigned a monetary value in conventional accounting mechanisms. Osberg writes:

"By the current conventions of National Income Accounting, labour services that are not exchanged for cash (as in household production, or the voluntary sector) are not counted in GDP. Firms and households that employed their own slaves would therefore be counted as employing very little wage labour and having high labour productivity."⁴⁵⁸

Similarly, current measures of productivity, which fail to consider how sustainably resources are being used, are inaccurate. The value and contribution to production of clean air and water, rich biodiversity, productive soils, and healthy societies cannot be appropriately described in monetary terms, and are therefore omitted from conventional assessments of productivity. Nevertheless, if an ecosystem becomes degraded and is no longer able to provide productive benefits to the economy, it is essential that this loss be registered in our economic accounts and taken into account in productivity assessments. Monetization is therefore a necessary, if temporary, step to ensure that these values are adequately recognized, until such time as social and environmental variables are fully and properly considered in their own right. In other words,

⁴⁵⁶ Lind, Michael. 1995. "To Have and Have Not. Notes on the Progress of the American Class War." *Harpers Magazine*. June. New York. p. 39.

⁴⁵⁷ Menzies, Heather. 1996. *Whose Brave New World? The Information Highway and the New Economy*. Between the Lines. Toronto. p. 143.

⁴⁵⁸ Osberg, Lars. 2002. "Economic and Social Aspects of Productivity: Linkages and Policy Implications." In *Productivity Issues in Canada*. Someshwar Rao and Andrew Sharpe (eds). University of Calgary Press. Calgary. pp. 759-788.

any estimate of productivity should include "unpriced inputs" as well as labour and machinery costs.⁴⁵⁹

In addition to resource use, Osberg argues that costs associated with changes in equality and insecurity may also be viewed as "unpriced inputs in production." For instance, technological change can lead to job losses and an increased risk of unemployment – costs being "borne by workers – which should be reflected in productivity measures."⁴⁶⁰ He writes:

"To the extent that firms have to internalize the human capital impacts of their decisions, one will be more likely to observe actual changes that reflect social costs – but in general, if such costs occur they ought to be considered in analyzing whether such changes improve productivity."⁴⁶¹

The quality of labour, the health of workers, and social capital all contribute to productivity, according to Osberg. He writes that social capital is a "characteristic of communities, and can be expected to increase productivity by increasing the range of transactions that people can engage in with confidence."⁴⁶²

If human, social, and natural capital impacts were factored into the productivity equation, it is possible that reported productivity gains may disappear.

3.7.1 The "Productivity Dividend"

Since the 1930s productivity has soared. Between 1950 and 1970 alone, the GDP in industrialized countries grew by 2.5 times and industrial production almost tripled. There were similar rates of growth in Australia, Canada, and the United States.⁴⁶³ It was this growth in productivity and real earnings that provided momentum for the sharp decline in standard work hours over the first 60 years of the 1900s. Schor writes that in the 1990s:

"We could now produce our 1948 standard of living in less than half the time it took in that year. We actually could have chosen the four-hour day. Or a working year of six months. Or, every worker in the U.S. could now be taking every other year off from work – with pay."⁴⁶⁴

But Schor says that instead of using this "productivity dividend" to reduce work hours and "retire at 38," workers took pay increases and began consuming at unprecedented rates. For many, however, especially since the 1970s, pay increases barely kept pace with inflation, and most pay

⁴⁵⁹ When impacts on natural ecosystems are not paid for today by the company or firm that benefits financially from using them, the costs (and the burden) are "externalized," creating an ecological debt that is assumed by future generations.

⁴⁶⁰ Osberg, 2002, op. cit., pp. 759-788.

⁴⁶¹ Idem.

⁴⁶² Idem.

⁴⁶³ Evans, Archibald A. 1975. *Hours of Work in Industrialized Countries*. International Labour Organization. Geneva. p. 12.

⁴⁶⁴ Schor, 1991, op. cit., p. 2.

increases just helped to maintain living standards rather than improve them.⁴⁶⁵ In effect, therefore, productivity gains since the 1970s have largely translated into corporate profits and investment rather than gains to the worker.

In addition, working long hours, increasing output, and spending more money all make the GDP grow, while free time does not register anywhere in our conventional accounting mechanisms and is therefore not valued in our standard measures of progress. Given this imbalance and distortion, it is not surprising that the substantial economic productivity gains of the last 50 years have not manifested in substantial increases in leisure time.

But this close relationship between productivity gains and GDP growth is not the case in some countries, especially in Europe. In a 2002 *Globe and Mail* article, Bruce Little pointed out that many European countries are actually more productive than the U.S. in productivity per hour, but have lower GDP per person. Norway, for instance, was 10% more productive than the U.S. in 2001 but its GDP per person was 17% lower. Similarly, Belgium, France and the Netherlands were all more productive than the U.S. but had GDP per capita that was 25-30% lower. "The big reason for the [GDP] gap is that people in those countries worked less, so their total output per head was lower than the Americans, even though they were more productive when on the job." Norwegians worked nearly 30% fewer hours than did Americans in 2001. Little argues that Europeans are taking the "fruits of their productivity in the form of leisure rather than more money."⁴⁶⁶

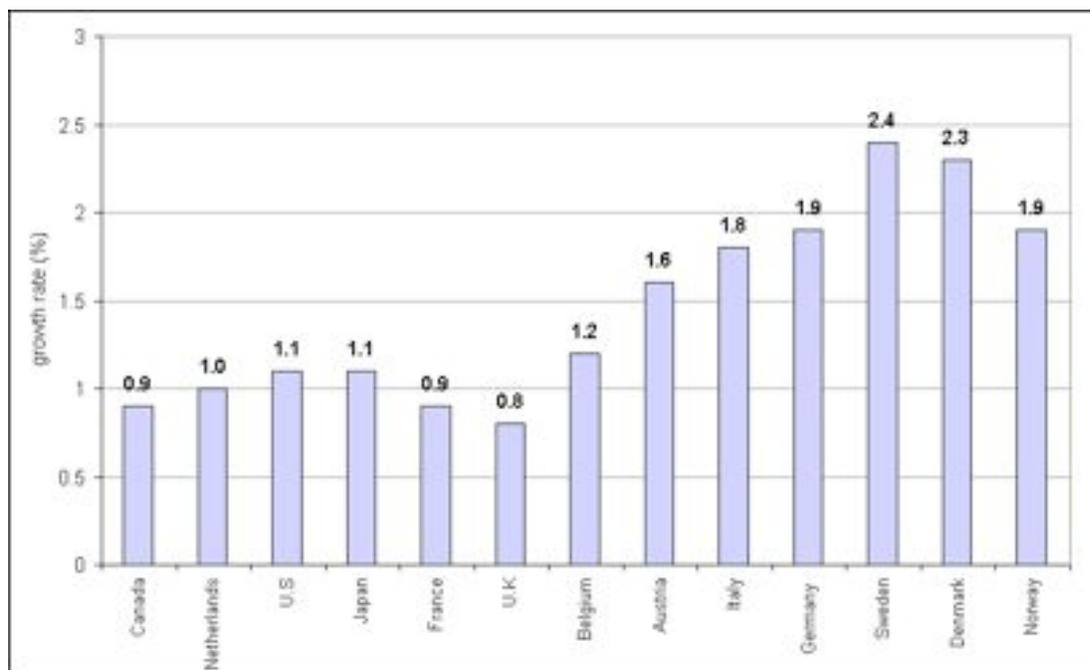
Figure 33 compares labour productivity gains of various countries in the 1990s, using GDP per employed person rather than per hour worked. This method yields markedly different results and finds Belgium, France and the Netherlands much closer to the U.S. in productivity gains. Using that standard, Sweden, Denmark, Norway, and Germany had the largest productivity gains between 1990 and 1996 based on GDP per employed person. According to the Canadian Centre for Policy Alternatives, Canada's weak performance, relative to these European countries, can be attributed to its significant growth in part-time employment and self-employment – which tend to be less productive.⁴⁶⁷

⁴⁶⁵ Bluestone and Rose, 1997, op. cit., p. 11.

⁴⁶⁶ Little, Bruce. 2002. "Leisure often Responsible for GDP Gaps." *The Globe and Mail*. Toronto. July 8, 2002. p. B8. Little bases his findings on productivity (per hour) data.

⁴⁶⁷ Lee, Marc. 1999. *A Primer on Canadian Productivity*. Canadian Centre for Policy Alternatives. Ottawa, p. 7.

Figure 33. Labour Productivity, 13 Countries, 1990-1996 (Annual % Change).



Note: Comparisons are limited to GDP per employed person (rather than per hour worked) due to differences in data collection.

Source: Lee, Marc. 1999. *A Primer on Canadian Productivity*. Canadian Centre for Policy Alternatives. Ottawa. p. 8.

3.7.2 "Productivity Offsets"

A reduction in work hours is accompanied by an increase in production and output which are called *productivity offsets*.

While it appears that for many European countries more leisure has been the fruit of productivity gains, some argue that it is the increased leisure itself that came first. Based on previous work, which carefully analyzed changes in working hours in British economic history, Michael White argues that major reductions in working hours preceded, rather than followed, peaks in productivity growth.⁴⁶⁸ Hours reductions were pursued by trade unions in order to "safeguard future employment in the face of technological change, rather than to reap the rewards of past economic growth."⁴⁶⁹

White says the "fruits of productivity" concept does not hold up to careful scrutiny in a number of studies that describe a clear-cut relationship between increased productivity that results from

⁴⁶⁸ White, Michael. 1987. *Working Hours. Assessing the Potential for Reduction*. International Labour Organization. Geneva. pp. 11-12. White bases his argument on Bienefeld, M.A. 1972. *Working Hours in British Industry: An Economic History*. Weidenfeld and Nicholson. London.

⁴⁶⁹ Bienefeld quoted in White, 1987, op. cit., pp. 11-12.

reductions in work hours. For instance, one government-sponsored study of two U.K. industries, which reduced their normal hours in 1981 as a result of national agreements, found that:⁴⁷⁰

- output was maintained
- total labour hours decreased in line with the agreements
- unit wage costs decreased
- productivity increased

In the printing industry, for instance, where hours were reduced by 2.5 hours/week, the productivity increase was greater than in engineering where hours were reduced by only 1 hour.⁴⁷¹

In *Hours of Work in Industrialized Countries*, Archibald Evans also argues that a drop in hours does not result in a proportionate drop in production, as many assume. He lists some of the factors that result in increases in productivity:

- Most people work more intensely over a short period of time than they are willing or able to work over longer periods.
- Reduction in hours has a favourable impact on absenteeism and sick leave.
- Changes in work hours often stimulate the re-examination of production structures and processes, and will often result in improvements in this area.
- The higher cost of an hour of labour may stimulate the search for more capital-intensive methods of production.
- Reduced hours may create better relations between labour and management resulting in higher productivity.⁴⁷²

According to a 1947 study of 34 manufacturing plants by the U.S. Department of Labor, long hours and overtime are not necessarily more productive than shorter ones. The study concluded that "for hours above eight per day and 48 per week, it usually took three hours of work to produce two additional hours of output when work was light. When the work was heavy it took about two more hours of work to produce one hour of additional output."⁴⁷³

Evans cites numerous studies from the 1960s and 1970s that all came to the same conclusion: a reduction in work hours is accompanied by an increase in production and output.

Productivity offsets are also important in assessing the job creation potential of reduced hours. In 1994 the Federal Advisory Group on Working Time and the Distribution of Work in Canada concluded from a review of existing evidence that a 10% reduction in working time would produce a 5% increase in productivity (output per hour). For example, if an employer were to cut work hours per week by 4 hours (10% of a 40-hour workweek), it would only cost the employer the equivalent of a loss of 2 hours, because of the increased productivity associated with the

⁴⁷⁰ 140 establishments were studied in printing and engineering.

⁴⁷¹ White, 1987, op. cit., p. 13.

⁴⁷² Evans, Archibald A. 1975. *Hours of Work in Industrialized Countries*. International Labour Organization. Geneva. pp. 67-68.

⁴⁷³ U.S. Department of Labor. 1947. *Hours of Work and Output*. Cited in Evans, 1975, op. cit., p. 69.

reduced work time. This employer would therefore only be looking for new workers to replace two hours of lost time (not four), thus cutting the job creation potential of reduced work hours in half.⁴⁷⁴

Shorter hours have been shown to reduce absenteeism, lateness, fatigue, and costly errors, and to improve morale and industrial relations. This increase in productivity can also be returned to employees in the form of financial incentives to reduce their work hours voluntarily. Thus the Belgian civil service offered its employees a 10% reduction in pay for a 20% reduction in work hours.

Part 3 of this report will explore the job creation potential and benefits of work hours reductions in greater detail. Here, we simply conclude this chapter with a citation from the Constitution of the International Labour Organization:

*"One of the conditions which make it possible for human beings to pursue both their material wellbeing and their spiritual development in conditions of freedom and dignity, is the achievement of reasonable hours of work, coupled with a measure of flexibility in their distribution and with freedom from unnecessary regimentation and constraint."*⁴⁷⁵

⁴⁷⁴ Advisory Group on Working Time and Distribution of Work. 1994. *Report of the Advisory Group on Working Time and the Distribution of Work*. Human Resources Development Canada. Hull. p. 75.

⁴⁷⁵ Excerpted from the Constitution of the International Labour Organization. Evans, 1975, op. cit., p. 133.

Chapter 4. Contingent Work, 'Junk Jobs' and 'Post-it-note-people'⁴⁷⁶

"If there was a national fear index, it would be directly related to the growth of contingent work."

– Richard Belous⁴⁷⁷

"As a society, we should be concerned less with the growth of non-standard jobs as such and much more with the growth of precarious, contingent, "just-in-time," dead-end jobs that do not give the employees adequate access to the rights, standards, and opportunities most of us usually take for granted. It is a particular cause for concern that the line that tends to divide standard from non-standard jobs also often separates men from women and divides visible minorities from the rest of the community."

– Advisory Group on Working Time and the Distribution of Work⁴⁷⁸

Growing inequality in both the U.S. and Canada can partly be blamed on the kinds of temporary and insecure work available for many people. Some labour market analysts refer to these jobs as "precarious" jobs occupied by the growing ranks of "peripheral workers." Bureaucrats refer to this group of workers as "the contingent labour force."⁴⁷⁹ In *Whose Brave New World? The Information Highway and the New Economy*, Heather Menzies calls these jobs "work on the fringes." Menzies says the fancy language that labour market analysts and bureaucrats tend to use hides the true meaning of who these people are: "the human equivalent of post-it-notes: marginal add-ons used briefly, then discarded, without a sound and without leaving a trace."⁴⁸⁰

Statistics Canada says that jobs offering fewer hours is characteristic of a job market where skill requirements and job-specific training are minimal for many types of jobs. "In this situation, workers can be treated as roughly interchangeable." The benefits of a part-time and temporary work force offset the costs in the new world of work.⁴⁸¹

According to a recent survey on non-standard work practices in Canada, in 1998 "one-third of all employed individuals had part-time work, temporary jobs, own-account self-employment or multiple jobs."⁴⁸² This was up from 24% in 1976. According to Andrew Heisz of Statistics Canada, this increase does not necessarily suggest a "deteriorating labour market," especially in

⁴⁷⁶ Terms coined by Menzies, Heather. 1996. *Whose Brave New World? The Information Highway and the New Economy*. Between the Lines. Toronto. p. 9.

⁴⁷⁷ Chief Economist for the National Planning Association in the U.S.. Cited in Tilly, Chris. 1996. *Half a Job. Bad and Good Part-time Jobs in a Changing Labour Market*. Temple University Press. Philadelphia. p. 1.

⁴⁷⁸ Advisory Group on Working Time and the Distribution of Work, 1994, op. cit., p. 28.

⁴⁷⁹ Menzies, 1996, op. cit., p. 9.

⁴⁸⁰ Idem.

⁴⁸¹ Sheridan, Sunter and Diverty, 1996, op. cit., p. 3.19.

⁴⁸² Gunderson and Riddell. 2000. "The Changing Nature of Work: Implications for Public Policy." In *Adapting Public Policy to a Labour Market in Transition*. W. Craig Riddell and France St.-Hilaire (eds). Institute for Research on Public Policy. Citation supplied by Andrew Heisz. Senior Research Economist. Business and Labour Market Analysis Division. Statistics Canada. Reviewer comments. Received October 27, 2003.

the "face of other massive changes in labour supply, including increasing participation of women, increasing educational attainment, early retirement, and increasing school attendance of young people."⁴⁸³ Increasing labour force participation of women and of young people attending school would both result in increases in voluntary part-time work, as these groups strive to balance paid work responsibilities with child-care and school-work responsibilities.

There is no question that the majority of part-time job holders are doing so voluntarily. GPI Atlantic would also be the first to agree that part-time work can be highly beneficial as it potentially allows for a better work-life balance. However, the key issue is the extent to which part-time work is voluntary and the extent to which part-time work conditions (pay, benefits, etc.) provide adequate livelihood security.

Case study evidence and other sources found a rising use of non-standard work in companies. The 1995 Statistics Canada survey of Work Arrangements found that nearly one-third of Canadian workers wanted more work. However, as Andrew Heisz, of Statistics Canada, points out, these surveys were "conducted in periods of depressed labour demand associated with the business cycle."⁴⁸⁴ This observation points squarely at the need for more frequent collection of these data.

In his book *Hollow Work, Hollow Society? Globalization and the Casual Labour Problem in Canada*, Dave Broad argues that the increase in the number of people working part-time who would rather be working full-time creates a competitive atmosphere where workers are just hanging on by their teeth, unwilling to rock the boat. For employers this means that they can keep labour costs down because part-time wages are usually lower than full-time wages; benefits are usually minimal, if they exist at all; and having an army of part-time staff at their disposal allows employers greater flexibility in meeting demand without having to pay overtime. Laying off part-timers is also cheaper than laying off full-time employees.⁴⁸⁵

In this chapter we will explore the trends in contingent work – particularly the trends in involuntary part-time and temporary work as well as trends in shift work. In addition, we will examine some of the factors contributing to these trends, including globalization and technology.

4.1 The Rise of the Part-time Job

Across Canada the standard workweek is gradually disappearing. In Canada, in 1976, nearly 65.8% of workers were putting in 35-40 hours a week, compared to just 59% in 2001. In Nova Scotia the decline in the standard workweek has been even more marked. In 1976 two out of

⁴⁸³ Heisz, Andrew. Senior Research Economist. Business and Labour Market Analysis Division. Statistics Canada. Reviewer comments. Received October 27, 2003.

⁴⁸⁴ Heisz, Andrew. Senior Research Economist. Business and Labour Market Analysis Division. Statistics Canada. Reviewer comments. Received October 27, 2003. Citing Statistics Canada. 1995. Survey of Work Arrangements; Osberg, Lars, F. Wien, and J. Grude. 1995. *Vanishing Jobs, Canada's Changing Workplace*. Lorimer and Company. Toronto.

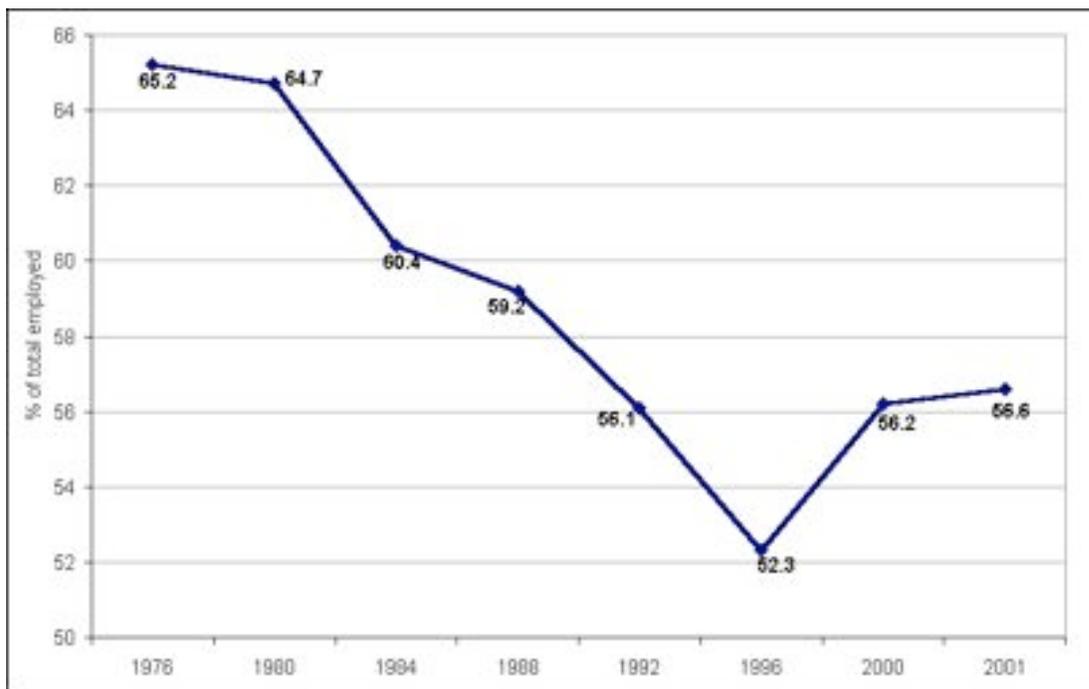
⁴⁸⁵ Broad, Dave. 2000. *Hollow Work, Hollow Society? Globalization and the Casual Labour Problem in Canada*. Fernwood Publishing. Halifax. pp. 21-25.

three workers put in a standard 35-40 hour week. By 2001 56.6% of all workers did, up in recent years from a low point of only 52.3% in 1996. Figure 34 plots the decline of the standard workweek in Nova Scotia over a 25-year period.

It is not clear how much of this trend is due to gender shift in the labour market. An ever increasing number of women, particularly women with children, have entered the labour force. Since their hours tend to be part-time, this would create a downward trend in standard hours. To the extent that part-time work is voluntary and helps alleviate work-life conflict, it is not a bad thing. However, when it is involuntary (i.e. employee would rather be working full-time) and accompanied by livelihood insecurity (i.e. lack of benefits, lower pay etc.) then it is not a good thing.

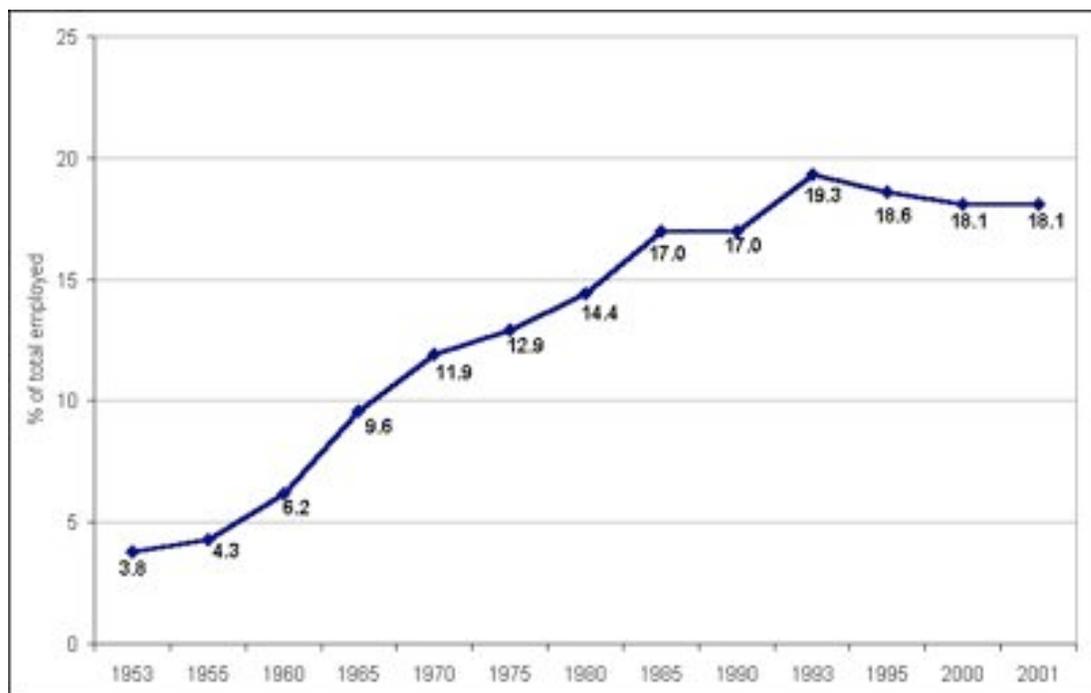
During the same time period the proportion of workers working part-time has climbed steadily. Figures 35 and 36 illustrate this upward trend in Canada and Nova Scotia. Statistics dating back to the 1950s indicate that the rate of part-time work in Canada more than quadrupled over a 48-year period from 3.8% in 1953 to 18% in 2001, reaching a peak of nearly 20% in 1993. In Nova Scotia part-time employment increased from 12.5% of all employees in 1976 to 17.8% in 2001, after dropping off from a peak of more than 20% in 1996.

Figure 34. The Decline of the Standard Workweek: Employed Men and Women working 35-40 hours/week, % of Total Employed, Nova Scotia, 1976-2001.



Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

Figure 35. Part-time Employment, % of Total Employed, Canada, 1953-2001.



Note: In 1975, Statistics Canada revised the Labour Force Survey (LFS) so that part-time employment consisted of persons who usually work less than 30 hours a week. Prior to this revision, that is, between 1953-1975, a person who worked part-time was defined as someone who usually worked less than 35 hours a week. The old LFS definition resulted in a rate of 12.9% for 1975, which is plotted in the Figure above. The new LFS definition would have resulted in a part-time figure of 10.6% for that year.

Sources: 1976-2001: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB; 1953-1976: Benimadhu, 1987, op. cit., p. 5; Broad, 2000, op. cit., pp. 14-15.

Statistics Canada data seem to indicate that part-time employment rates levelled off at the end of the 1990s. However a closer examination of the evidence indicates that this apparent stabilization conceals a continued polarization of hours within the part-time work force itself. Thus, different trends emerging for short-hour part-timers (less than 15 hours a week) and long-hour part-time workers (15-29 hours a week) are responsible for the appearance of stabilization. The proportion of those working 15 hours a week or less has declined, while the trend for those working 15-29 hours a week has remained "steady and upward," with the numbers more than doubling between 1976 and 2001.⁴⁸⁶ Statistics Canada attributes the decline in the numbers working less than 15 hours/week to a susceptibility of those jobs to the business cycle. "The precariousness of short-hour part-time jobs may reflect in part their temporary nature. Another indication of their vulnerability is the lower rate of unionization."⁴⁸⁷

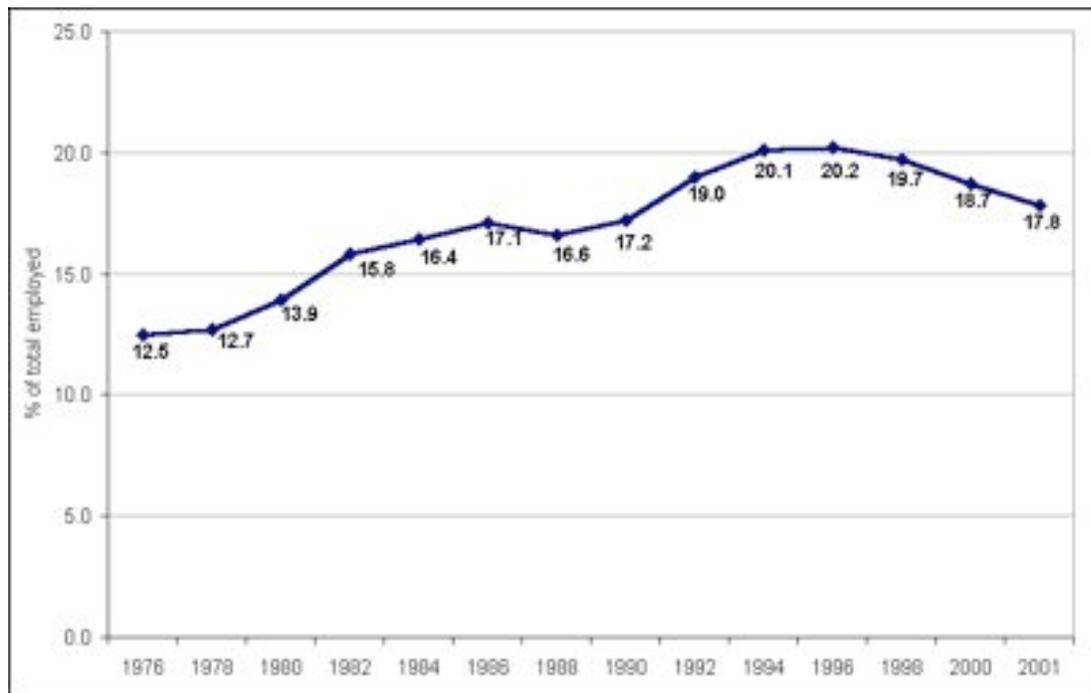
However, Statistics Canada also points out that a change in legislation may have contributed to the decline in short-hours part-time jobs in the late 1990s. Prior to January 1997, employers were

⁴⁸⁶ Pold, Henry. 2001. "Trends in Part-time Work." *Perspectives*. Statistics Canada. Catalogue no. 75-001-XPE. Minister of Industry. Ottawa. p. 36.

⁴⁸⁷ Idem.

not obliged to deduct Employment Insurance (EI) premiums if an employee worked less than 15 hours a week – so the employer was not required to pay his or her share of the premium (1.4 times the employee deduction). However, in 1997 this changed, and short-hour workers and their employers were no longer exempt. This added expense may have encouraged many employers to shed their short-hour workers.⁴⁸⁸

Figure 36. Part-time Employment, % of Total Employed, Nova Scotia, 1976-2001.



Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

Who works part-time?

Figure 37 breaks down the part-timers in Nova Scotia by age group. While youth (15-24 year olds) have always constituted a large proportion of part-timers, their predominance has declined over the last 25 years from 46% of part-timers in 1976 to 36% in 2001. Instead, more and more adults between 35-54 years of age now work part-time, increasing from 25% of all part-timers in 1976 to 35% in 2001.

Women make up a much larger share of part-timers than men (70% vs. 30%). Many women work part-time because of family responsibilities and some have reported to Statistics Canada that they would choose full-time work if flexible hours or better childcare were available.⁴⁸⁹ Both men and women part-timers have increased in number. This rise in the incidence of part-time work by sex is illustrated in Figure 38. In Nova Scotia, one in four working women was

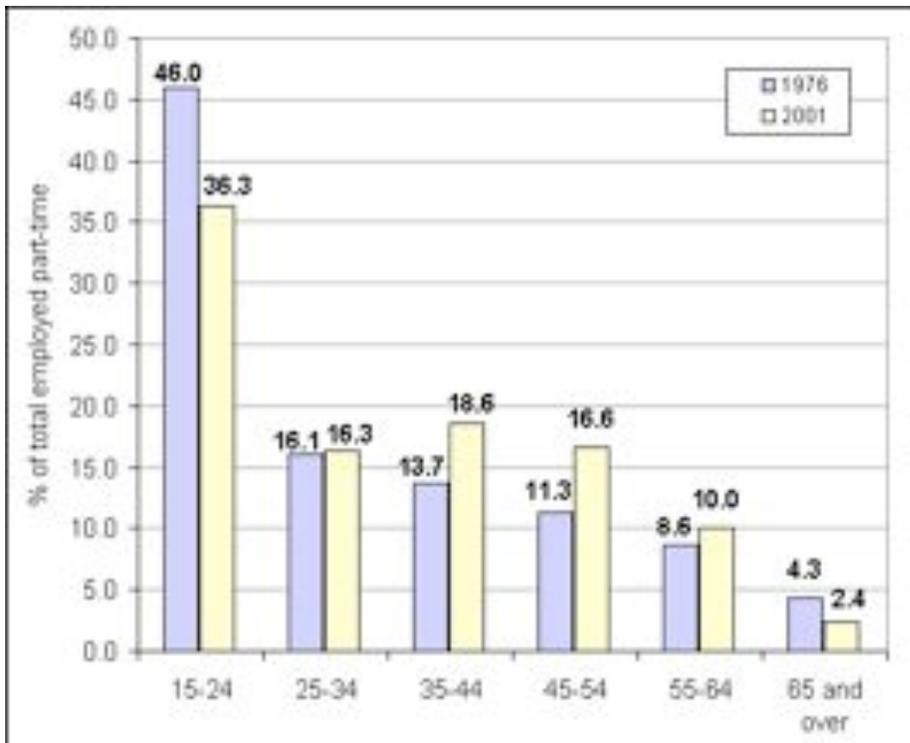
⁴⁸⁸ Pold, 2001, op. cit., p. 37.

⁴⁸⁹ Advisory Group on Working Time and the Distribution of Work, 1994, op. cit., p. 31.

employed part-time in 1976, compared with one in 20 employed men. By 1996, nearly one in three working women worked part-time compared to one in 10 men. These figures are consistent with the Canadian averages.⁴⁹⁰

Broad cites unpublished Statistics Canada data to analyze the distribution of part-time work by marital status and industry in Canada. He found that single men are much more likely to work part-time than married men. Only one in 40 married men worked part-time in 1998 compared to one in five single males. In the same year one in four married women worked part-time while three out of 10 single females did. Part-time work also tends to be concentrated in the lower-paid clerical, sales and service sector, and tends to be much less common in managerial or professional jobs.⁴⁹¹

Figure 37. Incidence of Part-time by Age Group, % of Total Employed Part-time, Nova Scotia, 1976 and 2001.

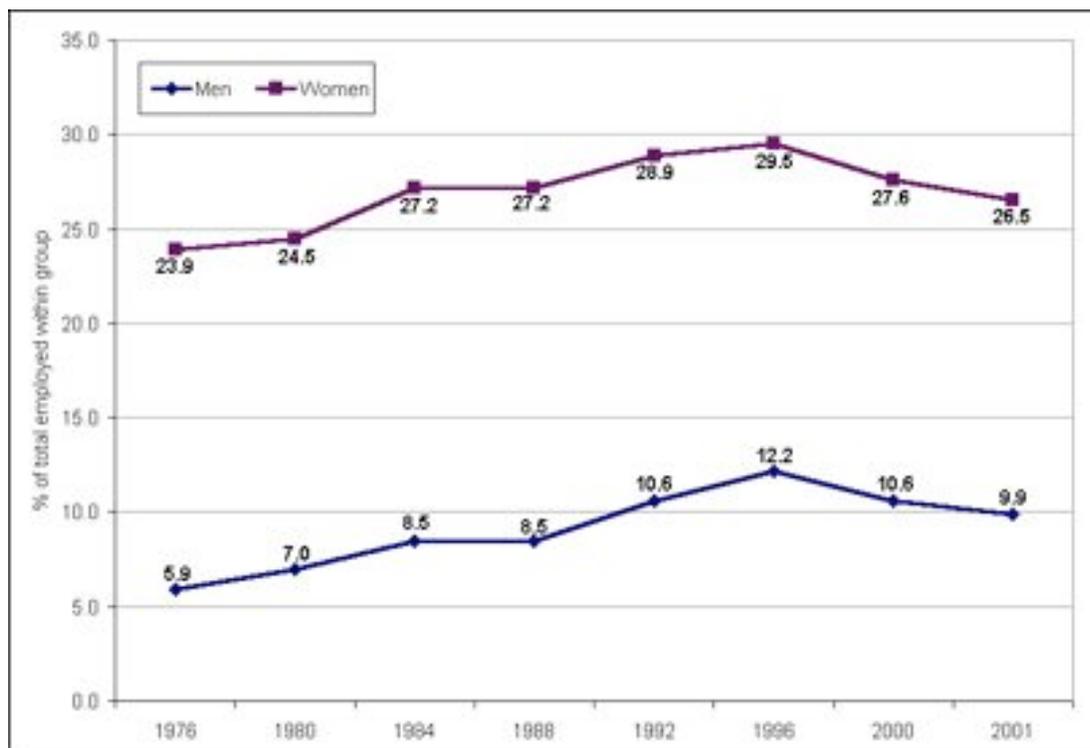


Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

⁴⁹⁰ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

⁴⁹¹ Broad, 2000, op. cit., p. 18.

Figure 38. Part-time among Men and Women, % of Total Employed Men or Women, Nova Scotia, 1976-2001.



Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

4.1.1 Underemployment or Involuntary Part-time

Undoubtedly, a shorter workweek can be very positive for health, family, and social reasons. Part-time work in and of itself is therefore not problematic, especially when chosen voluntarily. However, many Canadians who do work part-time would rather be working full-time, but are unable to find full-time work. These same individuals often experience economic hardship because they have insufficient work hours to make ends meet. Involuntary part-time work is therefore considered a key indicator of underemployment.⁴⁹² Indeed, Statistics Canada counts the difference between standard full-time hours and the number of hours actually worked by involuntary part-timers as a measure of underemployment, and it adds these missing hours (translated into full-time job equivalents) to its “supplementary” unemployment statistics.

The International Labour Organization identifies two forms of underemployment: visible and invisible. The visible type occurs when someone is employed but has insufficient work hours. Invisible underemployment occurs when skills are underutilized or when wages, productivity or other job qualities are sub-standard. This section of this report will focus on “visible” underemployment.

⁴⁹² Statistics Canada. 1997. *Labour Force Update. Hours of Work*. Vol. 1 no. 2. Catalogue no. 71-005-XPB. Minister of Industry. Ottawa. p. 17.

Statistics Canada has been collecting data on reasons for part-time work since 1976. Table 14 lists these reasons and the most recent data. In 2001, 31% of all part-timers were working part-time involuntarily in Nova Scotia. In Canada the figure was closer to 26%.⁴⁹³

Table 14. Reasons for Part-time Employment, % of All Reasons Given, Nova Scotia and Canada, 2001.

Reasons	% of all reasons given	
	Nova Scotia	Canada
All reasons:	100	100
own illness	2.8	2.7
caring for children	10.3	10.9
other personal or family responsibility	4.9	4.8
going to school	27.9	30.5
personal preference	22.3	23.9
other voluntary	1	1.4
Involuntary part-time:		
business conditions, did not look for f/t work in the last month	13.7	11
could not find f/t work, did not look for f/t work in the last month	8.1	7.3
business conditions, looked for f/t work in the last month	4.1	2.9
could not find f/t work, looked for f/t work in the last month	4.9	4.6
TOTAL Involuntary part-time	31%	26%

Notes:

- Since January 1997, all respondents who usually work less than 30 hours per week at their main job or only job have been asked if they want to work more or less than 30 hours at a single job or business. Depending on the response, the main reason for working part-time is collected. Those who want to work more than 30 hours per week but don't are called involuntary part-timers. The involuntary part-time rate is calculated by dividing this group (the last four categories above) by the total number of persons working part-time at their main or only job.
- Numbers may not add due to rounding

Source: Statistics Canada. 2002. Labour Force Historical Review 2001. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

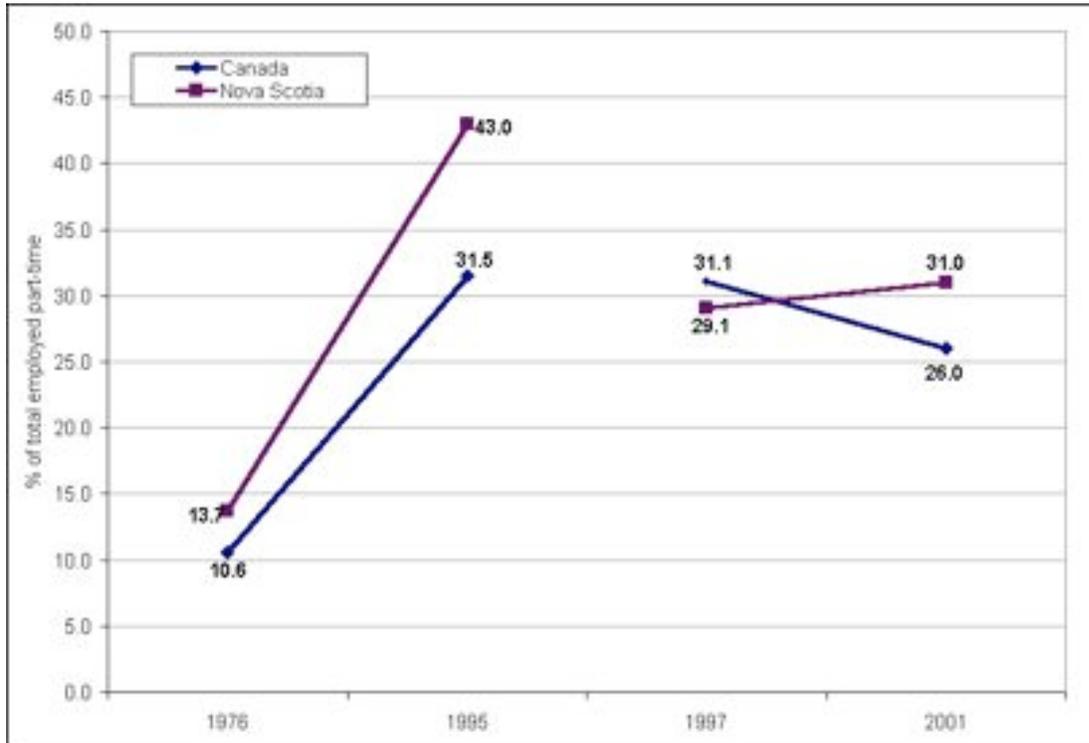
In Nova Scotia, involuntary part-time employment is growing much faster than the voluntary types, and is driving the overall upward trend in part-time work. The proportion of involuntary part-timers more than tripled between 1976 and 1995, from 13.7% of all part-timers to a striking 43% (Figure 39). After the Labour Force Survey (LFS) questionnaire was revised in 1997, and new definitions of involuntary part-time work adopted, the figure was lowered to 29% in 1997 and then increased to 31% in 2001.⁴⁹⁴ In Canada, the rate of involuntary part-time work more

⁴⁹³ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

⁴⁹⁴ Revisions were made to the definition of involuntary part-time work and to the LFS questionnaire in 1997, creating a break in the series. As a result, data from 1997-2001 are not comparable to earlier data, but comparisons can be made within each series. Before 1997 respondents who usually worked less than 30 hours/week in total in *all* jobs were asked their main reason for working part-time. They were considered underemployed (or “involuntary”

than tripled from 10.6% in 1976 to 31.5 in the mid-1990s, and then fell to 26% in 2001. Figure 42 plots the involuntary part-time rates for Canada and Nova Scotia. Please note, as previously mentioned, that there was a break in the series in 1995 due to questionnaire and definitional revisions.

Figure 39. Involuntary Part-time Employment, Canada and Nova Scotia, % of all Part-time Employment, 1976-1995; 1997-2001.



Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

According to Statistics Canada and other sources, underemployment is closely related to unemployment, and the rates tend to move in tandem, indicating that people are "forced into part-time work when economic conditions worsen."⁴⁹⁵ It is not surprising therefore that underemployment rates are higher in the Atlantic Provinces than elsewhere in Canada. In 1993, for example, the underemployment rate in Atlantic Canada was 51%, the highest in the country. With the exception of two years between 1980 and 1994, this region has had the highest rate of

part-timers) if they worked part-time because they could not find a full-time job. In 1997, the LFS questionnaire was redesigned, and respondents who worked part-time in their *main* job were asked why they did so. If they did not work full-time because of "business conditions" or because they "could not find full-time work" they were defined as underemployed. Statistics Canada, 1997, op. cit., p. 17.

⁴⁹⁵ Statistics Canada, 1997, op. cit., p. 17. The connection between underemployment and difficult economic times is also made by Noreau, Nathalie. 1994. "Involuntary Part-timers." *Perspectives*. Statistics Canada. Catalogue no. 75-001E. Minister of Industry. Ottawa. p. 25.

involuntary part-time work in Canada every year.⁴⁹⁶ By 2001, with the new definition of involuntary part-time work in effect, the involuntary part-time rate in the Atlantic Provinces was 35%, still nearly 10 percentage points higher than the Canadian average.

International Comparisons

Part-time employment rates are climbing in many industrialized countries.⁴⁹⁷ According to the OECD, the rate of part-time work increased in eight out of 10 selected countries, including Canada, between 1987 and 1998. Two countries, the U.S. and Sweden, showed a decrease during that time period. Rates of part-time work were exceptionally high in Australia, Japan, the Netherlands, and the United Kingdom.⁴⁹⁸ However, these trends may be interpreted either positively or negatively, depending on whether they are driven by changes in voluntary or involuntary part-time work, as a comparison between the Netherlands and the U.S. demonstrates.

In 1973 one in five American part-timers worked part-time involuntarily. By 1993 nearly one in three were underemployed.⁴⁹⁹ Schor says the increase in underemployment "signals a disturbing failure of the labour market."⁵⁰⁰

The incidence of part-time work is nowhere higher than in the Netherlands, where part-time jobs make up 33% of all employment and 58% of employed women worked part-time in 2000.⁵⁰¹ However only 6% of these part-timers say they would prefer full-time work (compared to 26% in Canada and 31% in Nova Scotia); so part-time work in that country is genuinely voluntary. In addition, while part-time work in most countries tends to be found in lower-paid occupations offering little opportunity for career advancement, the situation in the Netherlands is very different. Part-time work in the Netherlands is "good" work, with equal hourly pay, pro-rated benefits, and equal opportunities for seniority, promotion, training, and career advancement guaranteed by law.⁵⁰² In fact, the Netherlands has laws that make discrimination against part-timers in terms of promotion, pay, and fringe benefits illegal.⁵⁰³

In sum, an increased incidence of part-time work is not necessarily problematic, as the Netherlands experience demonstrates. It is more problematic when it is associated with high rates of involuntary part-time work, with lack of job security and benefits, with poor pay, with

⁴⁹⁶ Noreau, 1994, op. cit., p. 29.

⁴⁹⁷ OECD data cited in Marshall, Katherine. 2000. "Part-time by Choice." *Perspectives*. Statistics Canada. Catalogue no. 75-001-XPE. Minister of Industry. Ottawa. p. 20. It should be noted that international comparisons must be made with caution, since there is no universally accepted definition for part-time work. Generally, the cut-off is 30 hours a week.

⁴⁹⁸ Marshall, 2000, op. cit., p. 20.

⁴⁹⁹ Bluestone and Rose, 1997, op. cit., p. 4. The increase in involuntary part-time work in the U.S. is also discussed in Tilly, Chris, 1996, op. cit., pp. 1-5; Negrey, Cynthia. 1993. *Gender, Time and Reduced Work*. State University of New York Press. New York. pp. 56-57.

⁵⁰⁰ Schor, 1991, op. cit., pp. 39-40.

⁵⁰¹ OECD, 2002, op. cit., pp. 64-70.

⁵⁰² Colman, Ronald. 1999a. *If the Economy is Up, Why are Canadians down? Impact of Job Casualization on Canadian Workers*. Genuine Progress Index Atlantic. Halifax. p. 3.

⁵⁰³ Hayden, Anders. 1998. *A Shorter Workweek? An Answer for the Overworked and Unemployed*. Available from file://A:\swt2\anders shorter workwk.htm. Accessed July 12, 1999.

contingent work, and with diminished career advancement opportunities. The latter pattern has been more characteristic of the growth of part-time work in the U.S. and Canada.

4.1.2 Characteristics of Part-time Work

Twenty years ago a Commission of Inquiry into part-time work, the Wallace Commission, was set up in Canada. At the time there was alarm at the rate of growth of part-time work. Between 1976 and 1982 alone approximately one-third of the growth in employment was attributable to part-time jobs. The Commission was appointed in response to "mounting pressure" on Labour Canada to do something about the "unfair treatment" of part-time workers – "their low pay, lack of fringe benefits and pensions, and the fact that most are working in job ghettos with little chance of training or promotion."⁵⁰⁴

It is generally agreed that part-time jobs are more likely to be found in lower-paid occupations offering limited room for career advancement, few if any benefits, and no job security, and that they are typically characterized by high turnover. This is not to say there are no "good" part-time jobs. Of course there are. But these are usually the exception to the rule.⁵⁰⁵

For instance, in Nova Scotia in 2001, full-time employees were paid on average nearly 50% more per hour than their part-time counterparts. The average hourly wage rate of a full-time employee in 2001 was \$15.34 or \$614.80 a week. The average hourly wage rate for a part-time employee was \$10.13 or \$180.56 a week. In Canada in 2001 full-time employees were paid on average 49% more per hour than their part-time counterparts.⁵⁰⁶

A Statistics Canada study found that in 2000 the jobs most likely to offer non-wage benefits, including pension plans, extended medical and dental plans, and life/disability, are high-wage, unionized, full-time, and permanent. "Workers with higher education levels and more work experience were more likely to be in these high-wage, high-benefit jobs." The study also found that certain groups of employees were "doubly disadvantaged" with less access to non-wage benefits and lower hourly wages. "These groups include employees with less than high school education, and those in part-time, temporary or non-unionized jobs."⁵⁰⁷

For instance, the study found that of public administration employees, who earn on average \$20.20/hour, 69% have insurance coverage and 82% have a registered retirement pension plan. By contrast, of the one million workers in the food and accommodation services industry, with

⁵⁰⁴ Commission of Inquiry into Part-time Work. 1983. *Part-time Work in Canada*. Ministry of Labour. Ottawa. p. 18.

⁵⁰⁵ OECD, 2002, op. cit., p. 69; Tilly, 1996, op. cit., p. 6; Negrey, 1993, op. cit., p. 18; Tam, 1997, op. cit., p. 55; Blyton, 1985, op. cit., pp. 109-113; Advisory Group on Working Time and the Distribution of Work, 1994, op. cit., p. 31; Broad, 2000, op. cit., p. 20; and others.

⁵⁰⁶ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

⁵⁰⁷ Statistics Canada. "Non-wage Job Benefits, 2000." *The Daily*. May 21, 2003. Available from <http://www.statcan.ca/Daily/English/030521/d030521c.htm>. Accessed December 8, 2003. Citing Marshall, Katherine. 2003. "Benefits of the Job." *Perspectives on Labour and Income*. Catalogue no. 75-001-XPE. Vol. 15 no. 2. Statistics Canada. Minister of Industry. Ottawa.

average earnings of \$7.60/hour, only 13% have insurance coverage and 10% had pension plans.⁵⁰⁸

Even if people choose part-time work voluntarily, they should receive comparable hourly pay rates, benefits, and a modicum of livelihood security.

There are various advantages and disadvantages of part-time work from the perspective of the employer. It is interesting to note that the financial benefits accruing to the employer could easily compensate an employer who chose to provide pro-rated benefits to part-time workers.

Advantages to the employer:

Part-time work:

- is often more productive due to shorter work hours
- allows for scheduling flexibility
- results in less absenteeism, because the worker has time for personal, domestic responsibilities
- extends capital operating time/business hours
- reduces overtime payments
- produces savings on wages (on average, part-time jobs in Canada pay about 25% less per hour than comparable full-time jobs)⁵⁰⁹
- produces savings on payroll taxes because part-timers seldom receive benefits
- yields savings on costs for breaks etc (part-timers are often ineligible for breaks)

Disadvantages to the employer:

Part-time work may mean:

- less commitment on the part of the worker, who may be more willing to transfer and find other work
- less flexible hours (because of domestic responsibilities)⁵¹⁰

Growth in the service sector has also provided "fertile ground" for the growth of part-time work, due to its "high use of female labour, the type of work and the non-standard hours which characterize the service industry."⁵¹¹

In 1983 the Commission of Inquiry into Part-time work in Canada made 32 recommendations including:

- The Canadian government should introduce a new labour standard which would ensure part-timers receive fringe benefits and pension plans (on a pro-rated basis) where an employer provides them to full-time workers.

⁵⁰⁸ Idem.

⁵⁰⁹ Advisory Group on Working Time and the Distribution of Work, 1994, op. cit., p. 32.

⁵¹⁰ Evans, Alastair and Attew. 1986. "Alternatives to Full-time." In *Flexible Patterns of Work*. Chris Curson (ed). Institute of Personnel Management. London. pp. 105-106.

⁵¹¹ Blyton, 1985, op. cit., p. 109; Tam, 1997, op. cit., p. 55; Tilly, 1996, op. cit., pp. 19-21.

- The 15-hour/week requirement for participation in Employment Insurance should be reduced to 8-hours/week.

In 1997 changes were made to the now re-named Employment Insurance (EI) program so that part-timers working short hours are also eligible for EI. However, the Commission's key recommendation to provide pro-rated benefits and pension plans to part-time workers remains unfulfilled to this day.⁵¹² As the Advisory Group on Working Time and Distribution of Work pointed out in 1994, equal coverage of part-timers is important not only so that part-timers are treated fairly and equitably, but also to "facilitate easier movement between part-time and full-time work. A full-time clerical worker or nurse, for example, will think twice – if at all – about reducing hours if this means giving up pension benefits, even if she or he is prepared to trade some income for more free time."⁵¹³

4.2 Temporary Work

Statistics Canada defines a permanent job as one that is expected to last as long as the employee wants it, given business conditions persist. A temporary job is defined as one with a predetermined end date, or one that will end as soon as a project or contract is completed.⁵¹⁴ Nova Scotians are no strangers to temporary work that is seasonal. The very nature of work in the primary sector – fishing, logging, and farming – makes many jobs in these areas that have traditionally provided substantial employment in the province, highly dependent on the seasons. More recently, however, the seasons have had little to do with the increase in temporary or insecure work.

Data on temporary employment in Canada have only been collected by Statistics Canada since 1997. Therefore it is not possible to show a long-term trend line.⁵¹⁵ However, in just four years, from 1997 to 2001, seasonal, term or contract, and casual work have increased in Canada from 11.4% to 12.8%. One Statistics Canada study estimated that in 1989 only 8% of workers were in

⁵¹² In Canada, only the government of Saskatchewan began to move in this direction by passing legislation in 1996 guaranteeing pro-rated benefits for part-time workers. Essentially, a business with 10 or more full-time equivalent employees must provide benefits to eligible part-time workers. Part-time employees are eligible when: they have been continuously employed for 26 weeks and have worked 390 hours in that period; after the qualifying period they work at least 780 hours in each calendar year; full-time employees who work in comparable positions receive some or all of the four benefit plans; they are not full-time students. The eligible benefits include dental plans, group life, accidental death and dismemberment plans, and prescription drug plans. Saskatchewan Labour. *Rights and Responsibilities Guide. Benefits for Part-time Employees*. Available from <http://www.labour.gov.sk.ca/standards/guide/benefits.htm>. Accessed January 21, 2004.

⁵¹³ Advisory Group on Working Time and the Distribution of Work, 1994, op. cit., p. 32.

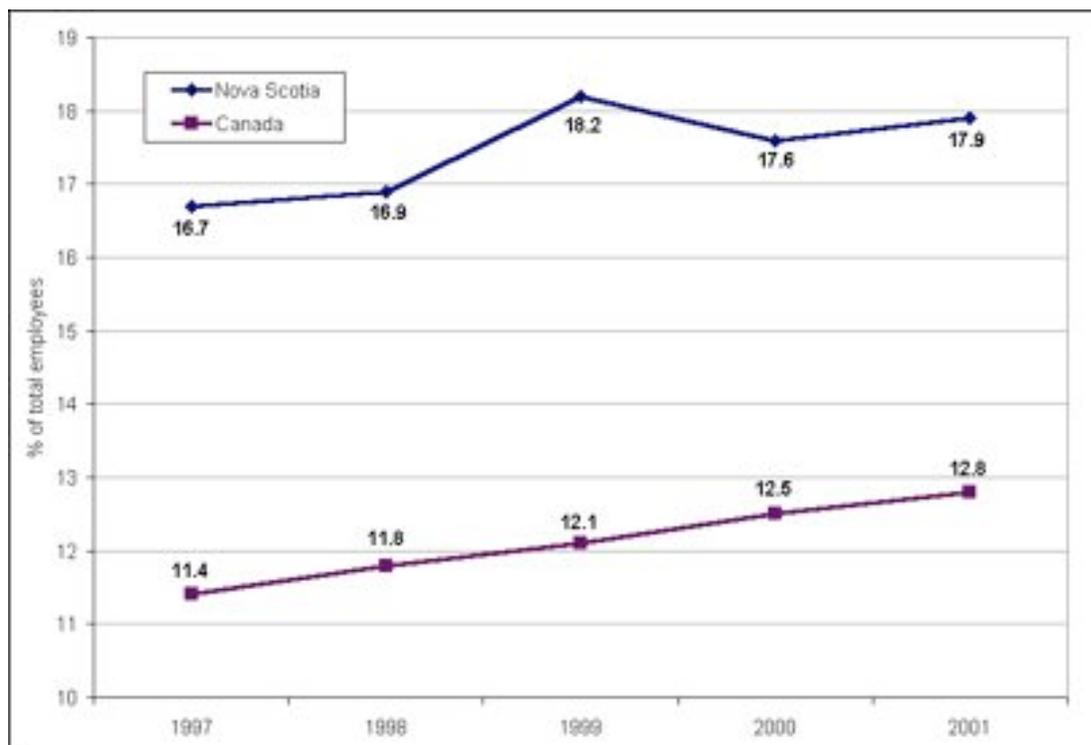
⁵¹⁴ Statistics Canada. 1997. *Labour Force Update. Hours of Work*. Vol. 1. no. 2. Minister of Industry. Ottawa. pp. 40-41.

⁵¹⁵ Andrew Heisz, of Statistics Canada, points out that the increase in temporary work could be due to a cyclical phenomenon, rather than a long term trend. Heisz, Andrew. Senior Research Economist, Business and Labour Market Analysis Division, Statistics Canada. Reviewer comments. Received October 23, 2003. GPI Atlantic acknowledges this possibility but data from earlier points in time were not available from Statistics Canada. As new Statistics Canada data become available in the coming years, it will be possible to assess whether or not current trends are long-term.

jobs with a specified end date.⁵¹⁶ The incidence of temporary work in Nova Scotia exceeds the Canadian average, with 18% of Nova Scotian workers employed on a temporary basis in 2001, up from 16.7% just four years earlier. Figure 40 plots the incidence of temporary work in Canada and Nova Scotia between 1997 and 2001.

The Advisory Group on Working Time and the Distribution of Work noted in 1994 that temporary workers, like many part-timers, do not receive benefits, and that their incomes, like their hours of work, are insecure.⁵¹⁷

Figure 40. Incidence of Temporary Work, % of Total Employees, Canada and Nova Scotia, 1997-2001.



Notes:

- Beginning in January 1997, Statistics Canada began collecting information on whether paid jobs are temporary or permanent. This classification is based on the intention of the employer, and on the characteristics of the job, rather than on the intentions of the employee. If a job that was formerly considered permanent is ending in the near future due to downsizing or closure, it is still considered permanent.
- Total employees do not include the self-employed.

Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

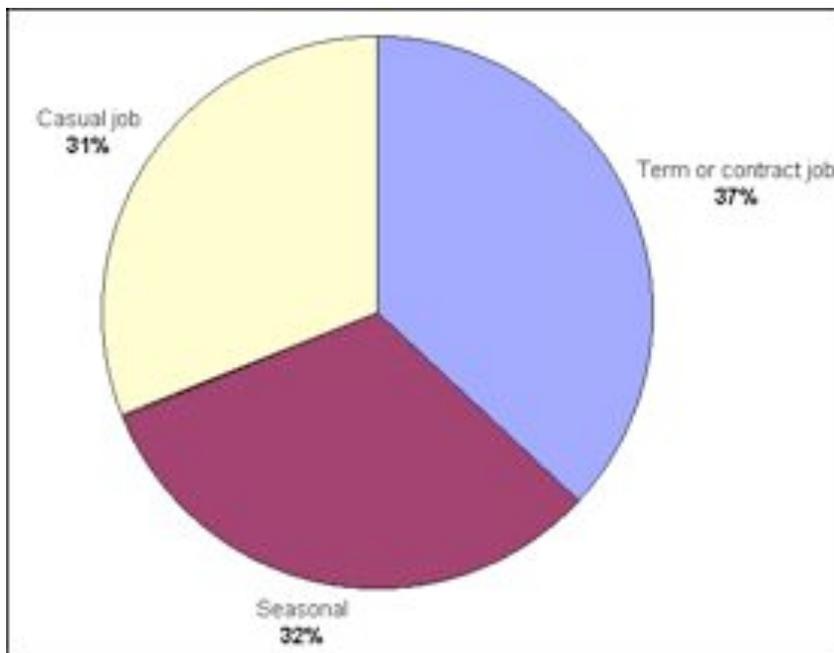
⁵¹⁶ Statistics Canada study cited in Advisory Group on Working Time and the Distribution of Work, 1994, op. cit., p. 33.

⁵¹⁷ The Advisory Group on Working Time and the Distribution of Work, 1994, op. cit., pp. 32-33.

Figure 41 illustrates the incidence of seasonal, casual, and term or contract work in Nova Scotia in 2001. The most prevalent form of temporary work was term or contract work, accounting for 37% of temporary work in the province. Seasonal and casual work accounted for 32% and 31% of temporary work respectively. Roughly the same proportion of all male employees and female employees had temporary jobs in 2001 at about 18% each.⁵¹⁸

Although some temporary jobs are part-time, there is one significant difference between most part-time work and temporary work: Few temporary workers are able to integrate their work with the responsibilities of raising a family. Characterized by being unpredictable, intermittent, and unsteady, temporary work is not generally conducive to scheduling activities outside of work.⁵¹⁹

Figure 41. Incidence of Seasonal, Casual, and Term or Contract work, % of Total Temporary Work, Nova Scotia, 2001.



Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

Data on the seasonality of employment has been collected by Statistics Canada since 1976 and reveals that the monthly seasonal variation between unadjusted and adjusted employment estimates averaged 3.4% in 1976, but had declined to 2.8% by 1997.⁵²⁰ Marshall attributed the decline to a number of factors including the proportionally smaller employment in highly seasonal industries in the late 1990s due to increasing demand for services and a decreasing

⁵¹⁸ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

⁵¹⁹ Negrey, 1993, op. cit., pp. 76-77 and p. 114.

⁵²⁰ Marshall, Katherine. 1999. "Seasonality in Employment." *Perspectives*. Statistics Canada. Catalogue no. 75-001-XPE. Minister of Industry. Ottawa. p.18. More recent data were not available.

demand for goods. In addition, increased mechanization has reduced the amount of labour needed during peak season. There has also been a trend toward more full-year employment. In 1996 72% of the workforce worked full-year, up from 67% in 1980. According to Marshall, all of the increase was attributable to part-time workers working year round.⁵²¹

In Nova Scotia seasonality also declined since 1976 from 3.6% to roughly 3% in 1997 – still above the Canadian average in 1997.⁵²²

While long-term data on the incidence of temporary work are not available in Canada, data from the U.S. and Europe seem to indicate it is on the rise.

According to the OECD, temporary work is becoming a "significant feature of the employment landscape" in most OECD countries. Among the OECD's main findings:

- Temporary workers tend to be young, less educated, and low skilled.
- They are rarely covered by collective bargaining agreements, and earn roughly 15% less per hour than permanent workers with similar educational levels and experience, after controlling for a range of individual and industrial characteristics.
- Young people are three times as likely as older workers to hold a temporary job, because these jobs often "serve as entry ports into the world of work."
- Temporary work is often insecure work and is less satisfying than secure work.
- Tasks associated with temporary work tend to be "monotonous" and schedules "inflexible."⁵²³

In the U.S., the temporary workforce tripled between 1982 and 1995 to 1.4 million workers.⁵²⁴ During the 1980s, temporary work grew "at a rapid pace" among clerical workers, manual workers, professionals, and technical workers."⁵²⁵ In 1996, the European Foundation for the Improvement of Living and Working Conditions conducted a survey of 15,800 workers (both employees and self-employed) throughout the European Union to assess the incidence of precarious employment and work conditions in the European Union. The survey found that 15% of paid employment and 12.5% of total employment was precarious (temporary). Among positions occupied for less than one year, precarious work accounted for 49% of all paid work and 43% of total work. Spain had particularly high levels of precarious work at 40% of all paid employment. This kind of work was most prevalent among the least skilled workers: labourers, agricultural workers, seasonal workers (hotels/restaurants/primary sector), and those working in small enterprises.⁵²⁶

⁵²¹ Ibid. pp. 18-19.

⁵²² Marshall, 1999, op. cit., p. 20.

⁵²³ OECD. 2002. *OECD Employment Outlook*. OECD. Paris. pp. 130-137; International Labour Organization. 2003. *Global Employment Trends*. Geneva. p.105.

⁵²⁴ Bluestone and Rose, 1997, op. cit., p. 4.

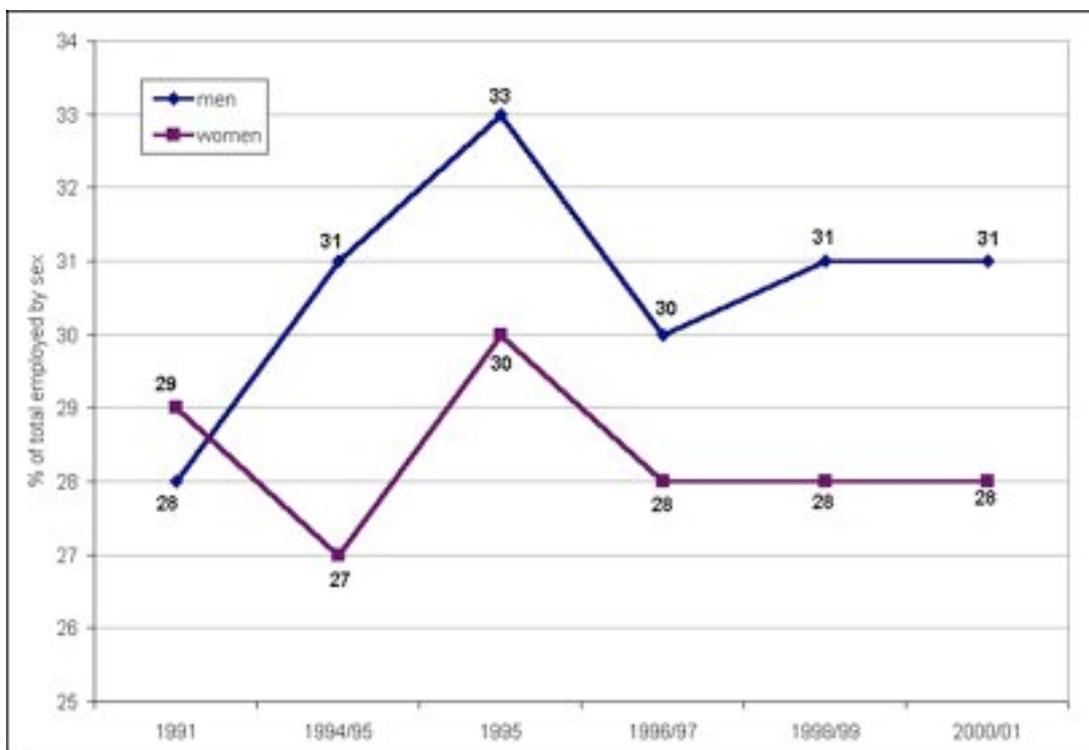
⁵²⁵ Negrey, 1993, op. cit., p. 76.

⁵²⁶ European Foundation for the Improvement of Living and Working Conditions. 1998. *Precarious Employment and Working Conditions in the European Union*. Dublin. p.1.

4.3 Shift work and the New Economy

Approximately 30% of employed Canadians worked shift or non-standard hours in 2001. As Figure 42 indicates, this figure has increased slightly over the last decade. Rates of shift work for women have remained relatively stable over the last decade while rates for men increased from 28% in 1991 to 31% in 2001.⁵²⁷ Prior to 1990, few data exist on the incidence of non-standard hours among Canadian workers. However Statistics Canada says that historical evidence "points to a rise in the prevalence of shift work in both Canada and the United States throughout the 1970s and 1980s because of the growth of the service sector and dramatic increases in the proportion of students working during the school year."⁵²⁸ In general, shift workers tend to be young, single, less-educated, and less affluent.

Figure 42. Percentage of Workers with Non-standard Hours, by Sex, Canada, 1991-2001.



Source: Shields, Margot. 2002. "Shiftwork and Health." *Health Reports*. Vol. 13, no. 4. Statistics Canada. Ottawa. p. 28. Original Data Sources: 1991: 1991 Survey of Work Arrangements. 1994/95: National Population Health Survey. 1995: Survey of Work Arrangements. 1996/97: National Population Health Survey. 1998/99: National Population Health Survey. 2000/01: Canadian Community Health Survey.

As Table 15 indicates, the most common type of shift worked in Canada is the irregular shift (14%) followed by the rotating or split shift (11%). Rotating shifts require workers to work different shifts during different periods, rotating between shifts and with no one shift

⁵²⁷ Shields, Margot. 2002. "Shift work and Health." *Health Reports*. Statistics Canada. Catalogue no. 82-003. Minister of Industry. Ottawa. p. 28.

⁵²⁸ Idem.

predominating. Split shifts involve two or more distinct shifts in the same day with an interval of free time (e.g. a bus driver working during the morning and evening rush-hour commute periods, with time off in the middle of the day).

Published data on the incidence of shift work in Nova Scotia was not available.

Table 15. Incidence of Types of Shift work, % of Total Employed, Canada, 1995.

Shift	Males	Females	Both Sexes
Evening	5	5	5
Nights	2	1	2
Rotating/Split	14	9	11
Irregular	12	15	14
Other	0	1	0
Total Shift work	33	30	32
Regular Daytime	67	69	68
Total	100	100	100

Notes:

- Numbers may not add to 100 due to rounding.
- Evening shifts start at about 3 pm or 4 pm and end around midnight. Night shifts start at midnight and end around 8am. Rotating shifts rotate the different shifts over different periods, with no one shift predominating. Split shifts involve two or more distinct shifts in the same day with an interval of free time (e.g. a bus driver working in the morning and evening commute periods). Irregular schedules involve different time schedules for the same employer, usually arranged one week or more in advance. "Other" schedules do not fit any of the above categories.

Source: Statistics Canada. 1998. *Work Arrangements in the 1990s*. Catalogue no. 71-534, no. 8. Minister of Industry. Ottawa.

In the U.S. in 2001 approximately 14.5% of full-time wage and salary workers were working non-standard hours, down from 18% in 1991.⁵²⁹ In 1999, roughly 20% of all employed (part-time and full-time) worked shifts.⁵³⁰ Shift workers tended to be black males. The incidence of shift work was highest among service sector workers and least common among managers, professionals, and workers in primary industries (farming, forestry, and fishing). According to the U.S. Bureau of Labor Statistics, more than half of those working shifts did so because it was a requirement of the job.⁵³¹

Unorthodox hours are one characteristic of the new economy that has emerged in the last three decades. Our society has always required certain around-the-clock services such as police, fire,

⁵²⁹ U.S. Bureau of Labor Statistics. *Workers on Flexible and Shift Schedules in 2001: Summary*. Available from <http://www.bls.gov/news.release/flex.nr0.htm>. Accessed October 24, 2002. By type of shift, 4.8% of all full-time wage and salary workers worked evening shifts, 3.3% worked night shifts, 2.8% worked irregular schedules, and 2.3% worked rotating shifts.

⁵³⁰ Marchant, Valerie. "In the Deep of the Night The New Economy is making more Companies Confront the Challenges of Unorthodox Hours." *Time Magazine*. New York. November 1, 1999. p. 110.

⁵³¹ U.S. Bureau of Labor Statistics, 2001, op. cit.

hospital services, etc. However, the growth and expansion of the service sector has also meant that hours of service for more and more businesses are offered while most of us sleep (e.g. 24-hour supermarkets). In addition, investments in expensive machinery often require the continuous use of that machinery, to ensure that the value is amortized and the considerable investment recouped in as short a time period as possible. In forestry for instance, expensive tree-felling equipment is often operated 24 hours a day simply so that owners can pay for the machines.

Despite its prevalence, shift work is mostly not a choice but a requirement of the job. In fact, evidence now points to the physical and emotional toll that working shifts takes on workers. Statistics Canada states:

"The most common health complaint of shift work is lack of sleep, but shift work has also been associated with cardiovascular disease, hypertension and gastrointestinal disorders, and for women, with reproductive health problems and breast cancer. Shift work may exacerbate conditions such as asthma, diabetes and epilepsy. Mental health disorders such as anxiety and depression have also been linked to shift work."⁵³²

Part 2 of this report will examine in detail the health costs associated with shift work.

4.4 The Global Assembly Line

"Globalization is an invisible, anonymous process, driven by abstract, nonhuman forces and factors. As it bypasses the authority of states, reducing their power, it sets up the marketplace as, in effect, the new god that we must worship, replacing the nation-state. The trouble is, this new god, though it may be more efficient, is incapable of taking a long-run view and can think only in material terms. The state, for all its shortcomings, is made up of people – people whose life experience may give them a long-term perspective and whose children make them likely to have a broad-ranging concern for the future. Furthermore, because the state is run by people, if we don't like what they're doing to us, we can eventually change them. Sooner or later, the state must respond to the demands of the people living in it. However, if we don't like what the market does, we can't repeal its laws. If we storm the bunker of globalization, we won't find a madman there or a clique of conspirators – just an empty space."

– Pierre Pettigrew⁵³³

Globalization and "free" trade have resulted in a labour market where Canadian workers are now competing with cheap labour abroad. At the same time, technology continues to reduce available work and increase the capital intensity of production and growth. The growing polarization of hours reflects the emergence of two separate work forces – a "core" work force of highly

⁵³² Shields, Margot. 2002. "Shiftwork and Health." *Health Reports*. Vol. 13. no. 4. Statistics Canada. Minister of Industry. Ottawa. p. 11.

⁵³³ Pierre Pettigrew, then Canadian Minister for International Cooperation, addressing conference on African Development in September, 1996. Cited in Cayley, David. 1998. *The Expanding Prison. The Crisis of Crime and Punishment and the Search for Alternatives*. Anansi Press. Toronto. p. 77.

educated and highly skilled employees, working longer hours and putting in higher rates of unpaid overtime than ever, and a "contingent" work force of mostly unskilled, less educated workers that can be hired and laid off in response to market conditions and fluctuations in demand.⁵³⁴ The latter are typically underrepresented by trade unions that often protect their own "core" members through contract clauses requiring layoffs according to seniority, thus reinforcing the increasing segmentation of the work force.⁵³⁵

In *Hollow Work, Hollow Society*, Dave Broad looks at how global transformations have led to the casualization of work. He writes:

"The impact of global transformations on the Canadian labour market can be seen in two processes in particular; the emergence of a new international division of labour, and the rapid technological changes that have wide-ranging impacts on labour processes."

Broad argues that weak trade unions are key to this new division of labour, because when work is casualized (i.e. made temporary, insecure, low paying) it tends not to be organized.⁵³⁶

Broad notes that in Canada, free trade with the U.S. has been good for those businesses that are able to compete effectively. But he argues that it has left the rest "vulnerable." Competing means reducing production costs, and this often means "downsizing," "rationalizing," and "restructuring." These are all ways of referring to reducing labour costs by laying off workers. Between 1988 and 1992, following the first Canada-U.S. Free Trade Agreement (1988), a net of 567,000 industrial jobs were lost in Canada. In contrast, between 1983 and 1988, before the Agreement, 1.6 million jobs were created.⁵³⁷

While it is not possible to link the aggregate job losses from 1988 to 1992 definitively to the Canada-U.S. Free Trade Agreement, there is little disagreement that global pressures on employers to reduce labour costs in the interests of competitiveness contributed to growing job insecurity in the 1990s and exerted a downward pressure on real wages.

The decline of the blue-collar class, which began in the 1970s, has been referred to by analysts, including Barbara Ehrenreich, as the "de-industrialization of America." Between 1979 and 1984 alone, 11.5 million American workers lost their jobs due to plant shutdowns or relocations. According to Ehrenreich, 60% of these workers found new jobs. In the 1980s, an "assault on

⁵³⁴ Because of what are called "lean production techniques," the number of "core" workers, or those in permanent jobs, is shrinking. As jobs are shed and the company is made more "lean" the core workers often find themselves doing the jobs of the lost workers – working longer hours and more variable hours in the form of paid and unpaid overtime. Jackson, Andrew and David Robinson. 2000. *Falling Behind. The State of Working Canada, 2000*. Canadian Centre for Policy Alternatives. Ottawa. p. 50.

⁵³⁵ Colman, Ronald. 1999a. *If the Economy is Up, Why are Canadians Down? Impact of Job Casualization on Canadian Workers*. GPI Atlantic. Halifax. p. 3.

⁵³⁶ Broad, Dave, 2000, op. cit., pp. 52-53.

⁵³⁷ Ibid. p. 59. Job numbers are from Stanford, Jim, Christine Elwell and Scott Sinclair. 1993. *Social Dumping under North American Free Trade*. Canadian Centre for Policy Alternatives. Ottawa. According to Broad, these numbers are conservative because they do not include indirect job losses or losses in the service sector.

America's working class people" was under way, writes Ehrenreich. Unions were "busted," she says, and labour regulators were "eviscerated."⁵³⁸

At the same time that many companies were shedding workers and cutting costs, they were also shifting many of the company's operations to other countries. In a cogent article that appeared in *Harpers Magazine*, Barry Lynn describes how globalization has created a global assembly line where:

"[A] single semiconductor might be cut from a wafer in Taiwan, assembled in the Philippines, tested in China, fit into a subcomponent in Malaysia, plugged into a component in Brazil, and loaded with a program designed in India."⁵³⁹

In contrast, in 1927, at Henry Ford's River Rouge complex in Michigan, except for the mining of the ore, the production of cars took place from beginning to end in the same plant. Lynn writes that "ships were unloading iron ore at one end of the complex while employees drove finished Model A's onto railroad cars at the other." But today, this kind of in-house production is a thing of the past. In its place, many companies have created a "vast network of outsourced production."⁵⁴⁰

Another major shift in the world of work is the move toward "just-in-time" production, where the goal is to have low inventory (both in inputs and output) in order to boost the bottom line and produce quicker returns on investment. A trim inventory means that very little capital is invested in excess stock. The result of this kind of production is usually more variety for consumers, greater capacity to respond quickly to shifts in consumer demand, and lower costs for firms. But there is a price to be paid as well for "just-in-time" production. According to the Advisory Group on Working Time and the Distribution of Work:

"The price of variety and speed in delivering services and products is variability and uncertainty in the labour market...inevitably demand fluctuates from one week to the next, even in a growing market, making the supplier want to hire people who will also work variable hours, on demand. This flexibility is often gained by reducing the number of core, permanent, full-time workers to a minimum, making the regular hours of work more variable, or increasing reliance on people whose hours of work can be easily changed: temporary workers, part-time workers without fixed hours, or so-called self-employed contractors such as homeworkers."^{541 542}

⁵³⁸ Ehrenreich, 1989, op. cit., pp. 206-208.

⁵³⁹ Lynn, Barry. 2002. *Unmade in America. The True Cost of a Global Assembly Line*. Harpers Magazine. Vol. 304, no. 1825. New York. pp. 33-41.

⁵⁴⁰ Idem.

⁵⁴¹ Advisory Group on Working Time and the Distribution of Work, 1994, op. cit., p. 29.

⁵⁴² A homeworkeer is someone who works from home and is paid by the piece. These workers are usually isolated and unorganized (non-unionized), poorly paid, and without benefits. They are typically immigrants working in the garment industry. This kind of work is also found in insurance, electronics, and even automobile assembly. For instance, General Motors farms out subassembly work – so rural workers in the Midwest are piecing together suspension components at their kitchen tables! From Yates, Michael. 1994. *Longer Hours, Fewer Jobs. Employment and Unemployment in the United States*. Monthly Review Press. New York, p. 48.

The Advisory Group concluded that as a result of the structural changes taking place in Canada and elsewhere, it is "quite possible, and even likely, that the non-standard job of today will become the standard job of tomorrow."

Has the North American Free Trade Agreement (NAFTA) worked for workers? The Economic Policy Institute in Washington, D.C., published a report in 2001 that explored this very issue, and examined the impact NAFTA has had on workers in Canada, the U.S., and Mexico. Overall the report authors found that free trade has "harmed workers in all three countries." Key findings from the study for Canada were:

- Exports accounted for 40% of GDP in 2000, up from 25% in 1989. 85% of all exports in 2000 went to the U.S.
- Imports destroyed more jobs than exports created – the net loss of jobs was 276,000.
- "In an effort to be more competitive under NAFTA," the Canadian government cut public spending from 16% to 11% of GDP, removing much of the social safety net. The proportion of unemployed workers collecting Employment Insurance, for example, declined by more than half, from 75% in 1990 to 36% in 2000. Corporate and high-end taxes were cut.
- Average per capita income in Canada fell steadily in the first seven years of the 1990s and only regained 1989 levels in 1999. Unemployment averaged 9.6% for the decade and was higher than in any decade since the 1930s.
- By the end of the 1990s employment in manufacturing was 6% below 1989 levels. Self-employment and part-time employment skyrocketed, accounting for 43% and 37% of new job creation in the 1990s.
- Income inequality grew in the 1990s as the top 20% of families saw their share of pre-tax incomes increase from 41.9% in 1990 to 45.2% by 1998. The bottom 20% saw their share drop from 3.8% to 3.1%. Even after taxes and transfers are taken into account, the shift in income distribution still favoured the top 20%.⁵⁴³

These Economic Policy Institute estimates are confirmed by other sources. Statistics Canada's most recent income data for 2001 shows that the average real disposable incomes of all families (economic families and unattached individuals) in Canada stagnated or declined between 1992 and 1997, except for the highest quintile which registered improvements starting in 1995. Between 1997 and 2001, improvements in disposable income were seen for all quintile groups. However, the data confirms that throughout the 1990s the greatest gains were enjoyed by the highest quintile.⁵⁴⁴ Between 1996 and 2001, inequality in income distribution between the quintiles grew. Statistics Canada found that the after-tax (disposable) income of the highest 20% (fifth quintile) of families in Canada in 1996 was eight times that of the lowest quintile. By 2001 the richest 20% had disposable incomes that were 8.7 times that of the lowest 20%. Between

⁵⁴³ Economic Policy Institute. 2001. *NAFTA at Seven. The Impact on Workers in all three Nations*. Washington. Available from <http://epinet.org>. pp. 21-29.

⁵⁴⁴ The term "quintile" simply means "one-fifth," and refers to five income groups ranked from the top 20% of incomes to the bottom 20% of incomes. To assess quintiles, all incomes in a given population are ranked from the lowest to the highest and then divided into five groups. Thus the bottom one-fifth of incomes is referred to as the "first quintile," the top one-fifth as the "fifth quintile," and the middle 20% of incomes as the "third quintile."

1993 and 2001 the gains by the highest quintile were largest and gains by the lowest quintile were smallest, contributing to further growth in inequality.⁵⁴⁵

The recent improvements in disposable income for 3rd, 4th and 5th quintiles have not been experienced by the poorest 40% of households in Canada. In fact, the increase in income inequality and the growing gap between rich and poor has become increasingly pronounced in the last decade.

By all accounts free trade has also been detrimental for Mexican workers. The *maquiladoras* are a case in point. Essentially these are Mexican assembly plants that produce finished goods for export to the U.S. Between 1983 and 1990 the maquiladora industry grew roughly 20% per year, and in 2000 there were 1.3 million Mexicans employed in 4,000 maquiladoras. To the non-Mexican corporations that own the maquiladoras, they are Mexico's "bright spot"—an assessment that is not surprising since the maquiladoras generate more than \$7 billion a year in revenues.⁵⁴⁶

To the mostly young Mexican women who work there for about \$5.75 per day, the maquiladoras mean poor working conditions and poverty wages. In fact, U.S. House Speaker Newt Gingrich argued against raising minimum wages in the U.S. "on the grounds that [it] would handicap American workers in their competition with workers in Mexico."⁵⁴⁷ Working conditions have been reported to be so deplorable that the average workweek in these factories is 60-70 hours a week – with mandatory overtime, and rapid production schedules that lead to physical burnout and a high turnover rate.⁵⁴⁸

Despite the recent effects of globalization on the labour market, globalization itself is not new. Broad points out that it has existed since the "voyages of discovery" 500 years ago. However, he argues that today it is different in character, in that it has "deepened" dramatically.⁵⁴⁹ A discussion about the roots and evolution of globalization is beyond the scope of this report, but it is sufficient in the context of this report to note that it has contributed markedly to the new forms of contingent and precarious work described above, and has not delivered on its promise of opportunity and affluence for most people. On balance labour has lost power since the free trade agreements, and in many cases, as Pierre Pettigrew's statement above indicates, so too have governments.

⁵⁴⁵ Statistics Canada. 2003f. *Income in Canada, 2001*. Catalogue no. 75-202-XIE. Ottawa. p. 74. and Table 7.2.

⁵⁴⁶ Bozic, Mike. 2001. "Maquiladoras: Economic Miracle or Debacle?" *The United*. Vol. 3, no. 5. Available from <http://myams.org/united/3-5/articles/bozic.html>. Accessed March 28, 2003.

⁵⁴⁷ From Lind, Michael. 1995. "To Have and Have Not. Notes on the Progress of the American Class War." *Harpers Magazine*. June. New York.

⁵⁴⁸ Bozic, 2001, op. cit.

⁵⁴⁹ Broad, 2000, op. cit., pp. 53-57.

4.5 Working for the Computer

"In the 1980s, there will be a general awareness that the technology game is out of control, and that perhaps man was not intended to live at the speed of light. Excessive speed of change isolates already-fragmented individuals and the accelerated process of adaptation takes too much vitality out of communities. It might even be said that at the speed of light man has neither goals, objectives nor private identity. He is an item in the data bank – software only, easily forgotten – and deeply resentful."

–Marshall McLuhan⁵⁵⁰

"The computer introduces...a time frame in which the nanosecond is the primary temporal measurement. The nanosecond is a billionth of a second and though it is possible to conceive theoretically of a nanosecond...it is not possible to experience it."

– Jeremy Rifkin⁵⁵¹

Technology has always had a profound effect on the nature of work. Since the industrial revolution, machines have increasingly replaced people – frequently rendering them "surplus" or "redundant." Many workers who were not replaced by the new machines were forced to increase their pace of work to match that of the new machines. During the last 200 years, many thinkers have engaged in a vigorous debate about the impact these new technologies have had on the worker, on the nature of work, and on society.

According to Menzies, the use of and reliance on the computer has been one of the most profound transformations since the Industrial Revolution, resulting in what she calls a "computer-defined," and "abbreviated form of work."⁵⁵²

According to Statistics Canada, in just over a decade, the proportion of workers using a computer at their main job has increased by more than 70% from 33% of workers in 1989 to more than half (57%) of workers in 2000. Nearly 6.4 million Canadian workers (80% of those using computers in their main jobs) worked at their computers every day. Other industrialized countries are experiencing the same upward trend.⁵⁵³

Menzies points out there is a "huge disparity" between the level of computer skill training attained and the availability of suitable work in which those skills are used. She cites one study that found that 80% of high school and university graduates had taken some computer training. However, of the 50% of those who were working with computers on the job, the vast majority were restricted to simple tasks including data entry, data-processing, and word-processing.⁵⁵⁴

⁵⁵⁰ Cited in Menzies, 1996, op. cit., p. 14. Original source: McLuhan, Marshall. 1980. "Living at the Speed of Light." *Maclean's*. January 7, 1980. p. 32.

⁵⁵¹ Rifkin, Jeremy. 1987. *Time Wars*. Henry Holt. New York. pp. 14-15.

⁵⁵² Menzies, 1996, op. cit., pp. 9-10.

⁵⁵³ Marshall, Katherine. 2001. "Working with Computers." *Perspectives*. Statistics Canada. Catalogue no. 75-001. Minister of Industry. Ottawa. pp. 9-11.

⁵⁵⁴ Menzies, 1996, op. cit., p. 122. Study cited: Lowe and Krahn. *Computer Skills and Use*. pp. 175-188.

In an increasing number of jobs, the computer has become the brain or control centre – doing the thinking, organizing, planning, and even the monitoring of the system's performance. According to Menzies:

"The computer's simplification and control of work have made possible the replacement of full-time staff with part-time, temporary McJobs in every economic sector, from goods production to the provision of public, commercial, and personal services."⁵⁵⁵

Not surprisingly, the rise of the "McJob," or the abbreviated form of work that Menzies describes, has been accompanied by what has been called the "McDonaldization" of work – a process in which the principles of the fast-food industry are applied to an increasing number of workplaces. These principles include efficiency, predictability, calculability, and control through technology. In this new world of work, people have become "extensions of the machine."⁵⁵⁶

The computer revolution is not the first time that technology has been used to achieve efficiency. Henry Ford rationalized the auto industry while, at the same time, Frederick Taylor produced his now famous idea of "scientific management" – where workers are studied and a system is created in which they will "operate in an efficient, predictable, calculable way."⁵⁵⁷ Ultimately there are costs – both human and cultural – to this kind of systematic robotization of the workforce. These costs will be discussed further in Part 2.

Menzies argues that in addition to the rise in McJobs, there has been a major new trend of jobless economic growth. The economy is growing, she argues, but most new economic activity is generating jobs in the Third World where an abundant supply of cheap labour keeps labour costs down and where squalid working conditions are less subject to government regulation.^{558 559} According to one satirist:

⁵⁵⁵ Menzies, 1996, op. cit., p. 9. Menzies is critical of the bureaucratic language used to describe the people who occupy these kinds of jobs. She writes that the term "contingent labour force" hides what it means for workers "who are being treated as the human equivalent of post-it-notes: marginal add-ons used briefly, then discarded without a sound and without leaving a trace. People become costlessly replaceable." p. 10.

⁵⁵⁶ Jensen, Derrick. 2002. "The Disenchanted Kingdom: George Ritzer on the Disappearance of Authentic American Culture." *The Sun*. Available from <http://www.derrickjensen.org/ritzer.html>. Accessed December 16, 2002. p. 2. George Ritzer is a professor at the University of Maryland and the author of numerous books including *The McDonaldization of Society* and *Explorations in the Sociology of Consumption: Fast Food, Credit Cards, and Casinos*.

⁵⁵⁷ Ibid. p. 3.

⁵⁵⁸ Menzies, 1996, op. cit., p. 143.

⁵⁵⁹ According to the International Labour Organization, forced labour, slavery, and human trafficking are on the rise around the world. The report attributes the increase in these conditions to a number of factors, including "poverty, unemployment, civil disorder, political repression and gender and racial discrimination," creating an environment in which the vulnerable (mostly women and children) can be easily exploited. A combination of anti-poverty and labour market regulatory measures are needed to counter these trends, says the report. From ILO. 2001. *ILO Study finds Forced Labour and Human Trafficking on the Rise. Migrants, Women and Children are Especially Vulnerable*. Press Release. May 25, 2001. Geneva.

*"The Jobless Recovery:
Got the economic jitters?
Insecure about your job?
Don't worry. Now you can be sure you are an essential part of the jobless recovery. Just follow these 10 easy steps:*

- 1. Identify inefficient co-workers.*
- 2. Enthusiastically accept the workload of your downsized co-workers.*
- 3. Learn to type 2,500 words per minute.*
- 4. Keep your chin up when more co-workers vanish.*
- 5. Work harder.*
- 6. Work faster.*
- 7. Work late!*
- 8. Multi-task.*
- 9. Exit the building promptly when you are laid off.*
- 10. Go shopping.*

Thanks to you the economy is looking better already."

–Text for cartoon by Mark Fiore from *The Village Voice*.⁵⁶⁰

⁵⁶⁰ Available from <http://www.markfiore.com>

Chapter 5. The Collapse of Work: Unemployment

"The emergence of an economy that grows by shedding labour has heightened anxiety about jobs and increased the number of people who find themselves without prospects and without a stake in the current order of society."

– David Cayley⁵⁶¹

"The problem is starkly simple: an astonishingly large and increasing number of human beings are not needed or wanted to make the goods or to provide the services that the paying customers of the world can afford. Since most people in the world depend on having a job just to eat, the unemployed, the unemployable, the underemployed have neither the money nor the state of mind to keep the global mass consumption system humming. Their ranks are growing so fast that the worldwide job crisis threatens not only global economic growth but the capitalist system itself."

– Richard J. Barnet⁵⁶²

In the winter of 1995, 26,000 people lined up to apply for a rumoured third shift at Oshawa's General Motors car plant. A year later, not one of those who applied had been offered a job. Instead, GM decided to work the employees they already had on "maximum overtime." It was not until seven years later that GM and the Canadian Auto Workers Union agreed that a third shift was in order. One thousand jobs were "created," and they were earmarked for those who were either former or current GM employees. About the same time that GM announced the third shift and the "new" jobs, the company also closed a Camaro/Firebird plant in Quebec and an engine plant in southern Ontario, laying off 1,400 and 900 people respectively.⁵⁶³

Between 1988 and 1992 a net of 567,000 industrial jobs were lost in Canada. In contrast, between 1983 and 1988 1.6 million jobs were created.⁵⁶⁴ The decline of the blue-collar class, which began in the 1970s, has nowhere been more dramatic than in the U.S. where between 1979 and 1984 alone, 11.5 million American workers lost their jobs due to plant shutdowns or relocations. At the same time, U.S. trade unions and labour regulators were losing substantial power.⁵⁶⁵ The North American Free Trade Agreement (NAFTA), signed in 1994, further crippled the American trade unions, since it became cheaper for a company to set up shop in Mexico. In 2000, a trade agreement between the U.S. and China meant, "hundreds of thousands of U.S. manufacturing

⁵⁶¹ Cayley, David. 1998. *The Expanding Prison. The Crisis of Crime and Punishment and the Search for Alternatives*. Anansi Press. Toronto. p. 6.

⁵⁶² Barnet, Richard J. 1993. "The End of Jobs. Employment is one thing the global economy is not creating." *Harper's Magazine*. September. New York. p. 47.

⁵⁶³ CBC News Online. 2002. "GM to add 1,000 workers, third shift at Oshawa car Plant." *CBC News*. May 6, 2002. Available from http://www.cbc.ca/stories/2002/05/06/generalmotors_020506. Accessed March 26, 2003.

⁵⁶⁴ Broad, 2000, op. cit., p. 59. Job numbers originally from Stanford, Jim, Christine Elwell and Scott Sinclair. 1993. *Social Dumping under North American Free Trade*. Canadian Centre for Policy Alternatives. Ottawa. According to Broad, these numbers are conservative because they do not include indirect job losses or losses in the service sector. It is unclear whether job gains were solely in the industrial sector.

⁵⁶⁵ Ehrenreich, 1989, op. cit., pp. 206-208.

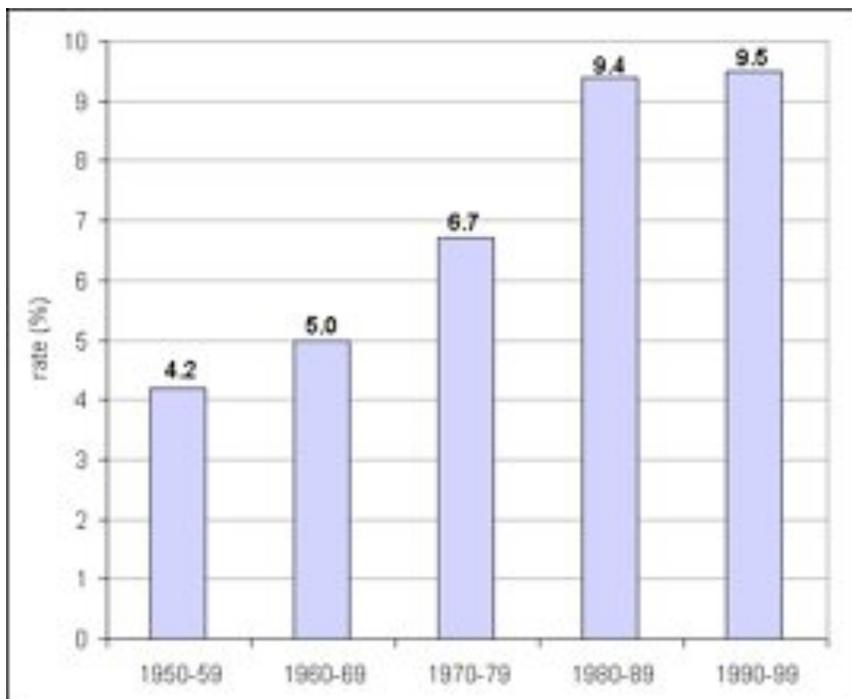
jobs that went to dollar-an-hour workers in Mexico are now moving to 20-cent-an-hour China."⁵⁶⁶

By the 1990s, white-collar professionals, who until that point had been relatively unscathed, were also receiving pink slips. Few workers remained secure in their jobs. These trends pushed increasing numbers of workers into part-time, contingent, and precarious work in the 1980s and 1990s.

5.1 Trends

Except during the Great Depression, the proportion of Canadians without work has never been higher than in the 1980s and 1990s, averaging 9.4% between 1980-89 and 9.8% between 1990-98. In the 1950s only 4.2% of Canadians were out of work, and in the 1960s, the average unemployment rate was just 5%. Figure 43 illustrates the steady increase in unemployment in Canada since the 1950s.

Figure 43. Canada's Unemployment Rate by Decade, 1950s to 1990s.



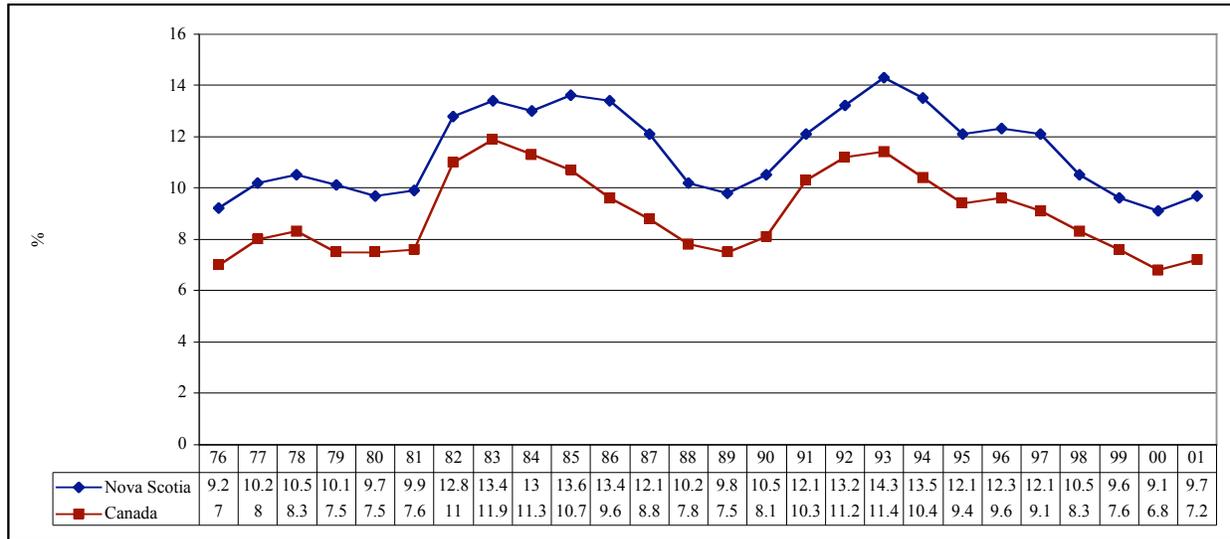
Source: Battle, Ken and Sherri Torjman, eds. 1999. *Employment Policy Options*. Caledon Institute of Social Policy. Ottawa. p. 5; Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

Peak unemployment years were 1983 and 1993 when 11.9% and 11.4% of Canadians respectively were jobless. Since 1976, the unemployment rate in Nova Scotia has consistently exceeded the

⁵⁶⁶ MacArthur, John R. 2002. "Democrats have Nobody to Blame but Themselves." *The Globe and Mail*. November 8, 2002. Toronto.

Canadian average. The 1980s saw average jobless rates of 11.8%, and in the 1990s the proportion out of work in Nova Scotia averaged 12%. Since 1996, unemployment rates have declined in both Canada and Nova Scotia, and in 2000 reached their lowest levels in 25 years. Figure 44 plots official rates of unemployment since 1976 for both Canada and Nova Scotia.

Figure 44. Official Unemployment Rates, Canada and Nova Scotia, 1976-2001.

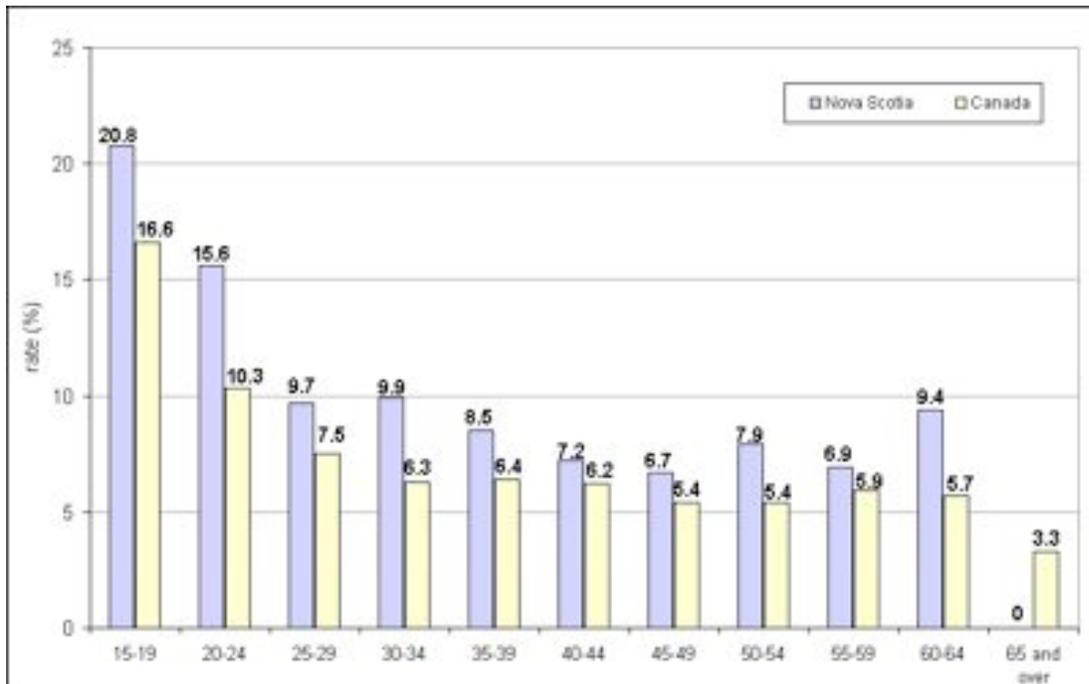


Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

Young people both in Canada and Nova Scotia are more likely to be unemployed than other age groups. In 2001, the unemployment rate for 15-24 year old Canadians was 12.8% and 17.7% for their Nova Scotia counterparts. According to Jackson and Robinson, there is a disproportionate number of unemployed youth because they have entered a job market where jobs were already scarce. The situation is especially difficult for those lacking work experience.⁵⁶⁷ Figure 45 indicates unemployment rates by age group in Canada and Nova Scotia in 2001. In all age groups, Nova Scotia unemployment rates exceeded the Canadian averages.

⁵⁶⁷ Jackson, Andrew and David Robinson. 2000. *Falling Behind. The State of Working Canada, 2000*. Canadian Centre for Policy Alternatives. Ottawa. p. 52.

Figure 45. Unemployment Rate by Age Group, Nova Scotia and Canada, 2001.



Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

In Nova Scotia, where average unemployment rates have remained consistently higher than the national average, some regions are worse off than others. As Figure 46 shows, unemployment was least severe in the Halifax area in 2001 at 7.1%. But a short drive in this province does not only result in changes in weather – the official jobless rate soars as one leaves the capital, reaching a staggering 17% in Cape Breton. It should be noted that the official unemployment rates exclude discouraged workers who have given up looking for work. So the actual jobless rate in Cape Breton is larger than the official figures indicate.

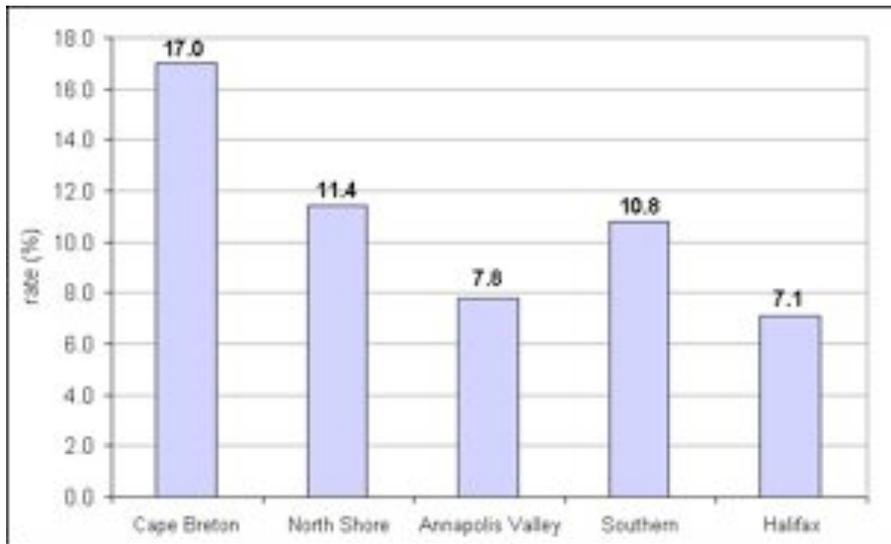
Statistics Canada only began collecting data on labour force estimates by region in 1987. Those data indicate that the official unemployment rate in Cape Breton declined by two percentage points, from 19% in 1987 to 17% in 2001. There have also been improvements in the official unemployment rates on the North Shore and the Annapolis Valley, where 1987 levels were 14.8% and 11.4% respectively, falling to 11.4% and 7.8% in 2001. Halifax also saw a decline from 8.8% in 1987 to the 2001 level of 7.1%.⁵⁶⁸

Between 1972 and 2001 the number of unemployed in the OECD tripled from an average of 10 million in the early 1970s to 33 million in 2001. In the OECD countries, the average unemployment rate was 6.4% in 2001. The OECD projected that unemployment would rise in 2002 to 6.9%, or more than 35 million.⁵⁶⁹

⁵⁶⁸ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

⁵⁶⁹ OECD, 2002, op. cit., pp. 16-17.

Figure 46. Unemployment Rates by Region, Nova Scotia, 2001.



Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

On a global scale the International Labour Organization estimates there were 180 million people without work in 2002, up 20 million from the previous year. Women and youth were hardest hit by the rise in unemployment. According to the ILO, the "shaky economy pushed more people into informal employment. Because of the precarious and badly paid nature of many informal jobs, expansion in the informal economy typically produces higher levels of working poverty."⁵⁷⁰ The ILO estimated that by the end of 2002 there would be 550 million workers living on the equivalent of U.S. \$1 a day.⁵⁷¹

Table 16 gives official unemployment rates by region of the world for 2000 and 2002, and Table 17 provides the official unemployment rates for a number of industrialized countries. According to the ILO, past recessions have often resulted in a "ratchet" effect on unemployment, where unemployment levels are raised permanently once the economy turns around. This is often caused by the fact that the skills of the unemployed deteriorate or become "obsolete" if unemployment lasts too long.⁵⁷²

The Netherlands had at one time one of the highest rates of unemployment in the EU, but with only 2.4% jobless in 2001, it had the lowest. This major reduction in unemployment was accomplished in part by shortening and redistributing work hours, and by promoting and improving the conditions of part-time employment.

⁵⁷⁰ The "informal" sector includes those jobs typically referred to as "under the table" jobs that are "off the books," and on which neither employer nor employee pays taxes.

⁵⁷¹ ILO. 2003. *Global Employment Trends*. Geneva.

⁵⁷² Idem.

Table 16. Unemployment Rates by Region, 2000-2002.

	2000	2002*
Asia and the Pacific	3.8	4.2
East Asia	3.2	4.0
South-east Asia	6.0	6.5
South Asia	3.4	3.4
Industrialized Countries	6.1	6.9
Latin America and Caribbean	9.7	9.9
Middle East and North Africa	17.9	18.0
Sub-Saharan Africa	13.7	14.4
Transition Economies**	13.5	13.5

* Projection

** Transition economies include Central and Eastern Europe, Commonwealth of Independent States and Mongolia, and the Russian Federation.

Source: ILO. 2003. *Global Employment Trends*. Geneva.

Table 17. Unemployment Rates in 14 Industrialized Countries, 1990-2002.

	1990	1995	2001	2002*
Austria	4	3.9	3.6	5.6
Canada	8.1	9.4	7.2	7.6
Denmark	7.2	6.8	4.3	4.3
France	8.6	11.4	8.6	9.2
Germany	4.8	8.2	7.9	7.8
Ireland	13.4	12.3	3.8	4.9
Italy	8.9	11.5	9.5	9.1
Japan	2.1	3.1	5.1	5.8
Netherlands	5.9	6.6	2.4	2.7
Norway	5.3	5	3.6	3.6
Spain	16.1	22.7	13	10.7
Sweden	1.7	8.8	5.1	4.2
United Kingdom	6.9	8.5	5	5.3
United States	5.6	5.6	4.8	5.6

* Projection

Source: International Labour Organization. 2003. *Global Employment Trends*. Geneva.

5.2 "Hidden" Unemployed

Statistics Canada's Labour Force Survey counts a person as being unemployed if he or she did not work for even an hour in the reference week and is actively seeking work.

According to current estimation methods, the official unemployment rate actually falls when the unemployed stop looking for work! As Yates explains: "If the labour force consisted of 900 employed and 100 unemployed people (a total labour force of 1,000 people) the unemployment rate would be 10%. But if those 100 people dropped out of the system and stopped looking for work because they were so discouraged, the labour force would drop to 900 and the number of officially unemployed would be zero."⁵⁷³ For instance, in the U.S. recently, the unemployment rate fell to 6.2% from 6.4% because of the sharp rise in the number of "discouraged workers."⁵⁷⁴ Discouraged workers – those who are out of work but have given up looking for work – are left out of the official numbers.

The official unemployment statistics also exclude the underemployed – those who are working part-time but would rather be working full-time (involuntary part-timer workers), or those who are working beneath their skill level. Official statistics also exclude many women who are at home with children and would like to have paid work but who cannot find a job with a flexible work schedule or who cannot afford daycare. The official statistics also exclude students who are in school because they cannot find work, people on short-term job creation projects, the prematurely retired, and those in prisons. In the U.S. roughly 2% of employable males are incarcerated and, consequently, omitted from that country's unemployment statistics.⁵⁷⁵

Statistics Canada acknowledges that the official definition of unemployment is a narrow one. Every March since 1979, Statistics Canada has identified the number and characteristics of discouraged workers through a supplement to the LFS. In addition to the "annual observation," the survey was also conducted in September 1981 and 1984.⁵⁷⁶

In 1997, therefore, the agency began collecting and publishing "supplementary" rates of joblessness on a monthly basis. These statistics, published in the *Labour Force Historical Review*, present a more realistic picture of unemployment and include at least a portion of the so-called "hidden" unemployed. These supplementary statistics include estimates for discouraged workers and for the underemployed. Figure 47 compares the official and supplementary rates of unemployment for Nova Scotia and Canada since 1997. In 2001, once some of the "hidden" unemployed (discouraged workers and underemployed) were added to the official numbers, the unemployment rate was 3 percentage points higher for Canada, and more than 4 percentage points higher for Nova Scotia.

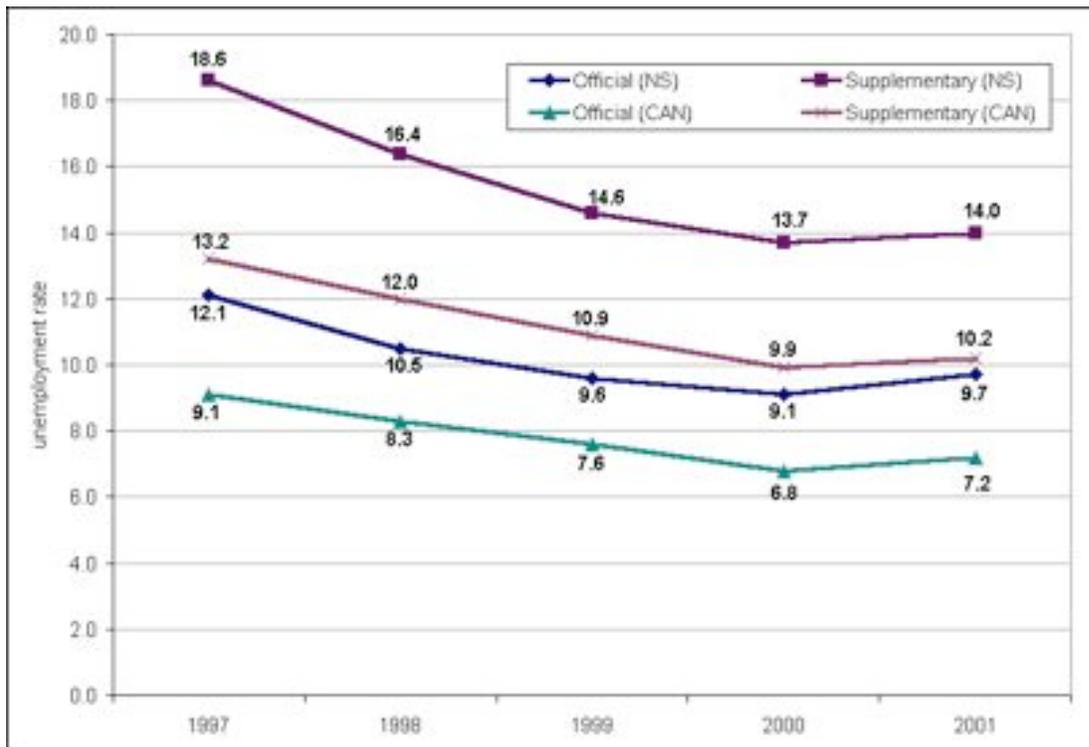
⁵⁷³ Yates, Michael, D. 1994. *Longer Hours, Fewer Jobs. Employment and Unemployment in the United States*. Monthly Review Press. New York. p. 62.

⁵⁷⁴ Stinson, Marian. "U.S. Work Force Still Shrinking." *The Globe and Mail*. August 2, 2003. Toronto. p. B1.

⁵⁷⁵ According to the Correctional Service of Canada 31,624 people (excluding young offenders) were in Federal and Provincial prisons in 1999/2000. These are people who are potentially employable, but because they are not available for work or searching for work they are not counted in the Labour Force Survey as unemployed. Correctional Service of Canada. Available from http://www.csc-scc.gc.ca/text/faits/facts08-02_e.shtml. Nova Scotia statistics indicate that most criminals were not employed at the time of arrest (Dodds, Colin, and Ronald Colman. 1999. *The Cost of Crime in Nova Scotia*, GPI Atlantic, Halifax). Paradoxically, imprisonment then removes unemployed criminals from the unemployment rolls.

⁵⁷⁶ Akyeampong, Ernest B. 1989. "Discouraged Workers." *Perspectives*. Statistics Canada. Minister of Industry. Ottawa. p. 65.

Figure 47. Comparison of Official and Supplementary Unemployment Rates, Nova Scotia and Canada, 1997-2001



Note: According to Statistics Canada the official rate of unemployment, while a key indicator of job conditions, does not adequately capture the complexity of the labour market. Supplementary measures have been developed to "shed further light on the degree of labour market slack and the extent of hardship associated with joblessness." 1997 was the first year that data for supplementary unemployment rates were produced.

Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

Discouraged workers are said to be "on the margins" of the labour force. They want work but have given up looking for it – largely because they believe they are unable to find a suitable job. According to Statistics Canada, they tend to be either older or younger workers, and are equally split between men and women. About three out of every five discouraged workers are married. Discouraged workers also tend to be less educated than the average worker, and are concentrated in areas of high unemployment. In 1989, about one-third of all discouraged workers in Canada resided in Atlantic Canada, although the region accounted for only 7.6% of the country's labour force in that year.^{577 578} In 2001, Atlantic Canada accounted for 36% of the country's discouraged workers and 7.2% of the total labour force.⁵⁷⁹

⁵⁷⁷ Akyeampong, Ernest B. 1989. "Discouraged Workers." *Perspectives*. Statistics Canada. Minister of Industry. Ottawa. pp. 64-69; and by the same author: 1992. "Discouraged Workers – where have they gone?" *Perspectives*. Statistics Canada. Catalogue no. 75-001E. Minister of Industry. Ottawa. pp. 38-43.

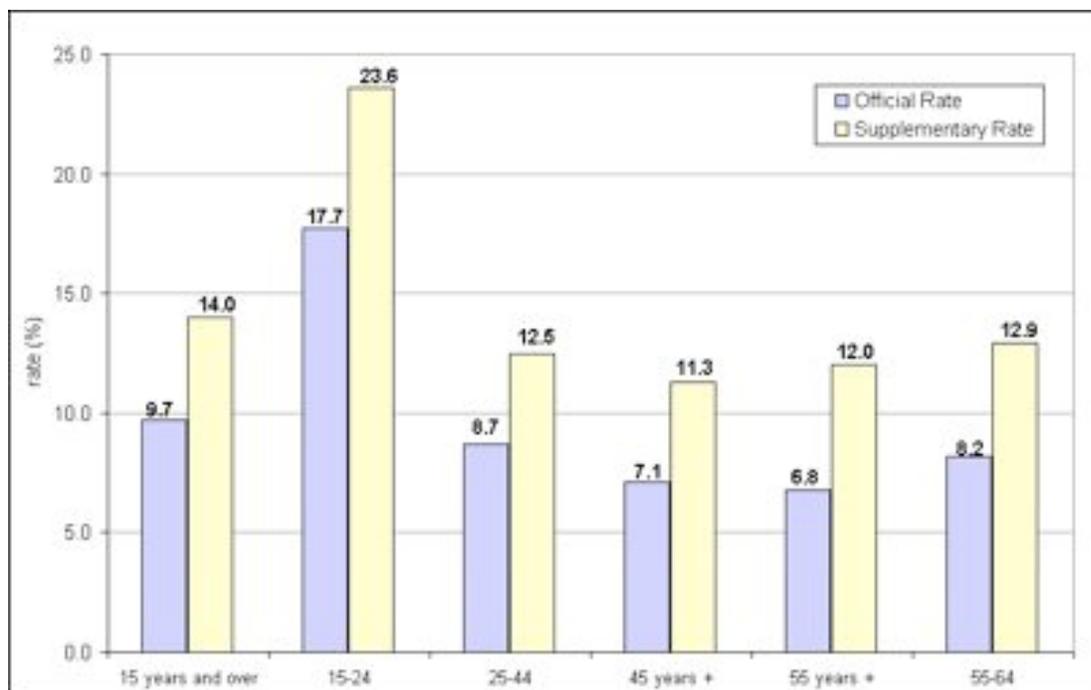
⁵⁷⁸ Akyeampong writes that Atlantic Canada accounted for 9% of the country's total population. The proportion of the total labour force was calculated using data from Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

⁵⁷⁹ Idem.

Involuntary part-time work was discussed in some detail in the previous chapter. However, it should be noted here that when involuntary part-time workers (those working part-time because they cannot find full-time work) are added to Statistics Canada's supplementary unemployment rates, they are not counted as *individuals* who are underemployed. Instead, underemployment is calculated by aggregating the non-work hours of involuntary part-timers (i.e. the difference between a full-time job – 35 hours – and the number of hours they actually work) as full-time job equivalents. In other words, the underemployed *portion* of their workweek is included in the supplementary unemployment statistics, as these workers would rather be working those *additional* hours if full-time work were available to them.⁵⁸⁰

Figure 48 compares the official and supplementary jobless rates by age group in Nova Scotia in 2001. Once some of the "hidden" unemployed are added in, it is seen that nearly one in four youth were out of work in the province. For older workers in the 25-44 and 45 and over age groups, the unemployment rates increased by three and four percentage points respectively, when discouraged workers and underemployment estimates were added. For those over 55, once these hidden unemployed were included, the unemployment rate nearly doubled from 6.8% to 12%.

Figure 48. Comparison of Official and Supplementary Unemployment Rates by Age Group, Nova Scotia, 2001.



Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

⁵⁸⁰ Colman, Ronald. 2000. *Women's Health in Atlantic Canada: A Statistical Portrait*. Vol. 1. GPI Atlantic. Halifax, p. 56. Original Source: Statistics Canada. 1999. "Supplementary Measures of Unemployment." *Labour Force Update*. Catalogue no. 71-005-XPB. Vol. 3, no. 3. Minister of Industry. Ottawa.

In the U.S., the Bureau of Labor Statistics calls underemployment "labour resource underutilization." This includes 1) those who have stopped looking for work because they are discouraged by lack of job prospects, 2) those who are "marginally attached" to the labour force, and 3) those who are involuntarily working part-time. "Marginally attached" workers include those who want work and have looked for work, but have left the labour force because of child-care constraints or transportation difficulties. In 1995 the official U.S. jobless rate was 5.6%. Once the three categories above were added in, the unemployment rate was 10.1% – or 13.5 million Americans, or one out of every 10 people in the labour force.⁵⁸¹

It has been argued by a number of labour analysts that even the supplementary unemployment rates provided by Statistics Canada are a "significant" underestimate of the real levels of joblessness. According to Jackson and Robinson, as well as others, it is generally agreed that when an economy is growing rapidly and creating jobs, people come out of the woodwork in search of work.⁵⁸² When the economy is shrinking, this often produces withdrawals from the labour force. So, for instance, in 1989 the labour force participation rate for Canada, defined as the proportion of the working age population either working or actively looking for work, was 67.5%. In 1998 it was down to 65.1%.⁵⁸³ Should these non-participants be added to the ranks of the unemployed to give a more accurate portrait of the number of people who want paid employment and would work if suitable work were available?

In his book *Unemployment and Social Exclusion*, Ron Martin attributes the decline in the unemployment rate in the U.K to an expansion in part-time work as well as an increase in "non-employment" – or a decline in the labour force participation rate.⁵⁸⁴

Here in Canada, Statistics Canada attributes the decline in the labour force participation rate to increased school enrolment and earlier retirement. But Jackson and Robinson say that this is where the picture gets "murky," and where cause and effect are easily confused. What if some of the increase in school enrolment and some of the increase in early retirement are due to a lack of jobs? Would some of these students have remained in the labour market if decent jobs were available, and are higher rates of school enrolment masking growing underemployment?⁵⁸⁵

In both Canada and Nova Scotia, labour force participation rates for youth and older men have declined since 1989 (Figure 49). The participation rate of 15 to 24-year-old Canadians fell 6.3 percentage points between 1989 and 2001 from 71% to 64.7%. During the same period, participation rates for men 55 and over fell nearly four percentage points from 37.5% to 33.8%. Participation rates for women 55 and over increased from 16.9% in 1989 to 19.4% in 2001.⁵⁸⁶

⁵⁸¹ Bluestone and Rose, 1997, op. cit., pp. 4-5.

⁵⁸² Jackson and Robinson, 2000, op. cit., p.53. This issue is also discussed by the Advisory Group on Working Time and the Distribution of Work, 1994, op. cit., pp. 2-3.

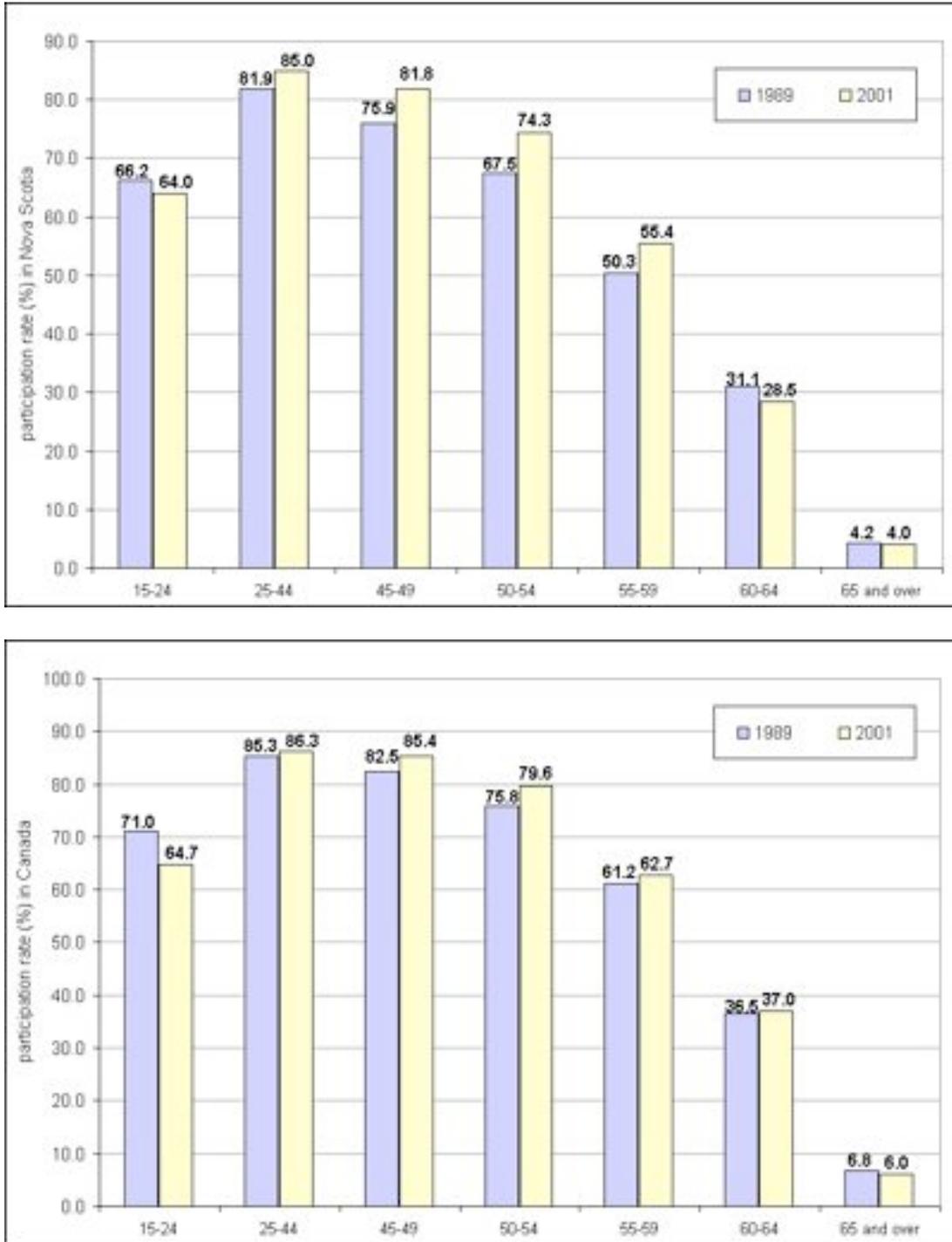
⁵⁸³ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa. Working age population is defined as those between 15 and 64 years of age.

⁵⁸⁴ Martin, Ron. 1998. "Regional Dimensions of Europe's Unemployment Crisis." In *Unemployment and Social Exclusion: Landscapes of Labour Inequality*. Paul Lawless, Ron Martin, and Sally Hardy (eds). Jessica Kingsley Publishers. London. p. 16.

⁵⁸⁵ Jackson and Robinson, 2000, op. cit., pp. 54-55.

⁵⁸⁶ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa. According to Andrew Heisz of Statistics Canada, participation rates among 15-64 year olds was

Figure 49. Labour Force Participation Rates in Nova Scotia and Canada by age, 1989 and 2001.



Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

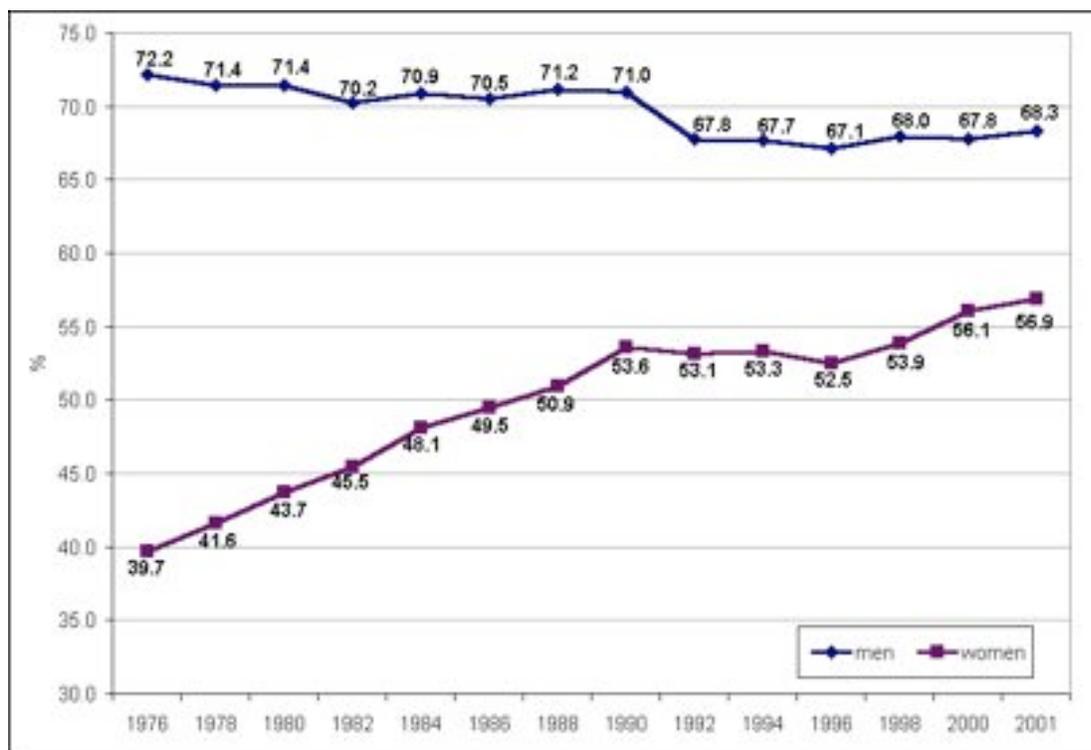
76.5% in 1989 and 76.5% in 2001. The unemployment rate was 7.6% and 7.3% respectively, and the employment rate was 70.7% and 70.9%. Heisz, Andrew. Senior Research Economist, Business and Labour Market Analysis Division, Statistics Canada. Reviewer comments. Received October 27, 2003.

In Nova Scotia labour force participation rates for youth fell about two percentage points from 66.2% in 1989 to 64% in 2001. Men 55 and over experienced a decline in participation rates from 29.5% in 1989 to 27.9% in 2001. Participation rates for older women, on the other hand, increased from 11.4% to 16.1% in the same time period.

A long-term trend towards early retirement among men and the fall in youth participation rates may be partially explained by a lack of job opportunities, since a shortage of work may influence the young to stay in school longer and the older to retire early.⁵⁸⁷

By contrast, labour force participation rates for women in most industrialized countries have soared. Nova Scotia is no exception. Figure 50 illustrates how more and more women have entered the labour force in the last 25 years. Labour force participation rates for women increased from nearly 40% in 1976 to 56.9% in 2001. During this same period, participation rates for men have dipped from 72.2% in 1976 to 68.3% in 2001.

Figure 50. Labour force Participation Rates for Women and Men in Nova Scotia, % of working age population (aged 15-64), 1976-2001.



Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

⁵⁸⁷ Jackson and Robinson, 2000, op. cit., pp. 54-55; Battle, Ken and Sherri Torjman, eds. 1999. *Employment Policy Options*. Caledon Institute of Social Policy. Ottawa. pp. 9-10.

5.3 Duration of Unemployment

Figure 51 illustrates how, on average, the unemployed were without work for longer periods in 2001 than they were 25 years earlier. In Canada the average number of weeks that an unemployed person was without work increased from 13.9 weeks in 1976 to 24 weeks in 1996, before falling again to 15.4 weeks in 2001. In 2001, unemployed Nova Scotians were without work for an average of 15.9 weeks, up from 13.9 weeks in 1976, and down from 22.1 weeks in 1996.

Figure 51. Average Duration of Unemployment, in weeks, Canada and Nova Scotia, 1976-2001.



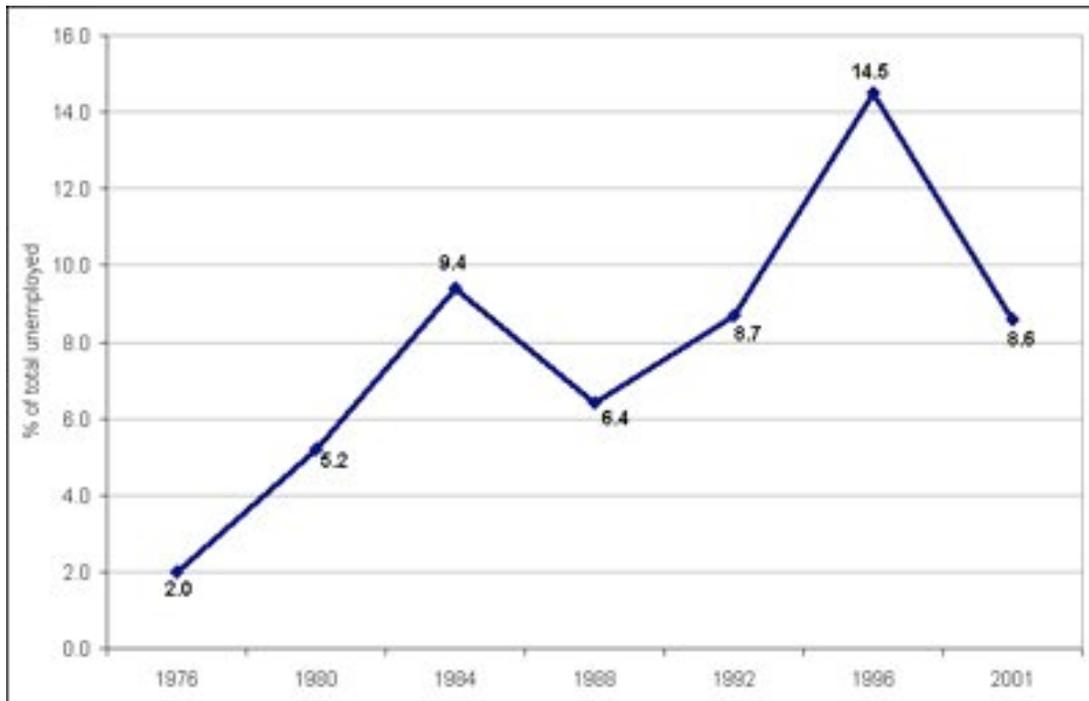
Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

The OECD defines the long-term unemployed as those who have been continuously without work for at least one year.⁵⁸⁸ In Canada the proportion of those unemployed for 52 weeks or more in 1976 was 3.8%. This proportion soared to 16.3% in 1996 and then dropped to 9% in 2001, but is still more than double the levels of 25 years earlier. Figure 52 illustrates the trend in long-term unemployment in Nova Scotia where the jobless have experienced a similar increase in long-term unemployment – up from 2% in 1976 to 8.6% in 2001, after peaking in 1996 at 14.5%.⁵⁸⁹

⁵⁸⁸ OECD, 2002, op. cit., pp. 191-194.

⁵⁸⁹ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

Figure 52. Long-term Unemployment, % of total unemployed, Nova Scotia, 1976 and 2001.



Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

Conversely, Statistics Canada reports that job stability, measured by average one-year retention rates, has fluctuated over the past 30 years. The period between 1977 and 1993 was characterized by declining job stability, "particularly for jobs with initial tenure of less than one year." Between 1993 and 2001 this trend reversed and by 2001 jobs of all lengths "were equally as stable as in the late 1970s." The study noted, however, that the overall trend may "have masked changes experienced by specific sub-groups of workers." For instance, low educated and younger workers bore the brunt of the decline in job stability in the 1980s. In the 1990s job stability did not improve enough to offset the declines of the 1980s for young women aged 15 to 24, and for women with high school or less education.⁵⁹⁰

It is important to note that, while Statistics Canada includes separate measures for the long-term unemployed in its "supplementary" unemployment statistics, these long-term unemployment rates *are* part of the official unemployment rates. This is because the definition of long-term unemployment includes only those who are continuously looking for and available for work. This is in contrast to Statistics Canada's supplementary measures of underemployment and discouraged workers, which are *not* included in the official unemployment statistics.

In the U.S., current evidence indicates that more and more people are dropping out of the labour force because they are worn out by fruitless job searches and discouraged by the length of their

⁵⁹⁰ Heisz, Andrew. 2002. *The Evolution of Job Stability in Canada: Trends and Comparisons to U.S. Results*. Analytical Studies Branch Series. no. 162. Statistics Canada. Minister of Industry. Ottawa. pp. 1-3.

joblessness. Since 2001, 4 million more people have dropped out of the labour force, the largest decline in 40 years. The average duration of unemployment in the U.S. has been on the rise, from an average of 13 weeks in 2001 to 18 weeks in 2003.⁵⁹¹

In the OECD countries in general, 30% of total unemployment was long-term in 2000. In some countries such as Italy, Greece, Belgium, Ireland, and Germany 50% of total unemployment was long-term in 2000, while in New Zealand, Iceland, Canada, the United States, Norway, Korea, and Mexico, less than 20% were unemployed long-term.^{592 593}

According to the OECD, the long-term unemployed are much more likely to remain unemployed in the longer-term, and they are more likely to leave the labour force altogether – adding to the ranks of discouraged workers. Long-term unemployment rates are also very highly correlated with unemployment rates. In other words, countries with high levels of unemployment also have high rates of long-term unemployment, and increases in unemployment over time tend to be accompanied by parallel increases in long-term unemployment.⁵⁹⁴

According to Williams and Windebank: "Long average spells of unemployment tend to imply greater economic costs and social costs than shorter spells." These costs include the depreciation of skills, and loss of confidence leading to the eventual withdrawal and "exclusion" from the labour force.⁵⁹⁵ Studies have also indicated that those who experience longer spells of unemployment are at greater risk of illness and even death.

These and other costs will be explored in greater detail in Part 2 of this report.

5.4 Skill Mismatches and Structural Unemployment

There was a shortage of jobs in the 1990s in Canada. However, some analysts argue that the fundamental cause of this unemployment was a shortage of workers with the education and skills required to fill the available positions in the "knowledge" sector. This argument may be used to imply that the unemployed are to blame for their joblessness. Strictly speaking, "structural" unemployment exists when there is a "mismatch between the skills required in available jobs and the skills of unemployed workers, rather than a shortage of demand in the economy."⁵⁹⁶ But is this what is happening in Canada? Are skill mismatches a root cause of unemployment?

According to a recent study by Lars Osberg of Dalhousie University and Zhengxi Lin of Statistics Canada, only one percentage point of Canada's 1998 unemployment rate of 8.3% was

⁵⁹¹ New York Times. "Unemployment Statistics High. More Jobless Americans Giving up the Hunt for Work." *The New York Times*. April 29, 2003. New York.

⁵⁹² OECD, 2002, op. cit., pp. 191-194.

⁵⁹³ While Canada is listed here as being "under 20%," the actual percentage of long term unemployed in 2000 in Canada was 10.7%. Statistics Canada. *Labour Force Historical Review*. 2002; OECD, 2000, op. cit., p. 192.

⁵⁹⁴ Idem.

⁵⁹⁵ Williams, Colin C. and Jan Windebank. 1998. "The Unemployed and Paid Informal Sector in Europe's Cities and Regions." In *Unemployment and Social Exclusion. Landscapes of Labour Inequality*. Paul Lawless, Ron Martin, and Sally Hardy (eds). Jessica Kingsley Publishers. London. p. 38.

⁵⁹⁶ Jackson and Robinson, 2000, op. cit., p. 48.

due to skill mismatches.⁵⁹⁷ Another study by Statistics Canada and Human Resources and Development Canada found that a substantial share of job vacancies in 1999 were not in the high-tech sector, where lack of available skills have been identified by some as a problem. Instead, 40% of job vacancies were in retail trade and consumer services.⁵⁹⁸

Here in Nova Scotia, the population as a whole, and the young in particular, have more skills, training, and higher levels of education than ever before.⁵⁹⁹ Unnoticed is a steady "credentials gap," as educational requirements steadily increase beyond the levels of knowledge actually needed to perform the job. A series of Ontario studies found that post-secondary credentials were required for 47% of clerical workers in 1996, compared to 34% in 1990 and 24% in 1984. For unskilled manual workers, 52% were expected to have a high school diploma in 1996 compared to 40% in 1990 and 19% in 1984.⁶⁰⁰

The problem, therefore, does not seem to be a lack of education, skills and training, but rather the opposite – a larger pool of available skilled and educated people seeking work, which allows employers to ratchet up the entry requirements over time. One subtle but highly significant aspect of underemployment, not captured in the market statistics at all, is the growing percentage of over-qualified job entrants unable to find work that adequately uses their talents, skills, and abilities. Until we clearly identify *structural underemployment* as a core policy issue, we are likely to continue diverting attention from fundamental causes and advocating more training as a supposed panacea for marginalized workers.⁶⁰¹

5.5 'Under the Table' Economy

According to Williams and Windebank:

*"Informal or under the table work is defined as paid work that is hidden from the state for tax, social security or labour law purposes, but which is legal otherwise. It ranges from casual jobs such as helping a friend with some plumbing for some under the table cash to the concealment of a major proportion, if not all, of their earnings by the self-employed."*⁶⁰²

To what degree do the unemployed participate in the "under the table" or informal economy? There are no reliable data available for the incidence of informal work in Canada. Statistics Canada does not collect these data and, in any case, the "illegal" nature of this type of work, involving deliberate concealment, fraud, and tax evasion, makes such data difficult to collect.⁶⁰³

⁵⁹⁷ Study cited in Jackson and Robinson, 2000, op. cit., p. 48. Study by Osberg, L and Z. Lin. 1999. *How much of Canada's Unemployment is Structural?* Available from <http://www.cslc.ca>.

⁵⁹⁸ Galarnau, Diane, et al. 2001. *The Quest for Workers: A New Portrait of Job Vacancies in Canada*. Statistics Canada and HRDC. Minister of Industry. Ottawa. p. 33.

⁵⁹⁹ Colman, 1999a, op. cit., p. 4. Original source is Livingstone, D., *The Education-Jobs Gap*, p. 74.

⁶⁰⁰ Colman, 1999a, op. cit., p. 4. Figures are from Livingstone, D., *The Education-Jobs Gap*, p. 74.

⁶⁰¹ Idem. Also, Jackson and Robinson, 2000, op. cit., pp. 48-49.

⁶⁰² Williams, Colin C. and Jan Windebank. 1998. "The Unemployed and Paid Informal Sector in Europe's Cities and Regions." In *Unemployment and Social Exclusion. Landscapes of Labour Inequality*. Paul Lawless, Ron Martin and Sally Hardy (eds). Jessica Kingsley Publishers. London. p. 143.

⁶⁰³ Levesque, Marc. Labour analyst. Statistics Canada. Personal communication. April 11, 2003.

An increasing body of evidence suggests that those with jobs make up a larger proportion of the paid informal sector than do those without: "The image is that the unemployed are engaged in benefit fraud and are called 'welfare spongers' or 'scroungers'... while little has been done to assess the validity of this."⁶⁰⁴

Williams and Windebank cite numerous studies which found the unemployed to be "less likely" to participate in informal work than the employed, for the following reasons:

- The unemployed tend to have limited access to the goods and resources necessary to do such work.
- The unemployed tend to have smaller social networks, which are less likely to yield opportunities to conduct paid informal work.
- They tend to lack skills.
- They tend to be fearful of being found out by authorities and losing their benefits.
- A greater proportion of the unemployed live in areas disrupted by economic restructuring and crisis, which do not provide either formal or informal job opportunities.⁶⁰⁵

Williams and Windebank also found a number of studies that contradict this general finding, and that *do* find high levels of informal work among some categories of unemployed workers. In particular, some studies found that people who were temporarily unemployed were more likely to participate in the informal sector than those who were "permanently" unemployed. Based on their review of the available evidence, Williams and Windebank conclude that the unemployed are not a homogeneous group and that their "experience varies with locale and with the length and duration of their joblessness.... It is the way in which a variety of economic, social, institutional, and environmental conditions *combine* in a locality which produces a particular configuration of paid informal work in that area."⁶⁰⁶

5.6 EI benefits and Rising Insecurity

"I would argue that we have experienced a period of greater insecurity in the last 25 years than in the 25 years prior to that."

– Arthur Donner ⁶⁰⁷

The proportion of unemployed workers receiving regular Employment Insurance (EI) benefits has fallen sharply over the last 30 years. Particularly dramatic has been the decline in the 1990s. Between 1989 and 1997, the proportion of unemployed people who collected EI benefits fell from 83% in 1989 to 42% in 1997. In 1971, 73% of the unemployed received regular benefits.^{608 609}

⁶⁰⁴ Williams and Windebank, 1998, op. cit., pp. 141-153.

⁶⁰⁵ Ibid. p. 142.

⁶⁰⁶ Williams and Windebank, 1998, op. cit., pp. 144-152.

⁶⁰⁷ Donner, Arthur. Economic consultant, who chaired both the federal Advisory Group on Working Time and the Distribution of Work, and the Ontario Task Force on Hours of Work and Overtime. Reviewer's comments. Personal communication. August 19, 2003.

⁶⁰⁸ Osberg L. and A. Sharpe. 1998. *An Index of Economic Wellbeing for Canada*. Centre for the Study of Living Standards. Ottawa. p. 28.

According to a recent study by the Canadian Labour Congress (CLC), insurance coverage for unemployed Canadians has been cut in half since the early 1990s, when Ottawa began changing the rules and the hours of work required to qualify for benefits. The study also found that in 2001 only 44% of affected men and 33% of affected women had access to EI benefits, compared with 45% and 39% in 1996 respectively.⁶¹⁰

The CLC study also found that only 33% of unemployed women in Canada had access to EI benefits in 2001, down from 39% in 1996.⁶¹¹

The CLC argues that women are losing EI protection faster than men because of the new rules introduced in 1997, which increased the minimum number of hours required to qualify for benefits from 15 hours a week to 35 hours a week. This means that part-time, temporary, and part-year workers – jobs predominantly held by women – are "penalized."⁶¹² As a result, the number of women claimants, who make up the vast majority of part-time workers, dropped by 78,000 a month or 26% between 1996 and 1998 alone.⁶¹³ Current EI rules are based on work time norms that clearly favour men, since women often work non-standard hours due to family responsibilities.

In their development of an "index of security," Osberg and Sharpe look at the ratio of EI beneficiaries to total unemployed (B/U ratio) to determine the economic risk associated with losing one's job, and the extent to which people are protected from the risks of unexpected income loss.⁶¹⁴ Based on a) the percentage of unemployed who receive regular benefits, b) the percentage of average weekly earnings replaced by EI, and c) the falling employment rate in the 1990s, reflecting both higher unemployment and a declining labour force participation rate, Osberg and Sharpe found that in the 1990s "[the index of security] has fallen by more than half."⁶¹⁵

⁶⁰⁹ In his review of this report, Arthur Donner referred to the fact that so few of the unemployed are covered by EI insurance as "scandalous." He also noted that "the greater insecurity, the less people are going to pay attention to working time issues." Donner, Arthur. Economic consultant, who chaired both the federal Advisory Group on Working Time and the Distribution of Work, and the Ontario Task Force on Hours of Work and Overtime. Reviewer's comments. Personal communication. August 19, 2003.

⁶¹⁰ Canadian Labour Congress. 2003. *Falling Unemployment Insurance Protection for Canada's Unemployed*. Available from <http://www.unemployed.ca>. Accessed October 23, 2003.

⁶¹¹ Canadian Labour Congress. 2003. *Falling Unemployment Insurance Protection for Canada's Unemployed*. Canadian Labour Congress. Ottawa. Available from <http://www.unemployed.ca/report-summary.htm>. Accessed October 23, 2003.

⁶¹² Canadian Labour Congress. 2002. *Women and Unemployment Insurance*. Available from: <http://action.web.ca/home/>. Accessed October 24, 2002.

⁶¹³ Idem.

⁶¹⁴ Osberg and Sharpe, 1998, op. cit., pp. 27-28. Human Resources and Development Canada analysts say that the B/U ratio is a "poor indicator of how effective the EI program is in serving its clientele." They say, however, that alternative indicators of EI benefit coverage also show there has been a "significant reduction in EI benefit coverage in the 1990s." They attribute half of the decline to changes in the EI program itself, and the rest to the changes in the composition of the workforce which, they say, consists of "more unemployed with no previous work experience" and more unemployed who have been without work for a long period of time. HRDC. 1998. *An Analysis of Employment Insurance Benefit Coverage*. W-98-35E. Applied Research Branch. HRDC. Ottawa. p. 3.

⁶¹⁵ Osberg and Sharpe, 1998, op. cit., p. 27.

Part 2 of this report will deal in detail with the costs of inequality and insecurity in Canada and Nova Scotia.

5.7 Causes of Unemployment

Unemployment is a complex problem rooted in a number of connected factors. The causes of unemployment are complex, and are the subject of many books and conflicting analyses. It is beyond the scope of this report to examine these in detail; we only touch on some of them below.

In *Changes in Working Time, An International Review*, Paul Blyton describes the "multi-causal" nature of unemployment. He argues that modern-day unemployment is fundamentally caused by:

- recession and deflationary policies;
- the increased size of the labour force (particularly the increased participation of women);
- the increased competition from other countries offering cheaper labour; and
- the labour-saving capacity of machines/technology.⁶¹⁶

5.7.1 Globalization

Chapter 4, Section 4.5 (The Global Assembly Line) noted some of the impacts of globalization on the quality of work. In addition, free trade has contributed to unemployment by encouraging companies in Canada and the U.S. to relocate in cheap labour countries such as Mexico, where workers can be hired for less than \$6.00 a day. According to the Economic Policy Institute in Washington, D.C., NAFTA has resulted in growing inequality and deteriorating working conditions for most workers in Mexico, while it has led to job losses, job insecurity for many workers in Canada and the U.S.⁶¹⁷

5.7.2 Deflationary Policies

A nation's monetary and fiscal policies play a significant role in determining levels of unemployment. Monetary policy refers to what a government does through the interest rate, primarily to counter inflation. A "tight" monetary policy uses high interest rates to protect assets from being devalued by inflation. A "loose" monetary policy gives priority to jobs, and keeps interest rates low in an effort to boost demand, stimulate the economy, and therefore create more jobs. Fiscal policy refers to government spending and taxation, and how much government provides in social programs. According to Linda McQuaig, "the rich generally benefit from tight money and low social spending. The non-rich – or the rest of society – generally benefit from looser money and higher social spending."⁶¹⁸

⁶¹⁶ Blyton, Paul. 1985. *Changes in Working Time. An International Review*. St. Martin's Press. New York. p. 4.

⁶¹⁷ Economic Policy Institute. 2001. *NAFTA at Seven. The Impact on Workers in all three Nations*. Washington D.C. Available from <http://epinet.org>. Accessed January 25, 2003. pp. 5-7, 21.

⁶¹⁸ McQuaig, Linda. 1998. *The Cult of Impotence. Selling the Myth of Powerlessness in the Global Economy*. Viking. Toronto. pp. 27-28. For an in-depth examination of the debates over the relationship between inflation and unemployment, and the "natural rate of unemployment" see pp. 30-62 of McQuaig's book.

It is generally assumed that there is a level below which unemployment cannot fall without provoking inflation. However, economists cannot agree on what that "natural rate of unemployment" is, or whether it exists at all.⁶¹⁹ Table 18 illustrates how this "natural" rate has varied over time since the 1970s, ranging from 5% to 8.7%, according to different analysts.

Table 18. Natural Rate of Unemployment or NAIRU (Non-Accelerating Inflation Rate of Unemployment), According to Various Studies, Canada, Various Years.

Authors	Years	Nairu %
Crozier (1977)	1973-1976	5.0
Carmichael (1979)	1978	6.4
Fortin/Phaneuf (1979)	1978	6.6
Miller (1987)	1981-1983	8.7
Fortin (1989)	1985	6.4
Burns (1990)	1981-1986	8.2
Johnson and Kneebone (1991)	1986	6.9
Rose (1988)	1987	8.0

Note: The wide variance over time and between analysts still establishes the point that the existence of a "natural" rate is suspect.

Source: Bellemare, Diane and Lise Poulin-Simon. 1994. *What is the Real Cost of Unemployment in Canada?* The Canadian Centre of Policy Alternatives. Ottawa. p. 4.

The debate about the "naturalness" of the NAIRU, or non-accelerating inflation rate of unemployment, is beyond the scope of this report. However, McQuaig notes that the notion of a "natural" rate of unemployment serves particular interests. She cites an article from *Business Week* titled "Can the Economy Stand a Million more Jobs?" which argues that too many people working is "a dangerous thing" for business. "That's because federal officials – and most private economists – believe that when the jobless rate dips too low, employers are forced to bid up wages to attract the best workers."⁶²⁰ Higher wages put pressure on prices. Inflation, in turn, devalues financial assets and investors don't want it.

McQuaig's views are echoed by economist Jim Stanford in *Paper Boom*, where he argues that official monetary policy in Canada accepts unemployment and poverty over inflation. He writes that Canada's experience with NAIRU policy has been "especially disastrous." To reduce inflation, the Bank of Canada set high interest rates in the late 1980s and early 1990s. "Hundreds of thousands of Canadians, thrown out of work for extended periods in the interests of bringing inflation down, found they were unable to get their foot back into the labour market when things finally improved."⁶²¹ Stanford notes that although many economists do not give credence to the NAIRU theory, monetary policy in Canada continues to focus on controlling inflation.⁶²²

⁶¹⁹ This "natural rate of unemployment" is also called NAIRU: Non-Accelerating Inflation Rate of Unemployment.

⁶²⁰ McQuaig, 1998, op. cit., p. 37.

⁶²¹ Stanford, Jim. 1999. *Paper Boom. Why Real Prosperity Requires a New Approach to Canada's Economy*. CCPA and James Lorimer and Co. Ltd. Ottawa. pp. 195-196.

⁶²² Ibid. p. 197.

The Advisory Group for Working Time and the Distribution of Work argues that persistently high unemployment rates in Canada, even at times of economic growth, constitute a “crisis” that requires a “wider range of policy options.”⁶²³

Some of these policy options will be looked at in greater detail in Part 3 of this report.

In concluding Part One of this report, it is necessary to note that the changing nature of work described here points to deeper philosophical questions about the purpose of work itself – questions that go beyond mere statistics and trend lines. According to one analyst:

" In the end, the job crisis raises the most fundamental question of human existence: What are we doing here? There is a colossal amount of work waiting to be done by human beings – building decent places to live, exploring the universe, making cities less dangerous, teaching one another, raising our children, visiting, comforting, healing, feeding one another, dancing, making music, telling stories, inventing things, and governing ourselves. But much of the essential activity people have always undertaken to raise and educate their families, to enjoy themselves, to give pleasure to others, and to advance the general welfare is not packaged as jobs. Until we rethink work and decide what human beings are meant to do in the age of robots and what basic economic claims on society human beings have by virtue of being here, there will never be enough jobs. "

– Richard J. Barnet⁶²⁴

5.7.3. Technology

Please refer to Section 4.5, titled *Working for the Computer*, for a discussion about the impact technology has had on the nature of work; the place of the worker within a technological system; and how technology has contributed to unemployment.

⁶²³ Advisory Group on Working Time and the Distribution of Work, 1994, op. cit., p. 2.

⁶²⁴ Barnet, Richard J. 1993. “The End of Jobs. Employment is one thing the global economy is not creating.” *Harper’s Magazine*. September 1993. New York. p. 52.

PART TWO

COSTS OF OVERWORK & UNDERWORK

Chapter 6. Introduction

In our conventional economic accounts, the costs associated with many of the trends discussed in Part 1 of this report are either invisible or are actually counted as contributions to economic prosperity and wellbeing. The longer the work hours, and the more we spend on health care, crime and family breakdown – all of which are highly correlated with unemployment – the more the economy grows. This growth is then mistakenly taken as a sign of progress.

So long as goods and services are being produced and money is being spent, the economy will grow, whether or not such production and spending reflect an improvement or decline in wellbeing. Thus, spending on sickness, pollution clean-up, war, accidents, and natural disasters also make the economy grow, as does the depletion of our natural resources.

As previously noted, the Gross Domestic Product (GDP) and related market statistics make no distinction between economic activities that cause benefit and those that cause harm. By contrast, the Genuine Progress Index (GPI) recognizes that the unequal distribution of work hours, growing inequality, and unemployment carry economic costs that must be explicitly measured and made visible if policy makers are to have the full range of information they need to make decisions. Thus, spending on illness, crime, family breakdown, and other documented consequences of unemployment are counted as costs rather than gains to the economy. Similarly, while the GDP registers longer work hours as contributions to economic growth, the GPI also counts the costs of stress and overwork. In fact, free time is explicitly valued, and its loss makes the GPI go down, while lower unemployment rates make the GPI go up and register as "genuine progress."

This report examines costs associated with the trends in work hours described in Part One – costs that are currently invisible in two ways in standard accounting mechanisms:

- Health care costs, spending on prisons and spending related to the breakdown of families (divorce, for instance) are currently counted as direct contributions to the GDP.
- Production losses due to unemployment, underemployment or excessively long work hours represent potential lost production that depresses the GDP, but these costs are not made explicit. Because they do not register anywhere in current measures of progress, these conventional measures can provide no estimate of the degree to which these losses limit our economic potential.

In both cases, the GPI can provide a much more accurate picture of the costs associated with current trends in work hours, and it can thereby provide better guidance to policy makers who aim to realize our economic potential.

In the following chapters we will examine the economic and social costs associated with unemployment, underemployment, and the growing polarization (unequal distribution) of work hours in the labour market and with the growing income and wealth inequality associated with those trends. We will also discuss the cultural and environmental costs associated with long and short work hours.

Where data are available, quantitative measures have been used to assign dollar values to costs. However, there are many instances where these kinds of data are not available. In these cases, qualitative measures have been used, and the benefits and costs are described rather than quantified in dollar terms. It should be emphasized here that when the available literature has not assigned dollar values to costs, this definitely does not mean that these costs are negligible. Therefore, the total cost estimates presented here are conservative, because they exclude a range of indicators for which hard data are not available.

Chapter 7. Costs of Work Stress and the Long Hours Culture

"We are challenging whether human beings exist for the sake of production and profit, or whether we are engaged in production for the sake of human beings."

– Leonard Woodcock ⁶²⁵

The more hours we work for pay, and the less free time we have, the more the economy grows, and the better off we are, according to conventional measures of progress. By that standard, stress is good for the economy, as is spending on health care costs of illness due to overwork. Some of these costs have been documented and quantified by analysts, as have health costs attributable to poor working conditions, underemployment, unemployment and poverty.

Better economic indicators and measures of progress would not treat work-related stress and the cost of treating stress-induced illness as contributions to prosperity, but as costs to the economy. A growing body of evidence points to substantial costs associated with poor working conditions as well as unsatisfactory work characterized by lack of autonomy, long work hours, low income, limited social contacts, or repetitive and tedious tasks.

In the following sections we will summarize some of the findings in the literature on stress in the workplace and its causes and effects on health, family life and leisure. We shall also attempt to estimate the real, unaccounted for economic costs associated with loss of productivity, absenteeism, and loss of leisure due to overwork and work stress.

7.1 Causes of Work Stress

*"Stress is today's most debilitating medical and social problem."*⁶²⁶

Not all stress is necessarily bad. In fact, a certain amount of stress is essential for growth, change and development. In fact, some analysts argue that too little stress, from too few demands, is just as detrimental to health and productivity as too much stress, from too many demands, and that an "optimum" level of stress will "elicit the best performance" from a person.⁶²⁷

For better or worse, however, the workplace is a significant source of stress for many, if not most, workers. The issue here is when is this stress excessive and harmful, and what are the chief characteristics of stressful work? A growing body of research has documented not only the

⁶²⁵ Statement by Leonard Woodcock, President of the Union of Auto Workers, during negotiations in 1973 between the union and Chrysler regarding mandatory overtime requirements. Quoted in McLean, Alan A. 1979. *Work Stress*. IBM Corporation and Cornell University Medical College. Addison-Wesley. Reading. p. 13.

⁶²⁶ Quote from *Globe and Mail* article, March 3, 1984. Cited in Lowe, Graham S., and Herbert C. Northcott. 1986 *Under Pressure: A Study of Job Stress*. Garamond Press. Toronto. p. 13.

⁶²⁷ Quick, James C. and Jonathan D. Quick. 1984. *Organizational Stress and Preventive Management*. McGraw Hill Book Company. New York.

relationship between people's work and stress but also how their work situations affect their health.

The evidence suggests there are particular workplace characteristics, which, by their very nature induce stress:⁶²⁸

- 1) *Quantitative and qualitative overload*: Too many hours of work; too much to do; time pressure; repetitious workflow combined with high output expectations and high demand on attention. Excessive speed and time pressure can be exacerbated by machine-paced work, surveillance and monitoring by computers, and the introduction of new technologies.^{629 630}
- 2) *Quantitative and qualitative underload*: Lack of stimulus or variation; low demands on creativity or problem-solving; restricted opportunities for social interaction; perceived threat of layoff; insufficient hours of work and income.
- 3) *Lack of control* (sense of helplessness) and lack of autonomy, especially in relation to work pace and work methods; lack of decision-making power.
- 4) *Lack of support from management*: Unsympathetic management; lack of support; harassment; poor communication; and social isolation at work.
- 5) *Lack of social support at home or from fellow workers*.
- 6) *Poor work conditions*: Low pay; shift work; night work; harsh disciplinary procedure; inadequate staffing; rigid hierarchy; poor physical conditions including noise, poor lighting, overcrowding, extremes in temperature/fumes, and dangerous equipment.
- 7) *Absence of job security*.⁶³¹
- 8) *Being unappreciated*.

⁶²⁸ The first six characteristics of work stress in this list are described by Levi, Lennart, Marianne Frankenhaeuser and Bertil Gardell. 1986. "The Characteristics of the Workplace Stress and the Nature of its Social Demands." In *Occupational Stress. Health and Performance at Work*. Stewart G. Wolf and Albert Finestone (eds). PSG Publishing. Littleton. These characteristics of work stress are also discussed in: Quick, James Campbell, Lawrence R. Murphy, and Joseph J. Hurrell Jr., eds. 1992. *Stress and Wellbeing at Work. Assessments and Interventions for Occupational Mental Health*. American Psychological Association. Washington. p. 331; Howard, John, David Cunningham, and Peter Rechnittzer. 1978. *Rusting Out, Burning Out, Bowing Out. Stress and Survival on the Job*. Financial Post/Macmillan Books. Toronto. p. 17; and London Hazards Centre. 1994. *Hard Labour. Stress, Ill Health and Hazardous Employment Practices*. London Hazards Centre Trust Ltd. London. pp. 35-36.

⁶²⁹ Analysts have noted that the introduction of computer monitoring can transform a workplace into a production line where individual productivity is rigorously tracked. They have noted that computer monitoring may increase the regimentation and routine of workplaces, and that it tends to measure only the quantity of work not the quality. Menzies, 1996, op. cit. pp. 120-121.

⁶³⁰ Repetitive strain injury (RSI) has been called the "occupational disease of the 1990s." It often results when workers are "reduced to working as disembodied hands and voice boxes under the control of computers." Menzies, 1996, op. cit., p. 137.

⁶³¹ Quick, James Campbell, Lawrence R. Murphy, and Joseph J. Hurrell Jr., eds. 1992. *Stress and Wellbeing at Work. Assessments and Interventions for Occupational Mental Health*. American Psychological Association. Washington. p. 331.

9) *Career and job ambiguity*: This can occur when actions are taken and changes made without the employee knowing why.

10) *Mistrust*: Office politics disrupts positive behaviour.

11) *Lack of two-way communication up and down*.

12) *Inconsistent performance management processes*: Employees get raises but no reviews, or they get positive evaluations but no raise. Employees may even be laid off despite good performance.

13) *Unclear company policies or direction*.

14) *The treadmill syndrome*: This is characterized by having too much to do at once, requiring a "24-hour day" to fulfil tasks. This is exacerbated by email that never stops filling the inbox.⁶³²

Essentially, stress is likely to become excessive if a job is demanding but the employee lacks power and control over his or her circumstances and work conditions. Statistics Canada's 1994/95 Population Health Survey found that key factors which played a significant role in producing and exacerbating work stress were job strain – defined as the "measure of the balance between the psychological demands of a job and the amount of control or decision-making power it affords"; job insecurity; high physical demands; and lack of supervisor support and co-worker support.⁶³³

According to an analytical report based on the health survey data, psychological distress tends to be highest among workers in jobs with high demands but little decision-making power. As Table 19 shows, fully 40% of workers in these kinds of jobs had high levels of psychological distress. Twenty-seven per cent of those who had demanding jobs but who had freedom to make decisions about their work experienced distress. Workers with the lowest job demands were least likely to report high levels of distress but even in these types of jobs the level of distress increased as decision latitude declined.⁶³⁴ In addition the study showed that women experience higher levels of distress than men, and that people working directly with people (particularly in the service industry) were most likely to suffer from job strain.⁶³⁵

By contrast, greater worker control and autonomy are associated with high levels of job satisfaction, commitment and motivation.⁶³⁶

⁶³² Work stress characteristics # 8-14 in this list are described in Business and Economic Roundtable on Mental Health. 2000. "Top 10 sources of workplace stress." In *The Unheralded Business Crisis in Canada: Depression at Work. An Information Paper for Business*. GPC Canada. Toronto. p. 37.

⁶³³ Wilkins, Kathryn and Marie P. Beaudet. 1998. "Work Stress and Health." *Health Reports*. Statistics Canada. Catalogue no. 82-003. Minister of Industry. Ottawa. p. 47.

⁶³⁴ Ibid. p. 52.

⁶³⁵ Ibid. pp. 50-51.

⁶³⁶ Quick and Quick, 1984, op. cit., p. 331.

Table 19. Workers Reporting High Psychological Distress, 1994-95.

Job decision latitude				
Job Demands	high	moderate	low	very low
% with high psychological distress score				
High	27	33	33	40
Moderate	24	26	30	35
Low	19	20	21	30
Very low	16	18	22	20

Source: Wilkins, Kathryn and Marie P. Beaudet. 1998. "Work Stress and Health." Health Reports. Statistics Canada. Catalogue no. 82-003. Minister of Industry. Ottawa. p. 52.

Numerous studies have found that anticipating the loss of one's job can be just as stressful as losing it. According to Statistics Canada this fear of job loss is not unfounded. Between 1989 and 1996 three-quarters of all jobs created were self-employed, and there was no increase in full-time paid work. There has also been an increase in highly insecure contingent work (temporary and on-call jobs). Although the last few years have seen a significant abatement of these trends, they have contributed to a longer-term sense of job instability that is still prevalent.

A 1997 Statistics Canada analysis found that "permanent layoffs are now observed among groups of workers who previously were almost totally immune from job displacement, notably public sector workers, older workers, and higher paid (likely better educated) workers who may be middle managers or professionals."⁶³⁷ Workers were more likely to be laid off in the 1990s than in the 1980s and their chances of finding new jobs were relatively low, at least until 1997. Overall, rates of temporary and permanent lay-offs increased through most of the 1990s, and the chances of a job lasting longer than six months also declined.⁶³⁸

There is even a term used to describe the sense of guilt and loss experienced by workers when their colleagues are fired. "Lay-off survivor syndrome" is a combination of guilt at still having a job, and a fear of losing it. "The syndrome leads to depression, frustration and anger. It also results in lower productivity and performance as people postpone making decisions that might bring them flak and spend enormous amounts of time chasing the latest rumours about lay-offs."⁶³⁹

For those who had work, there was also a greater chance that they were not satisfied with it. According to Health Canada's 1994/95 National Population Health Survey, fewer Canadians were satisfied with their work in 1994-95 than in 1991. Fifty per cent reported being satisfied with their work in 1994-95, another 41% were somewhat satisfied and 9% were not satisfied.⁶⁴⁰

⁶³⁷ Picot, Garnett and Zhengxi Lin. 1997. *Are Canadians More Likely to Lose their Jobs in the 1990s?* Research Paper Series, no. 96. Analytical Studies Branch. Statistics Canada. Minister of Industry. Ottawa. pp. 22-24.

⁶³⁸ Jackson, Andrew and Pradeep Kumar. 1998. *Measuring and Monitoring the Quality of Jobs and the Work Environment in Canada*. Centre for the Study of Living Standards. Ottawa. p. 9 and pp. 45-46. Based on Statistics Canada data.

⁶³⁹ Menzies, 1996, op. cit., p. 6.

⁶⁴⁰ Health Canada. 1999. *Statistical Report on the Health of Canadians*. Federal, Provincial and Territorial Advisory Committee on Population Health. Ottawa. p. 223.

A recent study at Dalhousie University examined stress levels among working men and women based on data collected in 1998 as part of Statistics Canada's General Social Survey. The study found that 51.2% of women aged 25-54 with full-time paid employment in 1998 felt constantly under stress in comparison with 41.6% of men. This was up from 45.9% and 37.4% (respectively) in 1992.⁶⁴¹

Clearly, long work hours and increased time pressure are the experience of a growing number of workers today but they are not the only cause of work stress and burnout.⁶⁴² Work underload, and lack of stimulus, challenge, and variety of work, is also cause for concern. Underload may be associated with a perceived threat of layoff. If the underload is in the form of not enough hours and income then there may be the additional economic stress of not being able to make ends meet.

As Part 1 of this report has shown, increases in work overload and work underload in the form of long work hours/overwork and unemployment/underemployment are the trends seen in Nova Scotia, Canada and indeed most industrialized countries in the 1980s and 1990s.⁶⁴³ Therefore, a time-use approach that considers total work hours and the balance between paid work, unpaid work and free time may be very useful in dealing with work stress in general. Reducing the work hours of those who are currently overworked (and conversely, increasing hours for those who are under-worked) will not solve the whole problem of work stress, but it may be a very practical first step in dealing with and alleviating some of the symptoms of work stress and burnout. Fundamental workplace conditions linked to work stress, such as hierarchical organization, competitiveness, lack of control, and computer monitoring, may be more intractable and require deeper changes and workplace reforms over the long-term.

7.2 Health Effects of Work Stress

*"In the short term stress can be debilitating. In the long term, stress can kill."*⁶⁴⁴

In the following section we shall examine some of the health effects of work stress in general, and of work stress caused by long hours and overwork in particular. It is important to emphasize

⁶⁴¹ Lethbridge, Lynn, Martha MacDonald, and Shelley Phipps. 2003. *Women's Work and Stress on the Rise*. Press Release. April 15, 2003. Nova Scotia Advisory Council on the Status of Women. Available from <http://www.gov.ns.ca/news/details.asp?id=20030415004>. Accessed April 15, 2003.

⁶⁴² Long hours, hard work, and other apparent stressors do not in and of themselves necessarily lead to burnout. Burnout, which is discussed below under "health effects," is usually accompanied by a sense of lack of meaning in work. For instance, among members of a Catholic religious order working in a residential setting for the mentally disabled, the "burnout reactions are buffered by a strong sense of ideological community." Thus, the burnout process begins not with stress but with "the loss of commitment and moral purpose in work." From Golembiewski, Robert T., and Robert F. Munzenrider. 1988. *Phases of Burnout: Developments in Concepts and Applications*. Praeger Publishers. New York. p. 171.

⁶⁴³ It should be noted that while overtime is increasing in Nova Scotia and in Canada overall, the data indicate that the incidence of long work hours increased between 1976 and 1996, and then declined between 1996 and 2001.

⁶⁴⁴ London Hazards Centre. 1994. *Hard Labour. Stress, Ill Health and Hazardous Employment Practices*. London Hazards Centre Trust Ltd. London. p. 23.

that while we are not attributing all work stress to long hours, the literature clearly links long hours and time pressure with stress, burnout, and a wide range of mental and physical illnesses.

Statistics Canada cites a large number of studies that have shown a relationship between work stress and illness. Its own study concluded that "workers who experienced job strain, job insecurity, physical demands or low support from their co-workers or supervisors reported physical and emotional health problems."⁶⁴⁵

A number of behavioural changes have been associated with work stress. These include:

- higher rates of smoking
- alcohol abuse
- drug abuse
- accident proneness
- absenteeism
- violence
- appetite and eating disorders
- deteriorating social relationships (family/friends)
- low participation in community affairs

Psychological effects include:

- family problems
- sleep disturbances
- sexual dysfunction
- depression
- burnout
- irritability
- increased risk of suicide
- withdrawal

Physiological effects associated with work stress include:

- colds and other respiratory infections
- depression
- heart disease
- backache
- arthritis
- peptic ulcers
- digestive tract disorders
- headaches/migraine

⁶⁴⁵ Wilkins, Kathryn and Marie P. Beaudet. 1998. "Work Stress and Health." *Health Reports*. Statistics Canada. Catalogue no. 82-003. Minister of Industry. Ottawa. p. 55. The study was unable to show a causal link between workplace conditions and adverse health effects, but found significant correlations between them. The study pointed out that it was possible that causality might work in reverse, and that workers with pre-existing health problems might be more susceptible to work stress.

- cancer
- diabetes mellitus
- asthma
- increased cholesterol levels
- increased blood pressure
- menstrual disorders
- thyroid disorders
- possible effects on pregnancy
- skin diseases
- karoshi (death from overwork)⁶⁴⁶

According to Health Canada's 1994/95 National Population Health Survey, many of the major causes of death and hospitalization (with the exception of pregnancy) are stress-related. While a direct causal link has yet to be identified, the preponderance of evidence suggests that both chronic stress and stressful life events, such as the death of a partner or job loss, can have "at least a strong indirect impact on physical and mental health, by affecting the physiology and morphology of the circulatory system and – by psychoneuro-immunological mechanisms – by affecting the development of cancer."⁶⁴⁷

Numerous studies suggest that stress plays a role in suppressing our immune systems, thereby making us more susceptible to infectious diseases, as well as increasing the rate of growth of certain tumours. "Stress has been linked to changes in the levels of circulating antibodies, lymphocyte cytotoxicity, and lymphocyte proliferation... There is every reason to believe that stressful elements of the work environment also may elicit changes in immunocompetence and thereby influence health status."⁶⁴⁸ According to Lowe and Northcott:

"Psychological distress often goes hand in hand with a deterioration in physical health... Stressors undermine and wear away at psychic and bodily defences."

This wearing away makes a person more vulnerable to a wide range of pathologies including psychological disorders, and infectious and degenerative diseases.⁶⁴⁹

One study that looked at the effects of job stress on workers' health was initiated at the request of officials at the Edmonton Local of the Canadian Union of Postal Workers (CUPW). The Union was concerned because of a growing number of health problems among its members. In particular, there was a high rate of miscarriages among pregnant female letter-coding machine operators. The study compared mail sorters and mail carriers and found that sorters worked twice

⁶⁴⁶ Quick and Quick, 1984, op. cit., pp. 59-63; Lowe, Graham. 1989. *Women, Paid/Unpaid Work, and Stress: New Directions for Research*. Canadian Advisory Council on the Status of Women. Ottawa. p. 7; London Hazards Centre. 1994. *Hard Labour. Stress, Ill Health and Hazardous Employment Practices*. London Hazards Centre Trust Ltd. London. pp. 24-25.

⁶⁴⁷ Health Canada. 1999. *Statistical Report on the Health of Canadians*. Federal, Provincial and Territorial Advisory Committee on Population Health. Ottawa. p. 49.

⁶⁴⁸ Quick and Quick, 1984, op. cit., p. 337.

⁶⁴⁹ Lowe, Graham S., and Herbert C. Northcott. 1986. *Under Pressure: A Study of Job Stress*. Garamond Press. Toronto. p. 47.

the overtime of carriers, and were more likely to lose their jobs due to new technologies. Sorters also had a higher chance of working shift work. The study found that:

- Sorters were much more dissatisfied with their work than carriers.
- Sorters were much more likely to report poor mental health, irritability, anger and depression, than were carriers.
- Sorters were more likely to use pain relievers, tranquilizers, heart or blood pressure medicine, skin ointments, and salves.
- Sorters who worked the night shift reported more sick days, had more psychophysiological complaints, used more pain relievers, and reported more family conflict than did the afternoon shift of sorters.
- Female sorters frequently reported conflicts between work and family responsibilities such as childcare.⁶⁵⁰

In the following section we will look at the relationship between work stress and a sample of negative health impacts – focussing on those health effects that have received the most study and examination in the existing literature to date.

Burnout

For the first time in 1985, a Nova Scotia arbitrator ruled that burnout could constitute a work-related injury.⁶⁵¹ The relationship between work stress, burnout, and health problems has been supported by a growing body of evidence.

Burnout has been defined as a "level of strain beyond the individual's normal coping capabilities, a strain whose management absorbs sufficient energies to deplete an individual's reserves as well as to pollute the quality of life."⁶⁵² This is not to say that everyone who experiences negative stress (distress) in the workplace will suffer from burnout. For many, stress in the workplace is buffered by meaning in work and by a strong sense of "ideological community."⁶⁵³ In other words, the quality of the work environment may "overcome very powerful stress producing aspects of work."⁶⁵⁴ Long work hours and "quantitative overload" can contribute to burnout, but they are not the only factors associated with it.

The symptoms of burnout include physical exhaustion, insomnia, increased drug and alcohol abuse, family problems, depression, anxiety, and hostility. People experiencing burnout also often experience "high rates" of headaches, lingering colds, backaches, and gastro-intestinal

⁶⁵⁰ Ibid. pp. 33-60.

⁶⁵¹ The case involved a Nova Scotia teacher who was seeking compensation for burnout. The case was dismissed because the arbitrator found that there were other confounding factors that led to the woman's burnout. However, the arbitrator did accept that burnout could constitute a job-related injury. From Canadian Press. "Burnout is an Injury – Ruling." *The Montreal Gazette*. Wednesday June 5, 1985. p. B6.

⁶⁵² Golembiewski, Robert T., and Robert F. Munzenrider. 1988. *Phases of Burnout: Developments in Concepts and Applications*. Praeger Publishers. New York. p. 8.

⁶⁵³ Golembiewski and Munzenrider, 1988, op. cit. p. 171.

⁶⁵⁴ Idem.

problems. In the advanced stages of burnout an employee may suffer from cardio-vascular complaints.⁶⁵⁵

Burnout ultimately leads to increased job turnover, absenteeism, more accidents, low morale and low productivity – all of which result in direct economic costs to the employer and indirect health and economic costs to individuals and society at large. Instead, in our current accounting system, aspects of burnout and other related disorders are actually counted as contributions to economic growth and prosperity. Every additional hour of paid work makes the GDP grow, and the purchase of drugs to deal with mental and physical health effects of work stress makes it grow again, as do related medical expenditures.

One of the first steps in ameliorating burnout is to take time off work (vacation) or to adopt flexible work hours. According to Golembiewski and Munzenrider, providing the employee with fewer stimuli is a more successful intervention than interpersonal confrontations and stress management workshops.⁶⁵⁶

Depression

Referred to as "the walking wounded," roughly one in 10 Canadian workers suffers from depression. It is estimated that by 2020 the number of work years lost to stress-related mental conditions will increase by 50% as a proportion of the "global burden of disease – outpacing even cardiovascular disease."⁶⁵⁷

Research has found a link between work stress, depression and heart disease. A Finnish study published last year in the *British Medical Journal* reported that people with stressful jobs were twice as likely to die from heart problems as those with less stressful jobs.⁶⁵⁸

Another study published in the *International Journal of Psychiatry in Medicine* in 1999 found that heart attack victims with "severe depression" were four times more likely to suffer a fatal second heart attack within two years of entering the study than those who were classified as "not depressed."⁶⁵⁹

Voices of the medical establishment in the U.S. and Canada confirm these findings. The Canadian Cardiovascular Society says there is "considerable epidemiological evidence

⁶⁵⁵ Golembiewski and Munzenrider, 1988, op. cit., p. 63.

⁶⁵⁶ The authors argue that support groups do not necessarily alleviate any of the symptoms of burnout unless they are accompanied by changes in the actual conditions of work. "Burnout is a basic consequence of policies, structures, and procedures at work...changes in work site features are central to the amelioration of burnout." Golembiewski and Munzenrider, 1988, op. cit., p. 249.

⁶⁵⁷ Wilkerson, Bill. 1999. *Presentation to Kiwanis Club of Ottawa*. Canadian Business and Economic Round Table on Mental Health. Ottawa. pp. 2-4. The estimate for 2020 cited by Wilkerson is attributed to Harvard University.

⁶⁵⁸ The Finnish study examined the health of 800 healthy employees of a Finnish metal company over a 25-year period. Study reported in BBC News. *Work Stress doubles Heart Risk*. October 17, 2002. Available from <http://news.bbc.co.uk/2/low/health/2337611.stm>. Accessed November 18, 2002.

⁶⁵⁹ Study was conducted in a Norwegian hospital outpatient cardiology practice. Summary of study is available from: Doctor's Guide to Medical and Other News. 1999. *Depression Linked to Death in Heart Failure Patients*. Press Release. November 1, 1999. Available from <http://www.docguide.com>. Accessed November 8, 2002.

supporting the role of psychosocial factors as risks for cardiovascular disease," and the American Medical Association says depression is a "potential risk factor for cardiac death."^{660 661}

The exact relationship between the two illnesses is yet to be determined. However, preliminary evidence suggests that depression and low social support can influence behaviours that increase cardiac risk, such as smoking, lack of exercise, and poor diet. Research also indicates there may be psychophysiological and neurobiological links between depression and cardiovascular disease.⁶⁶²

As devastating as depression is to an individual in terms of work, family, and quality of life, some aspects of the illness actually contribute to the economic growth statistics, due to medical and other spending. Depression, for example, is linked to higher rates of family breakdown and divorce which, in turn, have been estimated to contribute US\$69 billion annually to the U.S. economy through increased spending on lawyers and living expenses, among other things.⁶⁶³ Depression also produces spending on medical care and drugs that in turn fuels economic growth.

For example, nearly 40 million people worldwide have taken the anti-depressant drug Prozac since it was first made available by the \$10.9 billion pharmaceutical giant, Eli Lilly, in 1988. In 1999 alone, Prozac sales exceeded \$2.5 billion and more than 10 million prescriptions were written, producing windfall profits for its manufacturer. According to one commentator "mental disorders can be great for the economy even as they cause more torment to people and society."⁶⁶⁴ While the GDP registers pharmaceuticals in general and anti-depressants in particular as a growth industry, it does not explicitly recognize the productivity losses due to depression. In the Genuine Progress Index, by contrast, health care spending on depression counted as a cost rather than a gain to the economy, and productivity losses due to depression are explicitly quantified.

⁶⁶⁰ Canadian Cardiovascular Society. 1998. *Psychosocial Risks and Cardiovascular Disease*. Available from <http://www.ccs.ca/society/conferences/archives>. Accessed November 8, 2002.

⁶⁶¹ American Medical Association. 2001. *Depression and Cardiac Mortality*. Available from <http://archpsyc.ama-assn.org/issues/>. Accessed November 8, 2002.

⁶⁶² Canadian Cardiovascular Society. 1998. *Psychosocial Risks and Cardiovascular Disease*. Available from <http://www.ccs.ca/society/conferences/archives>. Accessed November 8, 2002.

⁶⁶³ Cobb, Clifford, Mark Glickman, and Craig Cheslog. *The Genuine Progress Indicator, 2000 Update*. Redefining Progress Issue Brief. December, 2001. Available from

http://www.redefiningprogress.org/publications/2000_gpi_update.pdf. Accessed August 24 and 25, 2003. p. 3. Redefining Progress estimated the cost of family breakdown for 2000 to be U.S.\$64 billion (\$1996). This is equivalent to US\$69 billion when inflation is factored in.

⁶⁶⁴ Landon, Laura. 2002. "The Unmeasured Costs of Deteriorating Mental Health." In *Reality Check*. The Atkinson Charitable Foundation and GPI Atlantic. Halifax. p. 3. On Prozac sales, see: McLean, Bethany. "A Bitter Pill." *Fortune*. July 24, 2001. Available from: <http://www.fortune.com/fortune/investing/articles/0.15114.371450.00.html>. Accessed August 23, 2003.

The International Labour Organization (ILO) examined mental health in the workplace in five countries, including the U.S., U.K., Finland, Germany, and Poland, and found that depression was becoming "increasingly common."⁶⁶⁵ Among its findings:

- Clinical depression has become one of the most common illnesses in the U.S. affecting one in 10 working adults each year, and resulting in the loss of roughly 200 million working days per year.
- In Finland, more than half of the workforce experiences some kind of stress-related symptoms including anxiety, depression, physical pain, social exclusion, and sleep disorders. Seven per cent of Finnish workers suffer from advanced burnout, "leading to exhaustion, cynicism and sharply reduced professional capacity."
- In Germany roughly 7% of all early retirements are due to depressive disorders. Absenteeism due to depression lasts 2.5 times longer than absenteeism due to other illnesses. Lost production due to mental health-related absenteeism is estimated at more than 5 billion DM per year.
- Three out of ten workers experience mental health problems annually in the U.K. Depression is so "common that at any given time one in every 20 working-aged Britons is experiencing major depression."
- Poland's workers are increasingly experiencing depressive disorders – a trend that is being linked to the country's "socio-economic transformation and resulting increases in unemployment, job insecurity and declining living standards."

Here in Canada it is estimated that 15% to 25% of employees in any given workplace suffer from depression, anxiety, substance abuse, or some combination of these disorders.⁶⁶⁶

The ILO report notes that while the situations in the countries examined differ widely, there are "common threads" which appear to "link the high prevalence of stress, burnout and depression to changes taking place in the labour market, due partly to the effects of economic globalization."⁶⁶⁷ These changes in the labour market have had serious ramifications for the wellbeing of workers worldwide. Among the work stressors cited by the ILO were high unemployment, job insecurity, short-term contracts, and time pressure. These have been made worse by "rationalization" and the "rapid introduction of new technologies."⁶⁶⁸

Hypertension and Coronary Heart Disease

Work stress, which may derive from time pressures, work overload, high levels of responsibility, lack of control, and non-supportive superiors, has been particularly identified in many studies as an important predictor of hypertension and coronary heart disease. Male workers in the U.S. with the highest levels of job strain were found to have four times the risk of heart attack as those with

⁶⁶⁵ International Labour Organization. 2000. *Costs of Workplace Stress are Rising with Depression Increasingly Common*. Press Release, October 10, 2000. Available from <http://www.ilo.org/public/english/bureau/inf/pr/2000/37.htm>. Accessed July 4, 2002.

⁶⁶⁶ Wilkerson, Bill. 2002. "The Business Case for Mental Health." *Benefits and Pensions Monitor*. Vol. 12, no. 6. Toronto.

⁶⁶⁷ Ibid. p. 2.

⁶⁶⁸ Idem.

the lowest levels of strain, indicating a risk level equal to that of smoking and high blood cholesterol. And a large, prospective, six-year Swedish study similarly concluded that job strain predicted future heart disease independently of other risk factors in a population sample free of symptoms.⁶⁶⁹

7.3 Long Work Hours and Health

"It seems that overwork can kill, but that we know precious little about when, who and how. Of course, there have been big improvements in developed countries since the Industrial Revolution, but sometimes physical overwork has been replaced by psychological overload. And as unemployment has increased over the last decade, those in work have experienced increased workload, work pressure, and hours of work. If this is not to reap its predicted toll, we need a much greater understanding about the effects, mechanisms, and, most importantly, preventive strategies. We also need government strategies and legislation to increase employment, reduce the working week, and monitor and intervene to prevent health and safety hazards at work, which include overwork."

– British Medical Journal⁶⁷⁰

The verdict is in. Working long hours is bad for our health and wellbeing.

In Canada between 1976 and 2001 there was a 15% increase in the proportion of full-time workers clocking 50 or more hours a week. In Nova Scotia the proportion of full-time employed working long hours (50 hours or more) increased by 29% between 1976 and 2001 from 12.7% to 16.4%. The numbers peaked in 1996, when more than 18% of Nova Scotian full-timers worked 50 or more hours/week at their main job. For Nova Scotian men the change was even more dramatic. In 1976 16.6% clocked long hours (50 + per week). This shot up to 24.1% in 1996 and then fell to 22.4% in 2001. Overall, in 1976 roughly one in five full-time workers clocked more than 41 hours a week. By 2001 nearly one in three workers was doing so.⁶⁷¹

Between 1997 and 2001 the incidence of overtime increased by 15% in Canada. In Nova Scotia, fully 60% of those who work overtime do not even get paid for their extra hours. In a typical week in 2001, 373,000 hours were worked free of charge in Nova Scotia.

When unpaid household work and work on the job are combined, the total work burden for some demographic groups is staggering. On average in Canada, full-time employed mothers are working 73 hours a week and full-time employed fathers are working 71 hours a week.⁶⁷²

⁶⁶⁹ Colman, Ronald. 2003. *Women's Health in Atlantic Canada: 2003 Update. Vol. I: Social Determinants of Health*. GPI Atlantic and Atlantic Centre of Excellence for Women's Health. Halifax. pp. 77-78. Original source: Kabat-Zinn, Jon. 1992. "Psychosocial Factors: Their Importance and Management." In *Prevention of Coronary Heart Disease*. Ockene, Ira, and Judith Ockene (eds). Little Brown and Company. Boston. p. 305.

⁶⁷⁰ British Medical Journal. 1996. *Overwork can Kill*. 312:921-922. Available from <http://www.bmj.com>. Accessed May 31, 2002.

⁶⁷¹ Based on actual hours, 15 years and over, main job. Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

⁶⁷² Includes paid and unpaid work. Statistics Canada. 1999b. "General Social Survey: Time Use." *The Daily*. November 9, 1999. Available from <http://www.statcan.ca/Daily/English/>. Accessed April 30, 2003.

According to the London Hazards Centre, excessive working hours may result in a number of health effects including:⁶⁷³

- increased risk of heart disease
- sleep difficulties
- increased tiredness
- sexual disorders
- gastric disturbances
- headaches/migraine
- backaches
- dizziness
- weight loss or weight gain
- increased incidence of accidents
- apathy
- depression
- irritability, intolerance, boredom, cynicism
- burnout

Since the 1950s it has been increasingly well established that work overload is a risk factor in heart disease. In 1958 a study published in the *American Journal of Medical Sciences* found that of 100 coronary patients, 25% had been working two jobs, and an additional 45% had jobs that required they work more than 60 hours a week.⁶⁷⁴

"Reducing work overload will reduce heart disease," concluded another important study at the University of Michigan in 1972.⁶⁷⁵ Many other studies have come to the same conclusions. In 1960, Breslau and Buell found a relationship between hours of work and death from heart disease. They found that light-industry workers who were on the job more than 48 hours/week had twice the risk of death from coronary heart disease (CHD) as workers putting in 40 hours a week or less.⁶⁷⁶ And in 1986, Wolf and Finestone reported that people who worked a hectic pace with little opportunity for initiative and decision-making were at a greater risk of myocardial infarction.⁶⁷⁷

One U.S. study, which reviewed a wide range of scientific literature, concluded there was a "clear link" between work stress and heart disease. It estimated that 23% of heart disease and

⁶⁷³ London Hazards Centre, 1994, op. cit., p. 37.

⁶⁷⁴ Russek, H.I., and B.L. Zohman. 1958. "Relative Significance of Heredity, Diet and Occupational Stress on CHD of Young Adults." *American Journal of Medical Sciences*. 23: 266-275. Cited in McLean, Alan A. 1979. *Work Stress*. IBM Corporation and Cornell University Medical College. Addison-Wesley Publishing Company. Reading. p. 81.

⁶⁷⁵ 1972 study by John French and Robert Caplan cited in McLean, 1979, op. cit., p. 5.

⁶⁷⁶ Breslow I. and P. Buell. 1960. "Mortality from Chronic Heart Disease and Physical Activity at Work in California." *The Journal of Chronic Diseases*. 11: 615-626 cited in McLean, 1979, op. cit., p. 81.

⁶⁷⁷ Wolf, Stewart and Albert J. Finestone (eds). 1986. *Occupational Stress. Health and Performance at Work*. PSG Publishing Company. Littleton, Massachusetts. p. 92.

150,000 deaths per year in the U.S. could be prevented if the stress levels in jobs with the worst stress levels were reduced.⁶⁷⁸

"The empirical research that exists suggests that higher workloads do increase disease and death rates."

This message in the editorial of the British Medical Journal in 1996 came on the heels of the death of a junior doctor in Britain who, after working "excessive hours and sleeping little," collapsed and died.⁶⁷⁹ The headline of a newspaper article after his death read "*Junior hospital doctor drops dead after 86-hour week.*" The article stated that the length of this doctor's workweek was not uncommon in the medical profession, and that thousands of junior doctors in hospitals regularly worked 70-80 hours with little sleep.⁶⁸⁰

The Japanese even have a name for sudden death caused by overwork – *karoshi*. Since it was first legally recognized in the 1980s, 30,000 Japanese have been diagnosed as victims of *karoshi* – their deaths attributed directly to overwork, and today there is a national pension system in Japan for surviving members of *karoshi* victims' families.⁶⁸¹ "Otherwise perfectly healthy, they keel over at their desks, usually after a prolonged stretch of overtime or a particularly high pressure deal."⁶⁸² Japanese "salary men," in particular, are at risk for this kind of sudden death, since they tend to work gruelling hours followed by obligatory "after-work socializing." They are even discouraged from taking vacations. Ironically, one study found that despite (and likely because of) all the extra hours of work, Japanese productivity is lower than that of other industrialized countries.⁶⁸³

But as overworked as the Japanese are, Americans are now working just as hard. Americans worked an average of 1,834 hours in 2000, about one-and-a-half weeks more than Canadians, nearly three weeks more than the British, and about nine weeks more than the Germans.⁶⁸⁴

⁶⁷⁸ London Hazards Centre, 1994, op. cit., p. 26., citing: Landsbergis et al. 1993. "Job Stress and Heart Disease: Evidence and Strategies for Prevention." *New Solutions*. 3(4) 42-58.

⁶⁷⁹ *British Medical Journal*, 1996, op. cit., p. 921.

⁶⁸⁰ Newspaper article cited in London Hazards Centre. 1994. *Hard Labour. Stress, Ill-health and Hazardous Employment Practices*. London Hazards Centre Trust Ltd. London. p. 27. The book also published the diary of another young British doctor, documenting his typical weekly rounds in the hospital, during which he was also hooked up to a brain monitoring machine to record his brain activity. After working nearly 20 hours with only 2 hours sleep, the doctor was called to suture a tear experienced by a woman who had just given birth. While the doctor was suturing the "difficult" tear, the brain monitoring machine showed bursts of theta waves, which meant that the doctor was falling asleep. The young doctor may not have fallen totally asleep while stitching up the patient but, not long after, he did fall asleep at the wheel of his car after working a gruelling 110-hour week. Fortunately, no one was injured. pp. 28-29.

⁶⁸¹ Reiss, Matthew. 2002. "American Karoshi." *The New Internationalist*. No. 343. pp. 16-17.

⁶⁸² Schor, 1991, op. cit., pp. 153-154.

⁶⁸³ Study cited in Schor, 1991, op. cit., p. 154. Original reference: Takahashi, Hideo. 1990. *The Long Workweek in Japan is Difficult to Reduce*. Japan Economic Institute Report 11A. Washington D.C.

⁶⁸⁴ Calculations are based on ILO report on annual work hours per person in various industrial countries: International Labour Organization. 2002. *Key Indicators of the Labour Market*. Table 6b. Available from <http://www.ilo.org/public/english/employment/strat/kilm/table.htm>. Accessed July 4, 2002. The figures are a very rough estimate based on the most recent data available at the time of writing. For some countries comparisons are made using data from different years. For instance, while annual hours data for the U.S. are from 2000, annual hours data for Canada are from 1998, the U.K., 1999, Japan, 1999 and Germany, 2000. At the time of publication of this

In the U.S., despite a solid research base establishing the link, coroners and judges still refuse to accept that overwork can lead to heart failure.⁶⁸⁵

"If someone is working 14 hours a day, that person is not going to be eating right, they're not going to have time for a nice homecooked meal. That means fast food and increased cholesterol. Secondly, the time constraints will not permit them to exercise. And if the person is a workaholic, often they're going to be a smoker or, if they're really stressed out, a drinker."⁶⁸⁶

The association between long work hours and the cumulative effects of lifestyle risk behaviours is supported by data collected by Statistics Canada's 1994/95 and 1996/96 National Population Health Surveys (NPHS). A Statistics Canada analytical study based on this NPHS data found that a substantially longer workweek increased the chances of unhealthy weight gain in men; of alcohol consumption and depression in women; and of smoking in both men and women.⁶⁸⁷

The Statistics Canada study examined longitudinal data from the first two cycles of the NPHS about Canadian workers aged 25-54 years who worked at least 35 hours a week in 1994-95. The study claims members of this group are "most likely to feel stress from the "time-crunch," as they juggle work, family and personal responsibilities."⁶⁸⁸ In this particular study, Statistics Canada defined long hours as 41 hours or more per week.⁶⁸⁹

The findings of the Statistics Canada study on long work hours and health are summarized in Table 20 below. Women who worked long hours were 2.2 times more likely to report a depressive episode than women working standard hours. Men working long hours were 2.2 times more likely of having excess body weight. Changes from standard to long hours were also associated with increases smoking in men and women, twice as high for men and four times as high for women. Alcohol consumption also increased for women whose working hours increased.

The Statistics Canada report concludes that "there is currently sufficient evidence to raise concerns about the health and safety risks of working long hours," but notes that much of the evidence to date linking negative health effects such as depression to work stress focus on job strain and not work hours. Therefore, the report urges caution and recognizes that it is not clear to date how much of a role long work hours play in causing ill health in general. The study notes

report new data were released by the ILO for 2002. The Americans and Japanese still worked about the same annual hours (1,815 in 2002 for the U.S.) but South Korea surpassed both countries with 2,447 hours per year. ILO. 2003a. *New ILO Study Highlights Labour Trends Worldwide: U.S. Productivity up, Europe Improves Ability to Create Jobs*. Press Release. September 1, 2003. Available from <http://www.ilo.org/public/english/bureau/inf/pr/2003/40.htm>. Accessed October 25, 2003.

⁶⁸⁵ Reiss, 2002, op. cit., p. 17.

⁶⁸⁶ Quote from an unidentified physician at New York's Beth Israel Medical Centre, which appeared in Reiss, 2002, op. cit., p. 17.

⁶⁸⁷ Shields, Margot. 1999. "Long Working Hours and Health." *Health Reports*. Autumn 1999. Vol. 11, no. 2. Statistics Canada. Ottawa. p. 44.

⁶⁸⁸ Ibid. p. 35.

⁶⁸⁹ Elsewhere in this report, long hours refers to 50 hours or more per week.

that there is strong evidence linking long work hours to heart disease, but the connection between long work hours and mental illnesses such as depression has not yet been well studied.⁶⁹⁰

Table 20. Adjusted Odds Ratios Relating Selected Characteristics to Probability of Various Health Effects/Behaviours in 1996/97 among men and women aged 25-54 who worked 35 or more hours per week throughout 1994/95, Canada.

Health Effect/ Behaviour	Odds Ratio – Men	Odds Ratio – Women
Major Depressive Episode:		
Long Working Hours	0.6	2.2
White-collar	0.5	1.6
Self-employed	---	0.2
Shift-worker	0.7	2.3
Work stress		
High job strain	3.3	2.1
High job insecurity	1.6	1.0
Low supervisor support	0.6	1.4
Age		
25-34	1.0	1.0
35-44	1.0	0.8
45-54	0.9	0.9
Married	0.8	0.9
Child(ren) under 12 in household	2.6	1.4

Health Effect/ Behaviour	Odds Ratio – Men	Odds Ratio – Women
Unhealthy Weight Gain:		
Working hours from standard to long between 1994/95 and 1996/97	2.2	0.8
White-collar	0.7	0.7
Self-employed	1.0	0.8
Shift-worker	1.3	1.6
Work stress		
High job strain	1.0	1.8
High job insecurity	1.3	0.9
Low supervisor support	0.9	1.1
Age		
25-34	1.0	1.0
35-44	1.1	0.9
45-54	0.8	0.6
Married	0.6	0.9
Child(ren) under 12 in household	0.8	0.9

⁶⁹⁰ Ibid. p. 40.

Health Effect/ Behaviour	Odds Ratio – Men	Odds Ratio – Women
Increased Weekly Alcohol Consumption:		
Working hours from standard to long between 1994/95 and 1996/97	1.1	2.0
White-collar	0.9	1.0
Self-employed	1.1	0.9
Shift-worker	0.7	0.9
Work stress		
High job strain	1.1	1.0
High job insecurity	0.9	1.1
Low supervisor support	1.1	1.1
Age		
25-34	1.0	1.0
35-44	1.0	0.7
45-54	0.7	0.9
Married	0.9	1.1
Child(ren) under 12 in household	1.1	0.8

Health Effect/ Behaviour	Odds Ratio – Men	Odds Ratio – Women
Increased Daily Smoking:		
Working hours from standard to long between 1994/95 and 1996/97	2.2	4.1
White-collar	0.6	0.4
Self-employed	0.5	0.9
Shift-worker	1.0	1.3
Work stress		
High job strain	1.0	0.9
High job insecurity	0.7	1.4
Low supervisor support	0.9	1.3
Age		
25-34	1.0	1.0
35-44	0.7	0.9
45-54	0.6	0.9
Married	0.9	0.5
Child(ren) under 12 in household	1.0	1.2

Source: Shields, 1999, op. cit., pp. 46-48. Data source: National Population Health Surveys, 1994/95 and 1996/97.

Though the vast majority of studies consider only hours of *paid* employment, work stress should clearly be assessed in relation to *total* work burden (paid plus unpaid work). The stress experienced by many who are not only clocking long hours at work but are also busy working once they get home is well documented in Statistics Canada's General Social Surveys (GSS). According to the time-use diaries in the most recent GSS (1998), full-time employed single mothers work an average of 75 hours a week, full-time employed married mothers put in 73 hours a week, and full-time employed fathers work 71 hours a week, when paid and unpaid work are both counted. Not surprisingly, Statistics Canada's 10-question time-stress survey found full-

time employed mothers to be the most severely time-stressed demographic group.⁶⁹¹ This heavy total work schedule combining paid and unpaid work has become so common that it has been given a variety of new names, including the "time crunch," the "struggle to juggle," and the "double-day work." Stress caused by the inability to cope with the combination of family and work responsibilities can have health effects as serious as those attributed in the literature to long paid work hours alone.

According to a Statistics Canada analysis of "tired workers," almost half of Canadians aged 15 and over felt they were not able to finish what they had set out to accomplish each day. Many cut back on sleep to make more time for their commitments.⁶⁹²

It should be noted that there is a glaring gap in the stress literature about how women's paid and unpaid work in particular combine and interact to create stresses that are detrimental to women's health. The added stress of household work, mostly still performed by women, is neglected in the literature on work stress, likely because unpaid work (looking after the home, children, and elderly relatives) is not recognized and counted as work in the conventional economic accounts.⁶⁹³ Despite the fact that such unpaid work provides a wide range of essential goods and services, the standard measures track only market interactions, counting paid child-care and domestic help, but ignoring the same services when they are performed without pay.

Nevertheless, the impact of women's double work day can be inferred from some key health studies. One of the most well-known and frequently referenced longitudinal studies – the Framingham Heart Study – looked at the health of more than 1,300 men and women between the ages of 45 and 64 over a nine-year period. Of the more than 1,300 subjects, 350 were female homemakers, 387 were employed women and 580 were employed men. All were free of coronary heart disease at the start of the study. At the end of the nine-year period, the study found the highest rates of coronary heart disease among employed married women with children, even after age, risk factors like smoking, and other variables were controlled. Employed mothers had the heaviest total work responsibilities and usually received little help from husbands at home. Interestingly, the study found that employment itself did not damage the health of the women. In fact, employed women had better mental health than homemakers did. Rather, it was the combination of paid work with heavy home responsibilities that substantially increased the risk of illness.⁶⁹⁴

Traditional measures of progress based on the economic growth statistics, send the misleading message that the more we work, the better off society is. In the case of the double-work day, unpaid work done in the home is invisible in our current system of accounting. Only paid work is included, and when it increases so does the GDP. But the negative effects of work stress on family life, health, and community do not register anywhere in our conventional accounts or measures of progress. In the Genuine Progress Index, these impacts register explicitly as costs. In

⁶⁹¹ Statistics Canada. 1999. *Overview of the Time Use of Canadians in 1998*. General Social Survey. Catalogue no. 12F0080X1E. Minister of Industry. Ottawa.

⁶⁹² Crompton, Susan. 1995. "Tired Workers." *Perspectives*. Catalogue no. 75-001E. Statistics Canada. Ottawa. p. 28.

⁶⁹³ Lowe, Graham S. 1989. *Background Paper. Women, Paid/Unpaid Work, and Stress: New Directions for Research*. Canadian Advisory Council on the Status of Women. Ottawa. p. 5.

⁶⁹⁴ Lowe, 1989, op. cit., pp. 27-38.

the following section we shall therefore explore some of the estimates of costs associated with work stress cited in the literature.

7.4 The Costs

"The financial cost of decreased productivity due to stress is so enormous as to be incalculable."⁶⁹⁵

"The returns to be realized on an investment in human capital assets should be calculated with the same precision as those realized on investments in other capital assets such as plant and equipment. One comparable aspect of those two equations is downtime and its costly negative impact on production schedules and productivity overall. In dispassionate terms, work hours and days lost among new economy employees can be likened in the old economy to a breakdown in distressed but vital capital investment in plant and equipment."⁶⁹⁶

Work stress should be explicitly acknowledged in our accounting mechanisms as hurting our national and provincial balance sheets. In reality, such stress is very costly, if we include lost production due to absenteeism, disability, and premature death; health expenditures due to ill health; and the enormous human and societal costs associated with family breakdown. Stress can destroy our quality of life, and even kill us, but, according to our current accounting system, it may perversely be interpreted as contributing to economic growth and prosperity. This is because (1) longer paid work hours increase the volume of market transactions; (2) some of the costs are invisible (i.e. lost production due to absenteeism is not explicitly attributed to the effects of stress) and (3) expenditures on goods and services attributable to stress (i.e. medical services, drugs, divorce, funeral arrangements) are simply added to the GDP.

Excessive work stress frequently results not only in reduced work quality but also in reduced output or productivity – this has been referred to as "presenteeism," to indicate less than optimal on-the-job performance. Work stress can also produce more absenteeism – days lost due to mental and physical illnesses.⁶⁹⁷

Long work hours can also result in lower productivity simply because long hours are usually accommodated by "an adjustment of pace or work intensity." Human beings have a certain amount of available energy. Once these energy stores are exhausted, the only way a worker can continue to work is by slowing the pace. For those engaged in light manual work or mental work, long hours may result in more mistakes and reduced output.⁶⁹⁸

According to an important report by the Business and Economic Roundtable on Mental Health, Canadians have been working "longer and harder" over the last decade, but not more productively. The report says that in 1998, for instance, the number of hours worked by

⁶⁹⁵ Sweetland, John. 1979. *Occupational Stress and Productivity*. Work in America Institute. New York. p. 2.

⁶⁹⁶ Business and Economic Roundtable on Mental Health, 2000, op. cit., p. 17.

⁶⁹⁷ Sweetland, 1979, op. cit., p. 2.

⁶⁹⁸ White, Michael. 1987. *Working Hours. Assessing the Potential for Reduction*. International Labour Organization. Geneva. pp. 40-44.

Canadians increased at six times the rate of growth in labour productivity. The report also found that the U.S. companies that downsized the most in the 1990s were the least productive. This could be due to the fact that companies that shed too many workers, unrealistically expected that the employees left behind would be able to pick up the slack.⁶⁹⁹

The Roundtable study attributes the increase in stress and depression to a number of factors, some of which were listed earlier in this report. According to Bill Wilkerson, the Roundtable's CEO, 15% to 25% of employees in any given workplace "suffer serious, acute, and milder forms of depression, anxiety, substance abuse, or some combination of them."⁷⁰⁰ The Roundtable report also outlines "12 Steps to a Business Plan to Defeat Depression," as ways for companies to reduce workplace stress and therefore reduce the costs associated with it. Some of these recommendations will be referenced in the *Policy Recommendations* in Part 3 of this report.

In *Organizational Stress and Preventive Management*, Quick and Quick list a number of direct and indirect costs associated with "distress" in the workplace that are borne by employers:

Direct costs include:

- Non-participation due to absenteeism, tardiness, early retirement, disability, or relocation (i.e. productivity costs and replacement costs);
- Turnover costs of replacing a lost employee;
- Performance costs: productivity, quality of production, grievances, accidents,⁷⁰¹ unscheduled machine downtime and repair;
- Compensation awards due to disability;
- Lost productivity due to early death that is attributable to stress (e.g. cardiovascular diseases or suicide).⁷⁰²

Indirect costs described by Quick and Quick include:

- Loss of vitality: Chronically distressed employees lose responsiveness and resiliency, which may manifest in low morale, low motivation and dissatisfaction. The result is a poor quality work life that has spillover effects into family life. These factors contribute to some direct costs such as employee turnover.
- Communication breakdowns;
- Faulty decision-making, which can lead to costly decisions for a company;
- Opportunity costs: Lack of energy and inability to take advantage of opportunities.⁷⁰³

⁶⁹⁹ The *Wall Street Journal* reported on the relationship between downsizing, especially among blue-collar workers, and this kind of work overload in the early 1980s. Cited in Quick, James C. and Jonathan D. Quick. 1984.

Organizational Stress and Preventive Management. McGraw Hill Book Company. New York., pp. 26-27.

⁷⁰⁰ Wilkerson, Bill. 2002. "The Business Case for Mental Health." In *Benefits and Pensions Monitor*. Vol. 12, no. 6. Toronto.

⁷⁰¹ It is estimated that at least 85% of all workplace accidents are caused by the inability to cope with emotional stress. From Forbes, Rosalind. 1979. *Corporate Stress*. Doubleday and Company, Inc. New York. pp. 51-56.

⁷⁰² Quick, James C. and Jonathan D. Quick. 1984. *Organizational Stress and Preventive Management*. McGraw Hill Book Company. New York. pp. 82-89.

⁷⁰³ *Ibid.* pp. 89-93.

In the following section we will list some of the specific cost estimates associated with these losses, as cited in the literature. These costs are associated with work stress in general, and include both direct health costs and lost production costs. Because of the complexity of the issues, the interaction of a number of factors, and the difficulty of confirming direct one-way causal relationships, it is very challenging to estimate accurately 1) the specific health costs resulting from stress that is directly attributable to long work hours and 2) the lost productivity associated with stress-related absenteeism that may also result specifically from working too many hours.

Thus, it should be borne in mind that the costs cited in the literature do not represent the costs of long hours of work specifically, but of work stress in general. As noted earlier, excessively long hours are one significant contributing factor to work stress, but by no means the only one, and they usually exacerbate stress when *combined* with lack of control, repetitive routine, lack of support, and other negative work conditions. Nevertheless, the following cost estimates are essential to consider, because they reveal that work stress is very costly and because the evidence indicates that long hours and work overload contribute to this work stress. Therefore, long work hours should be seen as carrying hidden potential costs, rather than being uncritically assessed as being good for the economy, as measures of progress based on conventional accounting mechanisms implicitly assume.

The Business and Economic Round Table on Mental Health, a coalition of health experts and business people, provides evidence that mental illness and stress-related work absences constitute the fastest-growing area of disability and insurance claims, costing the Canadian economy more than strikes, plant shutdowns, or product defects. In 2000, for example, depression and stress disorders at work accounted for more than 30% of all disability recorded at three of Canada's largest corporations. The second fastest growing category of disability claims is heart disease – also shown to be linked to depression.⁷⁰⁴

The Roundtable argues that the principal cause of stress among employees is "a prolonged sense...of constant catchup, interruption and distraction." It also says that many employees experience stress when they "are forced to spend hours digging through electronic messages – some trivial, some relevant to their work – which build up overnight, during the day or even through the lunch break...Email, in this form, contributes to the 24-hour work day." The Roundtable estimates that at any given time 10% of the Canadian workforce (or 1.4 million Canadians) is suffering from depression.⁷⁰⁵

The Roundtable report also calculates that by increasing the number of employees who are diagnosed and treated properly for depression from an estimated 62 out of 1,000 (the current estimate) to 500 out of 1,000 (or one in two), employers will save approximately \$2.5 million to \$5 million/year in avoided drug, sick leave, and wage replacement costs, based on estimated savings \$5,000-\$10,000 per employee.⁷⁰⁶

⁷⁰⁴ Business and Economic Roundtable on Mental Health, 2000, op. cit., p. 5.

⁷⁰⁵ Ibid. p. 4.

⁷⁰⁶ Ibid. pp. 19-20.

The Roundtable's Scientific Advisory Committee – an independent panel of work and health experts – estimates the costs associated with mental illness in Canada to be upwards of \$50 billion. This includes:

- \$11 billion/year in lost productivity due to depression, anxiety, and substance abuse.
- \$22 billion/year in lost productivity due to burnout, disengagement, and excessive, if not pathological, drinking, as well as more serious medical conditions.
- \$6 billion/year in direct health costs associated with treating depression and "distress."
- \$11 billion/year in direct health costs associated with treating addictions.⁷⁰⁷

This amounts to more than \$1,600 per Canadian per year.

A study co-authored by Bill Wilkerson, senior advisor to the World Federation for Mental Health, and CEO of the Global Business and Economic Roundtable on Addiction and Mental Health,⁷⁰⁸ and Marten deVries, the Federation's Secretary General, estimated that depression alone cost the Canadian and U.S. economies US\$80 billion in 2001.⁷⁰⁹ It is estimated that when addictions and other mental health disorders are included, the cost soars to a staggering \$200 billion/year. Wilkerson refers to these costs as "a large unfunded liability embedded in the costs of publicly-traded companies on the New York and Toronto stock exchanges."⁷¹⁰

Statistics Canada reported that the annual loss of productivity due to stress-induced absenteeism stands at an estimated \$12 billion/year in Canada.⁷¹¹

International Comparisons

A Gallup study indicates that 19% of the U.S. workforce is "actively disengaged" or less productive, less loyal, less satisfied, and more stressed than "engaged" co-workers. The study estimated that actively disengaged workers in the U.S. cost the economy between U.S.\$292 and \$355 billion per year.⁷¹²

In the U.K., where one in six workers clocks more than 60 hours a week, nearly 10% of the workforce suffers from work-related stress. It is estimated that 187 million working days are lost each year due to mental illness.⁷¹³ According to the Health and Safety Executive of the U.K.

⁷⁰⁷ Wilkerson, 2002, op. cit. Health care costs are derived from Health Canada data.

⁷⁰⁸ Formerly called the Business and Economic Roundtable on Mental Health.

⁷⁰⁹ Schlein, Lisa. "Mental ill-health puts many out of work." *Canadian Press*. November 5, 2002. The study, referenced here by Schlein, was presented at a conference sponsored by the World Health Organization and the International Labour Organization in Geneva in the fall of 2001.

⁷¹⁰ Wilkerson, 2002, op. cit., no page given.

⁷¹¹ Statistics Canada figures cited in Canadian Mental Health Association. *Workplace Dangers*. Press Release. May 1, 2000. Edmonton. This figure only includes costs associated with absenteeism.

⁷¹² Gallup Management Journal. *Gallup Study Indicates Actively Disengaged Workers cost the U.S. Hundreds of Billions Each Year*. Press Release. March 19, 2001. Available from http://gmj.gallup.com/press_room/release. Accessed October 24, 2002.

⁷¹³ Dillon, Jo. "Overworking is the New British Disease." *The Independent*. January 19, 2003. Available from <http://news.independent.co.uk/health/story.jsp?story=370702>. Accessed January 20, 2003.

government, the annual cost of work-related accidents and ill health attributed to stress is 7 billion pounds sterling (1994 pounds).⁷¹⁴

While cost estimates vary widely, depending on definitions, estimation methods, and what factors are included, it is clear that they may very well represent just the tip of the iceberg. Growing medical evidence suggests stress plays a role in a large number of physical ailments and diseases, including heart disease and cancer, as well as accidents, that may not currently be attributed to stress in the cost estimates. One study estimated that once these other "hidden" costs are factored in, a U.S. pricetag for stress in the hundreds of billions of dollars per year would not be unreasonable.⁷¹⁵

7.4.1 Estimating Costs of Absenteeism due to Workplace Stress caused by Long work hours in Nova Scotia

In order to calculate the cost of absenteeism due to workplace stress in Nova Scotia we have taken the following steps.⁷¹⁶

1) In 2001 in Nova Scotia, the average number of days per worker lost due to illness or disability was 8.2 days, which was 1.3 days or 18.6% higher than the Canadian average. This was up from an average of 5.6 days in 1987.⁷¹⁷ These figures are only for full-time paid employees who are single-job holders, and therefore represent an underestimate of lost productivity in the province. If we included the absenteeism of part-time workers and multiple-job holders, the loss would be considerably higher.

2) In 2001 the average hourly wage rate for full-time employed men in Nova Scotia was \$16.61/hour, and for full-time employed women it was \$13.78/hour. The average daily wage rate was \$137.80 for men and \$104.60 for women.

3) According to Statistics Canada's *Labour Force Historical Review* there were 423,300 employed people (including self-employed) in 2001. Of those, 347,900 worked full-time at their main jobs. If 2001 full and part-time ratios are applied to 2002 employment numbers then in 2002, 355,350 Nova Scotians worked full-time, and 76,900 worked part-time. The gender breakdown was as follows: Men part-time: 22,350; men full-time: 196,350; women part-time: 54,640; women full-time: 158,920.

4) Average daily wages for men and women multiplied by the number of full-time employed men and women and the average number of sick days/year (8.2), gives the cost of days lost due to illness and disability of full-time workers as \$358 million/year.

⁷¹⁴ London Hazards Centre, 1994, op. cit., p. 22.

⁷¹⁵ The Bureau of National Affairs, Inc. 1987. *Stress in the Workplace. Costs, Liability and Prevention*. A BNA Special Report. Rockville, Maryland. pp. 9-11.

⁷¹⁶ Methodology taken from GPI Atlantic analysis of the costs of absenteeism in Nova Scotia, prepared for the Heart and Stroke Foundation of Nova Scotia, by Ronald Colman.

⁷¹⁷ Statistics Canada. 2002. *Labour Force Historical Review, 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

5) If we estimate the cost of lost days for part-time workers, we find that part-timers work on average 18.1 hours/week compared to full-time work of 42.1 hours. Thus the average part-time worker puts in about 43% of the weekly hours contributed by full-time workers. If we apply this proportion to the average number of days lost by full-time workers to sickness and disability in Nova Scotia (8.2), we can estimate that the average part-time worker may have lost 3.5 days/year due to sickness. If we multiply these sick days by the number of part-timers (77,000) at an average wage of \$112/day then the annual cost attributable to illness-related absenteeism among part-timers is an additional \$30.2 million. (Part-time absenteeism rates and costs have to be extrapolated from full-time rates and costs, because Statistics Canada's *Labour Force Historical Review* only provides these absenteeism data for full-time workers.)

6) When full-time and part-time illness-related absenteeism costs are added, then the cost of days lost due to sickness and disability in Nova Scotia is seen to be about \$388 million.

It should be noted that this underestimates full losses to the Nova Scotia economy, because wages represent only a portion of the value of actual output or economic production, which would provide a more comprehensive measure of economic loss due to worker absenteeism than is presented here.

7) We need to determine what percentage of this cost is attributable to workplace stress. The following summarizes some of the findings in the literature:

- It is estimated that in the U.K, 50% of all work-related accidents and ill health are caused by workplace stress.⁷¹⁸
- In the U.S., it is estimated that 54% of all work days lost per year are stress-related.⁷¹⁹
- An international study found that 15% of the cost of absenteeism could be attributed to stress.⁷²⁰
- A study of Danish and Swedish workers estimated that workplace stressors were responsible for 10% of total work-related costs of illness in those countries.⁷²¹

Based on these findings, it appears that workplace stress may be the cause of substantially more absenteeism in the U.S. and the U.K. than in some other European countries. This is not surprising, as many Europeans work considerably fewer hours each year than Americans or Britons. According to the International Labour Organization (ILO), French workers put in 375 fewer hours per year than U.S. workers, and 116 fewer hours than British workers. German

⁷¹⁸ London Hazards Centre, 1994, op. cit., p. 22. Also: European Foundation for the Improvement of Living and Working Conditions. 1993. *European Conference on Stress at Work – A Call for Action: Proceedings*. Dublin. p. 20.

⁷¹⁹ Cooper, Cary L., Paula Liukkonen, and Susan Cartwright. 1996. *Stress Prevention in the Workplace: Assessing the Costs and Benefits to Organizations*. European Foundation for the Improvement of Living and Working Conditions. Dublin. p. 3 Also: European Foundation for the Improvement of Living and Working Conditions, 1993, op. cit., p. 20.

⁷²⁰ European Foundation for the Improvement of Living and Working Conditions. 1993. *European Conference on Stress at Work – A Call for Action: Proceedings*. Dublin. p. 6.

⁷²¹ Levi, Lennart and Per Lunde-Jensen. 1996. *A Model for Assessing the Costs of Stressors at the National Level: Socioeconomic costs of work stress in two EU Member States*. European Foundation for the Improvement of Living and Working Conditions. Dublin. pp. 3-4. These figures are based on Denmark and Sweden.

workers put in nearly 500 fewer hours a year than U.S. workers and 240 less than British workers. The Norwegians put in 603 hours less than the Americans and 344 hours less than the British. And the Dutch put in 614 fewer hours than the Americans and 355 fewer than the British. Based on a 40-hour week, the average Dutch worker therefore works the equivalent of 15.4 fewer weeks each year than the average American worker, and 8.9 fewer weeks than the average British worker.⁷²² In the U.K., 42% of workers have a workweek longer than 48 hours – a higher proportion than any other country in the European Union.

While a causal link between long work hours and absenteeism has not been definitively established, there is abundant evidence that long hours and work overload are a major contributing cause of workplace stress. It is therefore likely that the higher estimates of stress-related absenteeism for the U.S. and U.K. are at least partly related to the longer work hours of workers in those countries.

Where does Canada fit into this spectrum? As Part 1 of this report indicates, the workplace trends in Canada resemble, but are less pronounced than, those in the U.S. In fact, average annual work hours in Canada are shorter than in the U.S., longer than in the U.K., and much longer than in most European countries. According to the ILO, the average Canadian worker puts in 27 fewer hours per year than the average U.S. worker, but 87 hours more than the average British worker, 327 hours more than the Germans, and 442 hours more than the Dutch.⁷²³

Taking work hours as a proxy for relative levels of workplace stress, therefore, we shall assume that stress-induced absenteeism rates in Nova Scotia are in line with U.S. and U.K. estimates rather than with those of European countries with shorter annual work hours. Here we therefore assume that half of all work days lost each year due to sickness and disability in Nova Scotia are related to workplace stress – similar to U.K. rates and somewhat less than U.S. rates.

As a further caveat, it should also be noted that the studies cited above do not necessarily refer to workplace stress in specific relation to work days lost due to illness and disability. The U.S. and international estimates, for example, refer to *all* absenteeism, which may include family and other responsibilities, rather than those work days lost specifically due to illness and disability. The U.K., Swedish, and Danish studies refer to proportions of work-related illness attributable to stress, but not necessarily to absenteeism alone. In addition, some studies refer to workplace stress and others to stress in general. For all these reasons, our estimate for Nova Scotia should be regarded as a very rough extrapolation based on evidence that is only approximately comparable.

8) Assuming, therefore, that 50% of absenteeism specifically attributable to illness and disability in Nova Scotia is induced by workplace stress, we can estimate that absenteeism due to workplace stress cost Nova Scotia \$194 million in 2001.

⁷²² International Labour Organization. 2002. *Key Indicators of the Labour Market*. Table 6b. Available from <http://www.ilo.org/public/english/employment/strat/kilm/table.htm>. Accessed July 4, 2002. See Table 2 in this report, which summarizes some of these international findings. Since this report was written the ILO released more recent work hours data.

⁷²³ All data from ILO for 2000 except the U.K. which was for 1999. Idem.

9) It is difficult to estimate what proportion of these costs can be attributed to long work hours. Statistics Canada's 1994 General Social Survey indicated that 32.8% of men and women workers reported stress in their work environment from "too many demands or hours."⁷²⁴ If we apply this percentage to the total workplace stress costs estimated above, and if we assume that the remaining two-thirds of workplace stress-induced absenteeism is due to other causes of workplace stress, such as lack of control, poor physical conditions, and lack of supervisor support, then we derive a very rough estimate of the possible absenteeism costs associated with long work hours.

Based on these assumptions, it may be estimated that absenteeism costs specifically attributable to long work hours in Nova Scotia were \$69 million in 2001.

Again, it must be said that the costing methodology for absenteeism considered only wage costs, whereas actual economic losses based on GDP or output per worker, would be considerably higher. It should also be noted that absenteeism is only *one* out of *many* employer costs associated with workplace stress. The \$69 million cost estimate above does not therefore include stress-induced costs associated with on-the-job productivity losses due to poorer performance, with higher rates of employee turnover, or with tardiness, accidents, errors, low morale, and other costs that may be associated with work overload and excessively long hours. Since these other costs are not presently quantifiable based on available evidence, the \$69 million estimate should be taken merely as an indication of and very rough proxy for the substantial (but hidden) economic costs of stress produced by excessively long work hours in the province.

The *Prevention Dividend Project* notes that once these costs are made known, it is easier to calculate the social and economic value, or the dividend, of prevention programs. In other words, if it can be shown that workplace strategies designed to lower employee stress translate into savings from lower absenteeism, higher worker morale, and improved productivity, then more employers would be willing to invest money in these strategies.⁷²⁵ Attributing costs to workplace stress is clearly in its infancy, and far more work needs to be done in this area. Even these initial steps however, already provide a far more accurate and comprehensive portrait of the potential costs of workplace stress than indicated by conventional accounting mechanisms, where such costs are entirely hidden. Indeed, as indicated, these conventional measures imply an implicit stress cost of zero, and even misleadingly count some stress-related costs as contributions to economic prosperity. These initial costing efforts, while far from precise, are therefore essential steps in the right direction.

7.5 Long Work Hours and the Family

Workplace stress caused by long work hours is also taking its toll on family life. Over the last decade of downsizing, restructuring, globalization, and polarization of hours, this conflict between work and family has become more acute. It has increasingly attracted the attention of the media and gained growing public attention. In the 1980s, the phrase "work-life balance"

⁷²⁴ Statistics Canada's 1994 General Social Survey data are presented in Jackson and Robinson, 2000, op. cit., p. 91.

⁷²⁵ Prevention Dividend Project. *Worksite Health Promotion: Are Worksite Health Promotion Programs Cost-effective?*. Available from <http://prevention-dividend.com>. Accessed November 5, 2002.

hardly registered on the media's radar screen, and the phrase appeared in newspapers, on average, about 36 times a year. Today it gets mentioned at least 500 times a year.⁷²⁶

According to Statistics Canada, the proportion of working men and women who feel "time stressed" or "time crunched" is on the rise. Today three out of four women in two-parent families with children participate in the labour force. More than 60% of these women work full-time, and roughly 25% work shift work.⁷²⁷

*"Clearly the majority of working couples with children have to balance work and family in complex ways. This task is hardly made easier by the shift to more irregular and unstable hours on the one hand, and to longer hours on the other."*⁷²⁸

According to a recent study at Dalhousie University based on data from Statistics Canada's General Social Survey, 51.2% of women between 25 and 54 years of age with full-time paid work felt "constantly under stress" in 1998, compared with 41.6% of full-time employed men in that age group. This was up since 1992, when 45.9% of women and 37.4% of men with full-time employment reported feeling "constantly stressed."⁷²⁹

Women with full-time jobs are more likely than full-time employed men to feel time stressed, as they are still considerably more likely than men to do most of the housework. As a result, employed women on average clock more hours a day of paid and unpaid work than men, and they have less free time.⁷³⁰ In 1998, Nova Scotian women did 63% of the unpaid household work, and carried 52% of the province's total work burden (paid and unpaid work hours combined).⁷³¹

In an important national study on the "work-life" conflict, the authors found that the 1990s were a "turbulent" period for most families, who found themselves struggling for some job security. The study found that:

- "Throughout the 1990s a greater percentage of Canadian workers assumed more responsibilities (i.e. the number of working women, dual-earner and single-parent families, sandwich employees⁷³² and employees with responsibilities for elder care increased over the decade).

⁷²⁶ CBC Radio. *Workology: Workplace Stress*. November 4, 2002.

⁷²⁷ Statistics Canada data cited in Jackson and Robinson, 2000, op. cit., p. 89.

⁷²⁸ Jackson and Robinson, 2000, op. cit., p. 89.

⁷²⁹ Lethbridge, Lynn, Martha MacDonald and Shelly Phipps. 2003. *Women's Work and Stress on the Rise*. Press Release. April 15, 2003. Nova Scotia Advisory Council on the Status of Women. Available from <http://www.gov.ns.ca/news/details.asp?id=20030415004>. Accessed April 15, 2003. General Social Survey data collected from February 1998 to January 1999 were used in the research. Findings were compiled in a report titled *Taking Its Toll: Implications of Paid and Unpaid Work Responsibilities for Women's Wellbeing*. Report was being reviewed at the time of writing, and a final published version was therefore not yet available for citation.

⁷³⁰ Statistics Canada time use data (1998) cited in Jackson and Robinson, 2000, op. cit., p. 90.

⁷³¹ Statistics Canada. 1999c. *General Social Survey: Overview of the Time Use of Canadians*. Table 1: Canada, regions and provinces: special provincial tabulations run for GPI Atlantic.

⁷³² "Sandwich employees" are women who experience pressure from both ends of the family dependence scale, and who take care of both young children and elderly parents.

- Labour market changes and technological changes increased job insecurity, elevated work demands and blurred the boundary between work and family.⁷³³

The study found that for many Canadian workers, the conflict between their family responsibilities and their paid jobs has become more acute in large part because their work schedules have shifted away from standard and predictable daylight hours. Over the 1990s in particular, the incidence of rotating shifts, fixed shifts, and atypical work hours increased. Contrary to widespread belief, most Canadian workers are not offered any flexibility in their work schedules to accommodate family life. The study examined the data and found that:

*"The percentage of respondents using the most desired family-friendly flexible work arrangements (flexitime and telework) has not changed over the decade and remains relatively low (approximately 20% work flexitime and 1% telework)."*⁷³⁴

Many working couples with children also do what is called "off-shifting," whereby they arrange their work schedules so that they and their partner can share and alternate child-care responsibilities. The study points out that while this arrangement may benefit children by having at least one parent present at most times, it can sharply reduce the time that partners spend together. The effect of "off-shifting" on marriages remains "unknown."⁷³⁵ The study concluded that:

*"The links between hours in work and role overload, work-life conflict, burnout and physical and mental health problems suggests that these work loads are not sustainable over the long term."*⁷³⁶

The study also found that work-life conflict is resulting in:

- More stress – now twice as prevalent as it was 10 years ago.
- Increased absenteeism – employees experiencing high levels of work-life conflict are away from work three times as often as those with low work-life conflict.
- Lower job satisfaction – job satisfaction among workers has decreased by nearly 30% since 1991.
- Lower commitment to employers – survey results show that employee commitment has decreased by 24% since 1991.⁷³⁷

Stress resulting from the "juggling" of work and family responsibilities also take its toll on mental and physical health. For many, the stress from work spills over into family life and vice versa. According to one study that collected data from a sample of married women employed as blue-collar workers, 56% reported spillover stress from either or both work and family

⁷³³ Higgins, Christopher, and Linda Duxbury. 2002. *The 2001 National Work-Life Conflict Study: Report One*. Health Canada. Ottawa. p. 4. Available from <http://www.hc-sc.gc.ca/pphb-dgspsp/publicat/work-travail/>. Accessed September 3, 2002.

⁷³⁴ Ibid. p. 9.

⁷³⁵ Ibid. p. 10.

⁷³⁶ Ibid. p. 11.

⁷³⁷ Preliminary findings were summarized in Canadian Policy Research Networks. 2001. "New Data Show Increasing Conflict Between Work and Rest of Life." *Networknews*. No. 16. Ottawa. p. 1.

domains.⁷³⁸ Women who experienced the most spillover stress from work to home reported the most work stress and when it was the other way around, they experienced more marital stress. Spillover stress, in general, resulted in more depression and anxiety-related symptoms. These women also tended to drink more than those who did not experience spillover stress.⁷³⁹

Clearly, the conflict between work and family has effects not only on the health of the individual experiencing the conflict but also on the quality of parenting and the ability of working parents to nurture their families. "Parental time deficits" have been associated with children being less resilient and resourceful, receiving poor grades in school and having poor study habits. Adolescents who receive little attention from their parents are at a greater risk of abusing substances and getting pregnant.⁷⁴⁰

According to Alan Wells, director of the Government Basic Skills Agency in Britain, long working hours and the use of television as baby-sitter *in loco parentis*, are to blame for "young children being unable to talk properly" and "families being unable to chat." Wells argues that long work hours often mean that families don't eat meals together and that children spend excessive time sitting in front of televisions and computers, all of which has had an adverse impact on children's learning.⁷⁴¹

It is likely that healthy diets have suffered in the transition from home cooking to greater reliance on prepared fast food that has accompanied the growth of dual earner families and long work hours that leave no time for shopping, cooking, and washing dishes. A Harvard University study of 16,000 children found that the more families ate together, the more fruits and vegetables and the less fried food were consumed. Children who had regular family meals also had a far higher intake of important nutrients, like calcium, fiber, folate, iron, and vitamins B and E, and had healthier diets at other times of day as well than children who rarely ate family meals.⁷⁴²

Commenting on the study results, Dr. Michael Rosenbaum, associate professor of clinical pediatrics and medicine at New York Presbyterian Hospital, Columbia University, remarked: "In terms of teaching your children good habits, the dinner table is great.... There is a tremendous amount of data to show that healthy habits learned early persist into adulthood."⁷⁴³ Conversely, the current trend away from family meals to fast food and eating out may therefore have negative

⁷³⁸ Bromet, Evelyne J, Mary Amanda Dew, and David K. Parkinson. 1990. "Spillover Between Work and Family. A Study of Blue-collar Working Wives." In *Stress Between Work and Family*. John Eckenrode and Susan Gore (eds). Plenum Press. New York. pp. 133-151.

⁷³⁹ Idem.

⁷⁴⁰ Findings reported by 32 Hours. 1999. *Health Effects of Long Work Hours*. Available from <http://web.net/32Hours/Health%20Effects%20v2.htm#factors>. Accessed July 17, 2002. Original sources of findings: Covell, Katherine. CBC Radio Commentary (November 20, 1998); Goldberg, Wendy A., Ellen Greenberger and Stacy K Nagel. 1996. "Employment and Achievement: Mothers' Work Involvement in Relation to Children's Achievement Behaviours and Mothers' Parenting Behaviours." *Child Development*. Vol. 67, no. 4.; Parcel, Toby L., Rebecca A. Nickoll and Mikael J. Dufer. 1996. "The Effects of Parental Work and Maternal Nonemployment on Children's Reading and Math Achievement." *Work and Occupations*. Vol. 23, no. 4.

⁷⁴¹ Owen, Glen. 2003. "Daily grunt of families who don't know how to chat." *Times Online*. January 17, 2003. Available from <http://www.timesonline.co.uk/article/0-2-537234.00.html>. Accessed January 17, 2003.

⁷⁴² Epstein, Randi Hutter. "Linking Children's Health to Family Meals: Study shows families who eat together have better eating habits." *The New York Times*. Reprinted in *The Chronicle-Herald*. Halifax. March 29, 2000.

⁷⁴³ Idem.

health impacts into adulthood, and may be contributing to the epidemic of obesity in North America.

Long work hours can also lead to strained personal relationships, especially between spouses, eventually leading to family breakdown. The costs of overwork associated with family breakdown are difficult to determine, because it is not known what proportion of divorce/separation is attributable to long work hours. However, this lack of available data does not mean the costs are negligible. Earlier, it was noted that one estimate pegs the costs of family breakdown in the U.S. at \$69 billion a year (\$2001).⁷⁴⁴

In the U.S. it is estimated that employees experiencing marital problems lose an average of 15 work days per year, far greater than the average, and that marital distress costs U.S. companies US\$6.8 billion per year in lost productivity.⁷⁴⁵ In Canada, the Conference Board of Canada found that employees with difficulties balancing work and family life missed an average of 4.5 days of work over a six-month period. Those without such work-family conflict missed an average of 2.5 days over six months.⁷⁴⁶

In sum, the direct and indirect costs associated with the impact of long work hours on family life include:

- Health effects on stressed individuals and their partners, including depression, burnout, and heart disease, as well as numerous other stress-related disorders;
- Organizational costs, including higher absenteeism and lower productivity;
- Costs of family breakdown (lawyers fees, lost productivity in the work place, human costs, societal costs, and further health costs);
- Effects on children (short and long-term health effects, and adverse psychological and learning impacts of "parental deficit" and family breakdown)
- Costs associated with increased drug and alcohol abuse;
- The long-term costs associated with children being socialized by television sets instead of by their parents;
- Long-term societal costs associated with the deterioration of family life due to increased parental absence from the home. According to one analyst:

"At the end of the twentieth century society faces a crisis of care-giving, a direct result of the 'time crunch' that now characterizes the female life course."⁷⁴⁷

In Part 3 of this report we shall examine ways in which work schedules can be changed to accommodate family life more effectively.

⁷⁴⁴ Cobb, Clifford, Mark Glickman, and Craig Cheslog. *The Genuine Progress Indicator, 2000 Update*. Redefining Progress Issue Brief. December, 2001. Available from http://www.redefiningprogress.org/publications/2000_gpi_update.pdf. Accessed August 24 and 25, 2003. p. 3.

⁷⁴⁵ 32 Hours, 1999, op. cit., p. 5.

⁷⁴⁶ Idem.

⁷⁴⁷ Myles, John. 1991. "Women, the Welfare State and Care-giving." In *Canadian Journal of Aging*. Cited in Frederick, Judith A. 1995. *As Time Goes by...Time use of Canadians. General Social Survey*. Statistics Canada. Minister of Industry. Ottawa. pp. 6-7.

7.6 Work and Leisure

"A poor life this if, full of care, we have no time to stand and stare."

– William H. Davies

*"The world is too much with us,
late and soon
Getting and spending, we lay waste our powers;
Little we see in Nature that is ours;
We have given our hearts away, a sordid boon!"*

– William Wordsworth

"Time – all men neglect it; all regret the loss of it; nothing can be done without it."

– Voltaire

In the 1950s, the promise of new technologies and skyrocketing productivity led many academics to predict that by the year 2000 we would have a 20-hour workweek.⁷⁴⁸ Imagine what could have been done with all that leisure time – more vacations, more books to read, more time to spend with family and friends, more time just to live. Writers in the 1950s and 1960s regularly imagined such a world, and speculated about the massive social adjustments that would be required to accommodate the anticipated explosion in free time.

Instead, in a cruel irony, leisure time is shrinking for many people, and work hours are expanding. Even weekends, once the refuge from work for many, have been invaded by work. According to one Statistics Canada analysis: "Changes in the way we live – from more women working full-time to 24-hour just-in-time production schedules and the growth of self-employment – have changed many people's relationship to Saturday and Sunday." Statistics Canada data confirm that Canadians who work full-time use the weekend to do more work, both paid and unpaid.⁷⁴⁹

Across the Atlantic, the situation is similar. A recent survey revealed that more than half of British full-time workers are so tired they would prefer to sleep than have more sex, and would happily swap a pay raise for a shorter workweek.⁷⁵⁰ In that country, 42% of full-time workers have a workweek longer than 48 hours – a higher proportion than any other country in the European Union. Thirty-five per cent of those surveyed reported that work was interfering with family responsibilities. The poll also found that 58% of employed women and 49% of employed men are too busy working to enjoy their free time.⁷⁵¹

⁷⁴⁸ Lightman, Alan. 2002. "Prisoners of the Wired World." *Globetechnology*. March 16, 2002. Available from <http://www.globetechnology.com>. Accessed March 17, 2002.

⁷⁴⁹ Silver, Cynthia and Susan Crompton. 2002. "No Time to Relax? How Full-time Workers Spend the Weekend." *Canadian Social Trends*. Catalogue no. 11-008. Statistics Canada. Ottawa. p. 20.

⁷⁵⁰ Survey of 1,113 UK adults who work full-time was conducted by ICM Research for *The Observer*, and reported in *The Observer*. "Too Tired for Fun or Sex." *The Observer*. June 29, 2003. Available from http://observer.guardian.co.uk/uk_news/story/0,6903,987105,00.html. Accessed June 30, 2003.

⁷⁵¹ Idem.

Similarly, in 1992, half of Canadian mothers with full-time jobs and one in three fathers with full-time jobs said their lives were too busy to have any fun.⁷⁵² For a large segment of the working population, leisure time is shrinking.

One hundred years ago, a typical couple with children together worked an average of 111 hours per week, with households generally consisting of one full-time earner working about 59 hours a week and one full-time homemaker putting in about 52 hours a week. By 2000, with the rise of dual earner families, combined family work hours increased substantially and couples with children clocked an average of 137 hours a week of paid and unpaid work.⁷⁵³ Full-time employed dual-earner parents were working nearly 145 hours a week, when both paid and unpaid work are considered.⁷⁵⁴ This shift is largely due to the dramatic increase in the number of women with paid work.⁷⁵⁵

In 2000 in Canada, both parents worked in 65.6% of two-partner families.⁷⁵⁶ Couples in general have less time for leisure than unmarried individuals, and couples with children have even less.⁷⁵⁷ Table 21 shows how leisure time declines with marriage and with raising children. On average, married people have less free time in a day than single people do and married people with young children have the least amount of free time.

Table 21. Leisure time in Canada, 1998.

Status	Leisure Time (No. Of Hours/Day)*	
	Men	Women
single, no children	6.2	6.0
married, no children	5.4	4.9
married with children under 25	4.4	4.3
married with children, working full-time	3.6	3.6

*averaged over a 7-day week

Note: For the first three rows in this table, leisure time data are averages and are not broken down for those working full-time or part-time. The fourth row gives the leisure hours of full-time dual-earner parents, from Table 22 below.

Source: Fast et al., 2001, op. cit., pp. 20-23. Based on Statistics Canada, General Social Survey data, 1998.

In general, those with the most family responsibilities tend to work the longest days (paid and unpaid) and to have the least amount of leisure time. The 1998 General Social Survey time use data indicate that the "struggle to juggle" is most difficult for married parents working full-time. Men in this group averaged 48.6 hours and women 38.8 hours per week of paid work and work-

⁷⁵² Frederick, 1995, op. cit., p. 57. Based on data from General Social Survey, 1992.

⁷⁵³ See Table 1 in Part 1 for details and sources.

⁷⁵⁴ See Chapter 3, Section 3.4 titled Total Work Hours in Part 1 of this report for more detail.

⁷⁵⁵ According to Barbara Ehrenreich (1989) "crude economic pressure" as a result of the declining earning power of men in addition to the women's movement were responsible for more and more women entering the paid workforce. p. 213.

⁷⁵⁶ Statistics Canada. 2002b. *Income in Canada, 2000*. Income Statistics Division. Catalogue no. 75-202-X1E. Minister of Industry. Ottawa. p. 125.

⁷⁵⁷ Frederick, 1995, op. cit., pp. 7-8.

related activities, including commuting. This was up 2.0 hours a week since 1992 for both men and women. Table 23 shows the paid and unpaid work hours for full-time dual earner parents in 1998.

Table 22. Paid and Unpaid Work of Full-time Dual-Earner Parents, Canada, 1998.

	Hours of Work/Week	Total Work Hours	Total Leisure Time**
Paid work, fathers	48.6	71.4	25.2
Unpaid work, fathers	22.8		
Paid work, mothers	38.8	73.2	25.2
Unpaid work, mothers	34.4		

** Figure of 25.2 hours per week is derived by multiplying the average for full-time married couples of 3.6 hours per day averaged over a 7-day week by 7 days.

Note: Total work hours of both men and women are 144.6 hours. This is higher than the 137 hours cited in Table 1 (Part One of this report) because here it represents the hours of parents who both work full-time. Table 1 represents the hours of parents who work full-time and part-time.

Source: Statistics Canada. 1999b. "General Social Survey: Time Use." *The Daily*. November 9, 1999. Available from <http://www.statcan.ca/Daily/English/>. Accessed April 30, 2003.

As noted earlier, for this segment of the working population, the decline in leisure time has been the direct result of more hours spent working. Lone-parent mothers who were employed full-time have an equally small amount of leisure time, as they bear the full responsibility of unpaid household work alone, on top of their regular work hours. According to Statistics Canada, full-time employed single mothers put in an average 75-hour workweek, when paid and unpaid work are combined – more than any other demographic group.⁷⁵⁸

But when other segments of the working population are included, it is less clear what is happening to leisure time. Robinson and Godbey, in their 1997 book *Time for Life*, use American time-use data dating back to the 1960s to argue that on average free time actually increased – by five hours a week between 1965 and 1985. They contend that the prevailing sense of lack of time or "time famine" stems from the fact that people today are "doing more and doing things more quickly and simultaneously."⁷⁵⁹ They argue that television watching, which occupies a large portion of the average American's (and Canadian's) spare time, is partly to blame for the sense that leisure is on the decline.⁷⁶⁰

⁷⁵⁸ Statistics Canada. 1999b. "General Social Survey: Time Use." *The Daily*. November 9, 1999. Available from <http://www.statcan.ca/Daily/English/>. Accessed April 30, 2003.

⁷⁵⁹ Every 10 years in the U.S. since the 1960s the *America's Use of Time Project* has collected several thousand time use diaries, in which Americans record their daily activities on an hourly basis. Using these data, Robinson and Godbey reach different conclusions than did Schor. In fact they disagree with Schor's use of time estimate data to reach her conclusions, pointing out methodological problems with the data. A more detailed discussion regarding this debate over trends in leisure in the U.S., as well as an exposition of these differing view points can be found in Chapter 3.

⁷⁶⁰ According to Robinson and Godbey, Americans had an average of 39.6 hours of free time per week in 1985. Of this, nearly 40% or 15 hours a week were spent watching television. Canadians watched just as much television as Americans. Robinson and Godbey, 1997, op. cit., pp. 124-126.

This general increase in leisure cited by Robinson and Godbey, if correct, masks the trends occurring among particular sectors of the working population (particularly the loss of leisure among full-time employed parents and lone-parents). Time diaries also make no distinction between the "constrained" and "unconstrained" labour force, and therefore include underemployed workers. Their inclusion, according to Juliet Schor, has a large impact on hours of work and free time, "imparting a downward bias to estimates of hours," and an upward bias to estimates of leisure.⁷⁶¹

Robinson and Godbey also suggest that a decline in work time is causing the perceived increase in leisure time. However, a comparison of Canadian time-use surveys from 1986, 1992, and 1998 does not support this conclusion. Instead, it shows that leisure is occupying a larger share of the day for some groups, but not because work time is decreasing. Instead, the surveys show that people are sleeping less. The time use data suggest that the extra leisure time has come at the expense of personal care activities (i.e. sleeping, eating, washing, and dressing).⁷⁶²

Many other researchers have found, using work-estimate data, that in fact work time has increased and leisure has decreased.⁷⁶³ Despite disagreements on methodology and sources, the literature overall indicates clearly that a large segment of working men and women, particularly full-time earners with children, have less free time today than they did in the 1960s.⁷⁶⁴

7.6.1 Free Time and Personal Time in Atlantic Canada⁷⁶⁵

The changing work patterns described above have affected the free time available to women and men in the four Atlantic provinces for socializing, reading, sports, movies and other relaxation, as well as for personal care like sleep and meals. These changes again have health impacts, although they are not yet well documented and understood. What is known is that adequate sleep is necessary for good health; that stress is influenced by time available for relaxation; and that stress, in turn, can trigger a variety of ailments. Stress has been documented as the most costly health risk factor.⁷⁶⁶

When free time and personal care time are added, women lost personal time in all four Atlantic provinces between 1992 and 1998. In 1992, women in all four Atlantic provinces still had more free time than women in other parts of Canada. By 1998 rates of free time and personal-care time for women in the Atlantic region were at or below the Canadian level. In some cases, as in Nova Scotia, the changes in work patterns have manifested in reduced free time. In the other three Atlantic provinces, they have reduced women's sleep and personal-care time. In PEI, where men

⁷⁶¹ Schor, 2000, op. cit., p. 15.

⁷⁶² Fast, Janet, Judith Frederick, Nancy Zukewich and Sandra Franke. 2001. "The Time of our Lives." In *Canadian Social Trends*. Statistics Canada. Catalogue No. 11-008. Ottawa. p. 20.

⁷⁶³ The controversy over which data to use and whether work time has increased and leisure time has decreased, is explored in further detail in the Appendix of this report.

⁷⁶⁴ For more information on this controversy please refer to the Appendix of this report.

⁷⁶⁵ The following section is excerpted from Colman, Ronald. 2003. *Women's Health in Atlantic Canada: January 2003 Update: Vol. 1: Social Determinants of Health*. GPI Atlantic and Atlantic Centre of Excellence for Women's Health. Halifax. pp. 68-71.

⁷⁶⁶ On the health costs of stress, see for example, Geotzel, Ron (ed). "The Financial Impact of Health Promotion." *American Journal of Health Promotion* 15 (5), May / June, 2001.

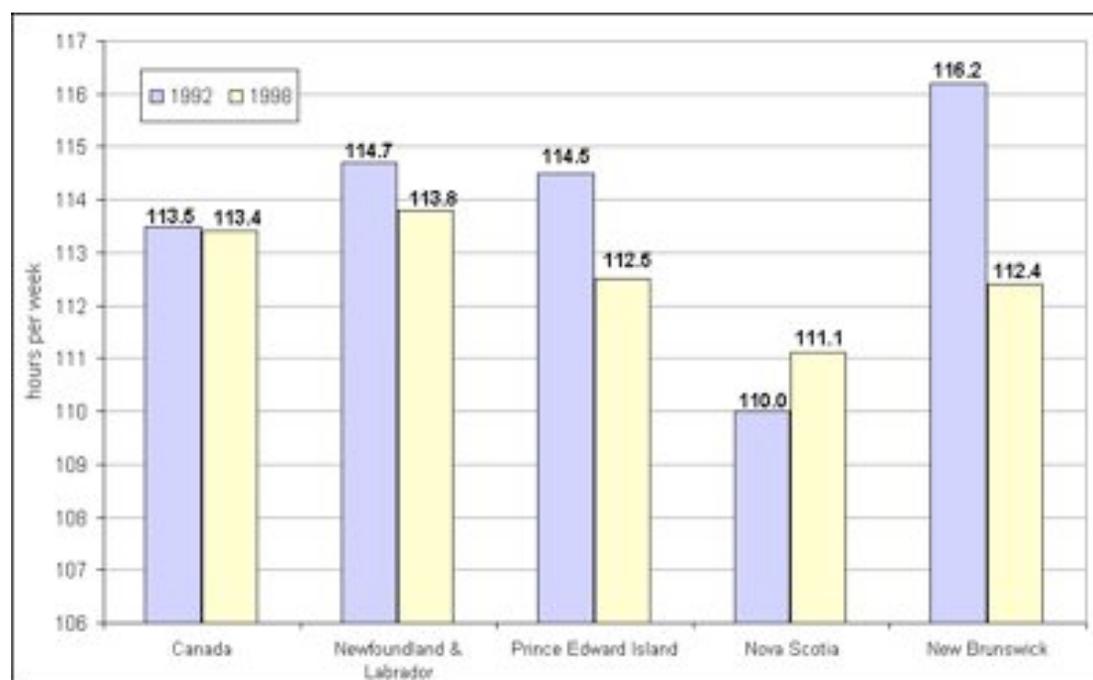
have sharply increased their share of unpaid household work, the extra work hours have also reduced free time for men (Table 23 and Figure 53).⁷⁶⁷

Table 23. Free time and personal care (including sleep), Canada and Atlantic provinces, 1992 and 1998 (hours per week).

		Canada		Atl.	Nfld		PEI		NS		NB	
		1992	1998	1998	1992	1998	1992	1998	1992	1998	1992	1998
Free time	All	40.0	40.4	42.2	41.8	44.8	42.5	41.4	43.3	43.3	39.9	39.3
	Male	42.0	41.9	45.3	44.2	49.6	46.3	43.9	43.4	45.9	41.7	41.5
	Fem	38.2	39.0	39.4	39.6	40.1	38.9	39.0	43.2	40.8	38.4	37.1
Pers. care	All	73.6	73.0	72.3	73.7	70.9	71.9	71.4	71.3	72.5	75.0	72.5
	Male	72.0	71.6	70.5	72.2	70.4	68.0	69.3	69.1	71.6	72.2	69.5
	Fem	75.3	74.4	74.0	75.1	73.7	75.6	73.5	73.4	73.3	77.8	75.3

Source: Statistics Canada, *General Social Surveys* 1992 and 1998.

Figure 53. Free time and personal care time combined, women in Canada and four Atlantic provinces, 1992 and 1998 (hours per week).



Source: Statistics Canada, *General Social Surveys* 1992 and 1998.

⁷⁶⁷ Statistics Canada. 1999c. *General Social Survey: Overview of the Time Use of Canadians*, November, 1999, Table 1: Canada, regions and provinces, special tabulations run for GPI Atlantic; Statistics Canada. *Initial Data Release from the 1992 General Social Survey on Time Use*. Catalogue no. 11-612, #30, Table 1.

While the changes may not seem dramatic in terms of absolute hours, it must be noted that these losses have occurred in a very short period of time. The consistency of the pattern across all four provinces may indicate a longer-term trend that could have serious consequences if current rates of personal time loss and increased time stress continue unabated. If free time is a core element of the quality of life of which Atlantic Canadians are justly proud, then the recent changes in women's time patterns in this region may signify the depreciation of a valuable regional asset.

In 1985, across the country, women registered lower levels of chronic stress than men, by more than 10% in the Atlantic provinces, and 6% nation-wide. Ten years later, female stress levels across Canada were 20% above male levels. Just as significantly, the regional gap appears to be closing, with Nova Scotia and New Brunswick gradually moving towards national levels of stress.⁷⁶⁸

The recent 2000/01 Canadian Community Health Survey shows women in Nova Scotia and New Brunswick with stress levels still 12% and 15% respectively below those of their counterparts in the rest of Canada. As in all previous surveys, Newfoundland and PEI still register the lowest stress levels in the country.⁷⁶⁹ But the time-use data above indicate more dramatic time losses for women in Atlantic Canada than for women in the rest of the country, and a gradual convergence with national levels of free time and personal time. If adequate free time and personal-care time are essential elements of relaxation and a buffer against stress, these present work and social trends may well be precursors of a gradual convergence of stress levels.

Instead, the time may be ripe for Atlantic Canada to learn from European countries that have sought to increase free time and quality of life by reducing work hours. International time-use studies, for example, show that people have 11 hours more free time per week in Denmark than in Canada. This is due not only to shorter paid work hours and longer vacations, but to shorter unpaid work hours. Danes spend seven and a half hours less per week on housework than Canadians (Figure 54).⁷⁷⁰

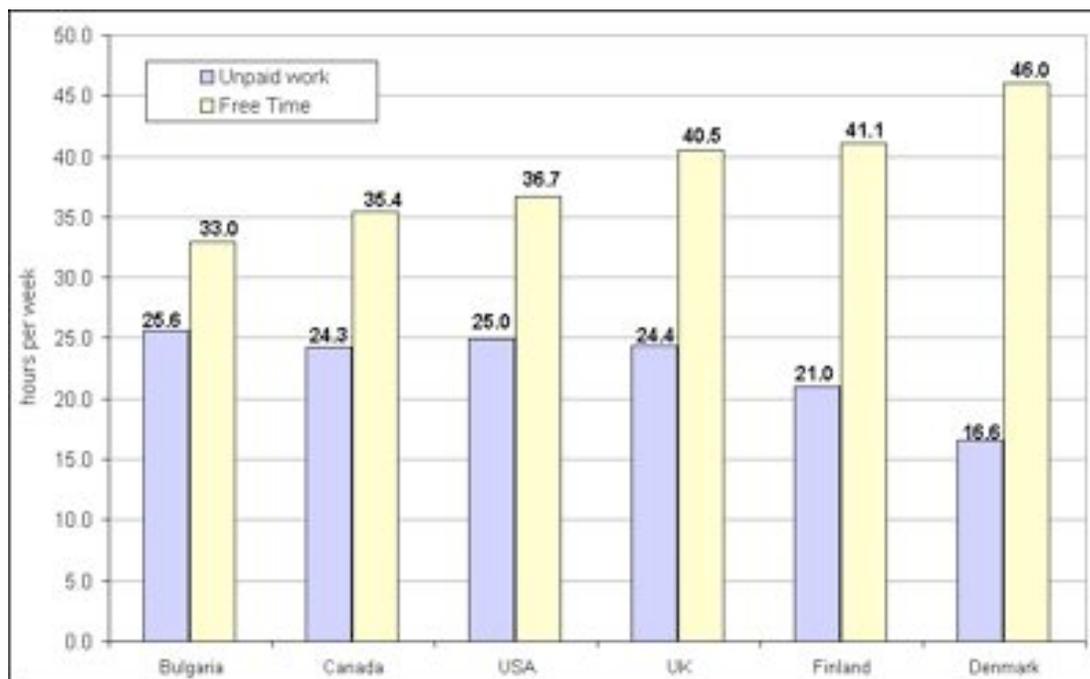
The results may be partly a function of the propensity for smaller living spaces that require less cleaning time. Denmark, for example, has been a world leader in creating more efficient "co-housing" units that have smaller individual residences and shared facilities that can reduce the burden of domestic chores. These models cannot be explored in detail in this brief overview, but they are clearly worthy of careful study for their potential to reverse the trends toward overwork and stress indicated in this chapter.

⁷⁶⁸ Statistics Canada. 1999d. *Health Statistics*. CD-ROM. Table 00060139.IVT: "Levels of Stress," and Health Canada. 1999. *Statistical Report on the Health of Canadians*. Federal, Provincial and Territorial Advisory Committee on Population Health for Meeting of Ministers of Health. Ottawa.

⁷⁶⁹ Statistics Canada. "Life stress, by sex, household population aged 18 and over, Canada, provinces, territories, health regions and peer groups, 2000/01." Available from: <http://www.statcan.ca/english/freepub/82-221-XIE/00502/tables/html/2336.htm>.

⁷⁷⁰ Source: Harvey, Andrew. 1995. "Canadian Time Use in a Cross-National Perspective." *Statistics in Transition*. Vol. 2, no. 4. p. 603.

Figure 54. Average weekly hours, unpaid household work and free time, population aged 20-59, selected countries (hours).



Note: Definitions of unpaid work have been adjusted for comparability.

Source: Harvey, Andrew. 1995. "Canadian Time Use in a Cross-National Perspective." *Statistics in Transition*.

7.6.2 Leisure time by Income

"You either have time or money, but not both," is an old saying that speaks to the difference between how much free time is enjoyed by those with and without money. According to Statistics Canada's 1998 General Social Survey, high-income Canadians spend more time on paid work than low-income Canadians – on average 15% more time, or 46 hours compared with 40 hours.^{771 772} More than 80% of high-income Canadians feel rushed, compared with 73% in low-income households. Both groups wish they had more time for their children.

Among high-income households, 56% reported being satisfied with their work hours while 20% preferred to work less hours for less pay. Only 8% were willing to work more hours for more pay. Among low-income households, nearly one-third stated they would be willing to work more hours for more pay, while only 6% would work less time for less pay.⁷⁷³

⁷⁷¹ For the purposes of the 1998 General Social Survey, a household was classified as high income if total household income was equal to or greater than \$80,000 a year, and low income if total household income was \$30,000 or less.

⁷⁷² Williams, Cara. 2002. "Time or Money? How High and Low Income Canadians Spend their Time." *Canadian Social Trends*. Catalogue no. 11-008. Statistics Canada. Ottawa. p. 8

⁷⁷³ Statistics Canada. 1995. Survey of Work Arrangements. Cited in Williams, Cara. 2002. "Time or Money? How High and Low Income Canadians Spend their Time." *Canadian Social Trends*. Catalogue no. 11-008. Statistics Canada. Ottawa. p. 8.

People in low-income households spend considerably more time on unpaid work than do their high-income counterparts. For instance, low-income Canadians between 24 and 54 years of age spend an average of 50 minutes a day on unpaid chores while those on high incomes spend 30 minutes.⁷⁷⁴

On average, low-income Canadians enjoy 14% more leisure time than those with high incomes. In an average day, those on low incomes have 317 minutes (or 5.3 hours) of leisure while their high-income counterparts have only 277 minutes (or 4.6 hours) of free time. Table 24 compares the paid and unpaid work hours of high and low-income households in 1998.

Table 24. Paid and Unpaid Work Hours and Leisure time of High and Low-Income Households, Canada, 1998.

	High Income	Low Income
Total (millions)	2.4	1.9
% employed in last 12 months	97	72
Average number of hours worked for pay in last week	46	40
Average number of weeks worked for pay in last year	50	41
Average number of hours worked (unpaid) on household chores per day (including housework, meal preparation, and shopping)	1.97	2.6
Leisure time in hours per day	4.6	5.3

Source: Williams, Cara. 2002. "Time or Money? How High and Low Income Canadians Spend their Time." In *Canadian Social Trends*. Catalogue no. 11-008. Statistics Canada. Ottawa. p. 8.

7.6.3 Vacation Time

Workers outside Canada enjoy as much as three times more vacation time each year than Canadians (or Americans) do. Based on the amount of vacation time provided in relation to years of service, Canadian workers would have to work, on average, 15 years before they received the vacation time mandated by some European countries after just one year of work (Figure 55).⁷⁷⁵

By contrast, in most European countries, the average number of paid vacation days doubled from 2-3 weeks in the mid-1950s to 4-6 weeks in the early 1980s. In the U.S., the corresponding change during this period was only from 1.5 weeks to 2.5 weeks a year.⁷⁷⁶

Today, according to a recent *Washington Post* article, the U.S. enjoys the "stingiest vacation allotment in the industrialized world." The article reported that, on average, Americans take 8.1

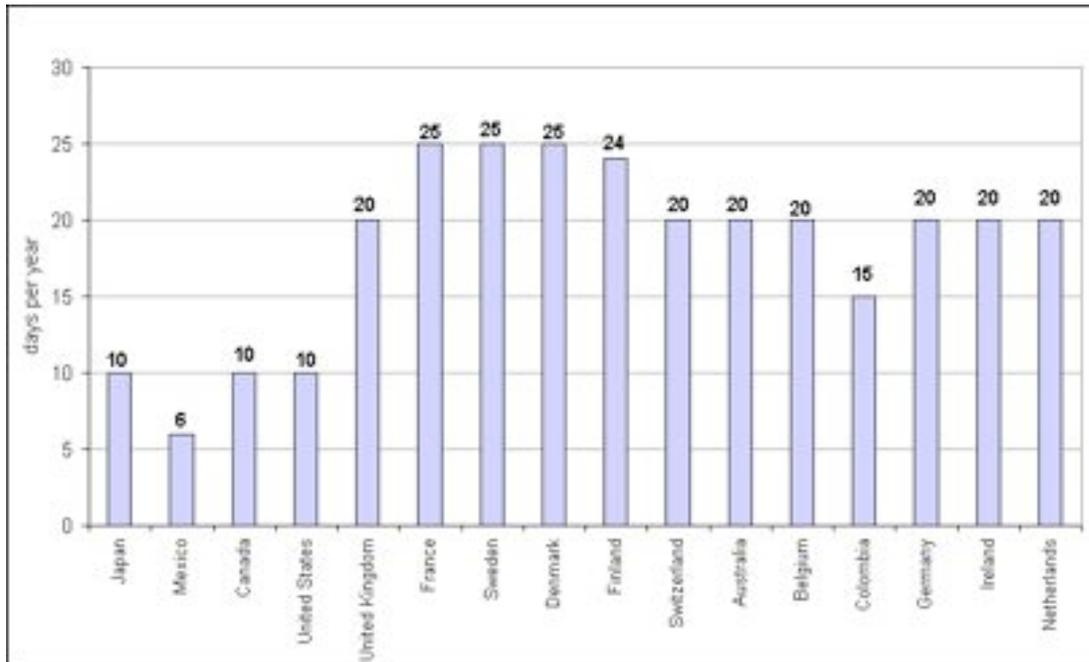
⁷⁷⁴ Ibid. p. 8. Differences in unpaid work are likely related not only to the longer paid work hours of high-income groups, but also to the fact that high-income households are more able to afford cleaning services as well as meals outside the home than their low-income counterparts.

⁷⁷⁵ Hewitt Associates. 2001. *Summer Vacation Highlights Global Difference in Paid Time Off*. Available from <http://www.hewitt.com/hewitt/resource/newsroom/pressre/2001/06-06-01.htm>. Accessed October 24, 2002. Hewitt Associates is a consulting firm that deals with human resources issues.

⁷⁷⁶ Organization for Economic Co-operation and Development. 1998. *Employment Outlook*. OECD. Paris. p. 154.

days of vacation after one year of service, and 10.2 days after three years. "Vacations are going the way of real bakeries and drive-in theatres, fast becoming a quaint remnant of those pre-downsized days when so many of us weren't doing the jobs of three people."⁷⁷⁷

Figure 55. Vacation Time Mandated for Employees with One Year Service, Various Countries, 2001 and 2002 (days per year).



Sources: All European countries from European Industrial Relations Observatory (EIRO). 2003. *Working Time Developments – 2002*. Available from: <http://www.eiro.eurofound.ie/2003/03/Update/TN0303103U.html>. Accessed June 16, 2003; All other countries from: Hewitt Associates. 2001. *Summer Vacation Highlights Global Difference in Paid Time Off*. Available from: <http://www.hewitt.com/hewitt/resource/newsroom/pressre/2001/06-06-01.htm>. Accessed October 24, 2002. Hewitt Associates is a consulting firm that deals with human resources issues.

While two weeks vacation is required after one year of employment in Canada, workers actually receive various amounts of vacation time depending on where they work, whether they are unionized, and how long they have been employed. As Table 25 indicates, unionized workers receive more vacation time than non-unionized workers, with 60% receiving more than 16 days per year, compared with 31% of non-unionized workers. Overall, one in four Canadian workers enjoyed more than four weeks paid vacation a year in 1995.

⁷⁷⁷ Robinson, Joe. "The Shrinking American Vacation." *The Washington Post*. July 27, 2003. p. B01. Article based on data from the U.S. Bureau of Labor Statistics.

Table 25. Paid Vacation Leave, Canada, 1995.

	10 Days or Less (%)	11-15 Days (%)	16-20 Days (%)	More than 20 Days (%)	Total
All	28	28	19	25	100%
Men	27	27	18	28	100%
Women	29	30	20	22	100%
Union	16	23	24	36	100%
Non-union	37	32	15	16	100%

Source: Jackson and Robinson, 2000, op. cit., p. 83. Original source of data: Statistics Canada, *Survey of Work Arrangements*, 1995.

7.6.4 Cost of Lost Leisure

Free time is essential to a high quality of life, and Aristotle even viewed it as a prerequisite for democracy and citizenship, as it allowed time for contemplation and debate of vital state issues.⁷⁷⁸ Yet, a reduction in free time and the consequent loss of wellbeing do not register anywhere in our current accounting system. Since free time is not traded in the market economy in the way that labour time is, it remains invisible in our conventional accounts and measures of progress. More accurate and comprehensive measures of wellbeing like the Genuine Progress Index include the value of leisure time lost or gained.

The loss of leisure also has implications for our health. Strong scientific evidence suggests that leisure acts as a "buffer" between stress and wellbeing. In other words, work stress and the physical and mental ailments that often accompany it, can be reduced by quality leisure time.⁷⁷⁹

Redefining Progress estimated that the cost of lost leisure time in the U.S. in 2000 was US\$336 billion (\$1996).⁷⁸⁰ Leisure was defined as the amount of time left over in a day after hours for sleep, other personal necessities like washing and eating, and work were subtracted.

It was not possible at this time to calculate a value of for lost leisure time in Nova Scotia as too many variables are unknown. It is recommended that future updates of this report pay more attention to this important issue.

“Suppose that, at a given moment, a certain number of people are engaged in the manufacture of pins. They make as many pins as the world needs, working (say) eight hours a day. Someone makes an invention by which the same number of men can make

⁷⁷⁸ Aristotle. 1958. *Politics*. Ernest Barker (trans). Oxford University Press, New York.

⁷⁷⁹ Haworth, John T. 1997. *Work, Leisure and Wellbeing*. Routledge. New York. pp. 137-140.

⁷⁸⁰ Redefining Progress. 2000. *Eroding Economic Security: Genuine Progress Indicator Uncovers Dangers Hidden Behind Last Year's Economic Boom*. Press Release. Available from www.rprogress.org/media/releases/00125gpi.html. Accessed Jan. 9, 2003. p. 9; and Cobb, Clifford, Mark Glickman, and Craig Cheslog, *The Genuine Progress Indicator: 2000 Update*, Redefining Progress Issue Brief, December, 2001. Available from http://www.redefiningprogress.org/publications/2000_gpi_update.pdf. Accessed August, 25, 2003.

twice as many pins as before. But the world does not need twice as many pins: pins are already so cheap that hardly any more will be bought at a lower price. In a sensible world, everybody concerned in the manufacture of pins would take to working four hours instead of eight, and everything else would go on as before. But in the actual world this would be thought demoralizing. The men still work eight hours, there are too many pins, some employers go bankrupt, and half the men previously concerned in making pins are thrown out of work. There is, in the end, just as much leisure as on the other plan, but half the men are totally idle while half are still overworked. In this way, it is insured that the unavoidable leisure shall cause misery all round instead of being a universal source of happiness. Can anything more insane be imagined?"

Bertrand Russell⁷⁸¹

"A society that gives to one class all the opportunities for leisure and to another all the burdens of work dooms both classes to spiritual sterility."

Lewis Mumford⁷⁸²

⁷⁸¹ Russell, Bertrand. 1935. *In Praise of Idleness*. George Allen and Unwin Ltd. London. p. 17.

⁷⁸² Lewis Mumford, cited in Negrey, 1993, op. cit.

Chapter 8. The Costs of Non-standard Work and Growing Inequality

"There are no secret economies that nourish the poor; on the contrary, there are a host of special costs."

– Barbara Ehrenreich⁷⁸³

Increasing inequality in our society can partly be blamed on the growing disparity between the different kinds of work available – particularly between full-time, “permanent,” highly skilled work on the one hand, and insecure, temporary, marginal jobs on the other. Some labour market analysts refer to these insecure jobs as “precarious” jobs occupied by the growing ranks of “peripheral workers.” Bureaucrats sometimes refer to this group of workers as “the contingent labour force.”⁷⁸⁴ In *Whose Brave New World? The Information Highway and the New Economy*, Heather Menzies calls these kinds of jobs “work on the fringes” and argues that fancy language is used to hide the true meaning of who these people are: “the human equivalent of post-it-notes: marginal add-ons used briefly, then discarded, without a sound and without leaving a trace.”

Precarious work is, as the name implies, insecure, temporary, often part-time with no benefits, and typically low paying. Since this kind of work is temporary, it is often followed by a period of joblessness. Evidence on duration of unemployment indicates that it now takes considerably longer to find another job than it once did. For example, in Canada the proportion of those unemployed for 52 weeks or more in 1976 was 3.8%. This proportion soared to 16.3% in 1996 and then dropped to 9% in 2001, but is still more than double the levels of 25 years earlier. The jobless have experienced a similar increase in long-term unemployment in Nova Scotia – up from 2% in 1976 to 8.6% in 2001, after peaking in 1996 at 14.5%.⁷⁸⁵

In the last 25 years there has been a massive increase in the number of people working part-time who would rather be working full-time. In Nova Scotia, involuntary part-time employment is growing much faster than the voluntary types, and is driving the overall upward trend in part-time work. The proportion of involuntary part-timers more than tripled between 1976 and 1995, from 13.7% of all part-timers to a striking 43% (Figure 39). After the Labour Force Survey (LFS) questionnaire was revised in 1997, and new definitions of involuntary part-time work adopted, the figure was lowered to 29% in 1997 and then increased to 31% in 2001.⁷⁸⁶ In Canada,

⁷⁸³ Ehrenreich, 2001, op. cit., p. 27.

⁷⁸⁴ In his review of this report, Andrew Harvey noted that these workers were studied nearly 30 years ago and at the time were referred to as “marginal workers” in the “marginal work world.” Harvey, Andrew S. Professor of Economics and Director of Time Use Research Program, Saint Mary’s University, Halifax. Reviewer’s Comments. August 20, 2003.

⁷⁸⁵ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

⁷⁸⁶ Revisions were made to the definition of involuntary part-time work and to the LFS questionnaire in 1997, creating a break in the series. As a result, data from 1997-2001 are not comparable to earlier data, but comparisons can be made within each series. Before 1997 respondents who usually worked less than 30 hours/week in total in all jobs were asked their main reason for working part-time, and they were considered underemployed (or “involuntary” part-timers) if they worked part-time because they could not find a full-time job. In 1997, the LFS questionnaire was redesigned, and respondents who worked part-time in their *main* job were asked why they did so.

the rate of involuntary part-time work more than tripled from 10.6% in 1976 to 31.5% in the mid-1990s, and then fell to 26% in 2001. Figure 39 plots the involuntary part-time rates for Canada and Nova Scotia. Please note, as previously mentioned, that there was a break in the series in 1995 due to questionnaire and definitional revisions.

This increase in involuntary part-time work has created a competitive atmosphere, in which many workers are literally hanging on to their livelihoods by their teeth, unwilling to rock the boat for fear of losing their jobs. For employers, this means labour costs can be kept down, because part-time wages are usually lower than full-time wages, benefits are generally minimal if they exist at all, and having an army of part-time staff at their disposal allows employers greater flexibility in meeting demand without having to pay overtime. Laying off part-timers is also cheaper than laying off full-time employees. In addition, full-time employees fear being displaced by these contingent workers, having their previously secure work contracted out, and themselves joining the ranks of these temporary workers and thus losing their security and benefits. That fear, in turn, depresses wages among some full-time employees, as employers argue that competitive pressures will require layoffs unless employees accept wage restraints.

Because our conventional economic statistics focus on *numbers* of jobs, the *quality* of these jobs does not register in the way we currently measure progress. Further, the effects of poor quality work on mental and physical health as well as on society as a whole are also invisible, because many of these costs are currently counted as contributions to economic growth and prosperity. For instance, if job insecurity or job loss produces distress, depression, and anxiety that require drugs and medical attention, those expenditures boost the economy, since all spending on goods and services makes the GDP grow. If that depression leads to family breakdown, then consequent spending on lawyers and counselling for the children makes the economy grow again. That growth, in turn, is interpreted as a sign of prosperity and progress.

In the more accurate and comprehensive accounting system proposed in the Genuine Progress Index, health care expenditures, family breakdown, and the negative effects of growing inequality would register as costs rather than gains to the economy. This chapter looks at the growing gap between rich and poor in Canada, discusses some of the causes and effects of this gap that relate to the changing employment patterns described above, and provides some evidence on the actual costs of poverty for individual health, families, and society.

8.1 Growing Inequality

The Canadian wealth parade: "The parade was going on for ten minutes before we even realized it had started. That's because the people at the front of the parade were so small they were actually under the ground. These underground people represented Canadians who owned nothing of value, had no savings and were overall in debt. The rest of the wealth parade was much the same as the income parade, with heights rising only very gradually – until we came to the end. By the last second of the wealth parade, we were

If they did not work full-time because of "business conditions" or because they "could not find full-time work" they were defined as underemployed. Statistics Canada, 1997, op. cit., p. 17.

*witnessing some colossal people – Conrad Black and brother Montagu, with assets of \$200 million, walked past at an astonishing height of six miles. Shoe baron Thomas Bata was twelve miles high; Galen Weston, twenty-nine miles high; Charles Bronfman, thirty-two miles high. Finally we got to the last man in the parade – the wealthiest man in Canada – Ken Thomson, 198 miles high.*⁷⁸⁷

A new poverty indicator created by Human Resources Development Canada, called the Market Basket Measure (MBM), found that one in eight Canadians is poor.⁷⁸⁸ The MBM indicates that more than 13% of Canadians cannot afford to fill a basket of goods and services needed for a healthy lifestyle – including enough food for a nutritious diet, shelter, clothing, footwear, and transportation. By this measure, the incidence of poverty in Nova Scotia is even higher, with more than 16% of the population unable to afford the basic requisites of a healthy existence.⁷⁸⁹

Wealth is defined by Statistics Canada as assets minus debts, and is a measure of financial security, as it indicates the capacity of Canadians to weather a crisis precipitated by loss of income due to illness, job loss, or death of a partner. Overall the data indicate that the rich have become richer, and the poor poorer in this country. A recent report by the Canadian Centre for Policy Alternatives called *Rags and Riches: Wealth Inequality in Canada*, based on these Statistics Canada data, shows that the richest 50% of families now own 94.4% of the country's wealth and the bottom half own the remaining 5.6%. Table 26 shows how wealth was distributed in Atlantic Canada in 1999. In this region, the poorest five groups (50%) held 7.8% of the wealth, while the richest five groups (50%) held 92.2% of the wealth.⁷⁹⁰

Many Canadians do not have sufficient wealth to deal with an emergency such as illness, job loss, or death of a partner. Between 1970 and 1999 the poorest 10% of Canadians saw their average wealth (adjusted for inflation) decline by 28% from -\$8,031 in 1970 to -\$10,656 in 1999. In other words, in 1999, the debt of the poorest 10% of Canadians exceeded their assets by \$10,656. In Atlantic Canada (Table 26) the debt of the poorest 10% exceeded their assets by \$8,227. According to Kerstetter's analysis of the 1999 SLID data: "If the current income of the poorest 20% of family units suddenly vanished, they would have barely enough in assets to sustain their families for five weeks. This compares to more than four years for the richest

⁷⁸⁷ McQuaig, Linda. 1998. *The Cult of Impotence. Selling the Myth of Powerlessness in the Global Economy*. Viking. Toronto. p. 135. McQuaig says wealth, which includes savings, stocks, bonds, and real estate holdings is a "more meaningful measure of true economic power and command over the country's resources" than income alone. She demonstrates that the gap between rich and poor is large when incomes are taken into account, but "it pales in comparison to the wealth gap between the two groups."

⁷⁸⁸ MBM developed by Human Resources Development Canada and the Working Group on Social Development Research and Information. HRDC. 2003. *The Market Basket Measure? Constructing a New Measure of Poverty*. HRDC. Ottawa.

⁷⁸⁹ The basket of goods and services included enough food for a nutritious diet, shelter, clothing, footwear, and transportation. The price of filling the basket of goods and services varied from province to province. From CBC. *New Poverty Indicator shows 1 in 8 Canadians Poor*. May 27, 2003. http://www.cbc.ca/cgi-bin/templates/print.cgi?2003/05/27/poverty_basket030527. Accessed May 28, 2003.

⁷⁹⁰ Prior to 1993 the Survey of Consumer Finances (SCF) constituted the primary source of data on family income in Canada. In 1993, Statistics Canada introduced the Survey of Labour and Income Dynamics (SLID). In 1998 the SCF was no longer conducted. According to Statistics Canada the two surveys produce comparable results. Statistics Canada. 2003f. *Income in Canada, 2001*. Catalogue no. 75-202-XIE. Minister of Industry. Ottawa. p. 139.

20%."⁷⁹¹ During the same 30-year period, the average wealth of the wealthiest 10% of Canadians more than doubled from \$442,468 to \$980,903.⁷⁹²

Table 26. Distribution of Wealth and Average Wealth, Atlantic Canada, 1999.

	Distribution of Wealth %	Average Wealth **
Poorest 10%	- 0.7	- \$8,227
Second	0.2	\$3,011
Third	1.3	\$15,507
Fourth	2.7	\$33,077
Fifth	4.3	\$52,480
Sixth	6.1	\$75,124
Seventh	8.3	\$101,829
Eighth	11.4	\$140,616
Ninth	17.4	\$213,454
Richest 10%	48.9	\$604,669

** Average wealth overall in Atlantic Canada in 1999 was \$122,798.

Source: Kerstetter, Steve. 2002. *Rags and Riches. Wealth Inequality in Canada*. Canadian Centre for Policy Alternatives. Ottawa. pp. 17-18.

Shifting the analysis of inequality from wealth to income, it can be seen that in 1998 low income Nova Scotians (the bottom 20% of all households including economic families and unattached individuals) had the lowest average disposable income in the country at \$9,293.⁷⁹³ By 2001, Nova Scotia's poor ranked third with an average disposable income of \$10,604.^{794 795}

Between 1990 and 1998, all income groups in Nova Scotia saw their disposable income decline, but this decline was not evenly shared. In that period, the poorest 20% of households in the province lost nearly 25% of their disposable income while the rich lost less than 1%. In 1990 the richest 20% of households had 6.2 times as much disposable income as the poorest 20%. By 1998, they had 8.2 times as much. By 2001, the richest 20% of households had 7.7 as much as the poorest 20%.⁷⁹⁶ In fact, between 1990 and 2001 the poorer the household, the bigger the

⁷⁹¹ Canadian Centre for Policy Alternatives. Press Release for *Rags and Riches* report. December 12, 2002. Available from <http://www.policyalternatives.ca>. Accessed December 29, 2002.

⁷⁹² Kerstetter, Steve. 2002. *Rags and Riches: Wealth Inequality in Canada*. Canadian Centre for Policy Alternatives. Ottawa. pp. 4-5, 10, 16.

⁷⁹³ Statistics Canada. 2003e. *Income Trends in Canada, 1980-2001*. Catalogue no. 13F0022XCB. Minister of Industry. Ottawa. Disposable income has not been adjusted for family size.

⁷⁹⁴ Idem. New Brunswick's lowest quintile made \$10,560 in disposable income; British Columbia's lowest quintile made only \$9,702.

⁷⁹⁵ Disposable income is income after taxes and government transfers (social assistance, public pensions, EI benefits, tax credits, etc.). It is used here instead of market income because it is "the level at which most analyses concerned with welfare and well-being focus." Heisz, Andrew, A. Jackson, and G. Picot. 2002. *Winners and Losers in the Labour Market of the 1990s*. Statistics Canada. Catalogue no. 11F0019, no. 184. Ottawa. p. 4.

⁷⁹⁶ In 1998 the poorest 20% of Nova Scotia households survived on \$9,293 a year (in \$2001) (after taxes and transfers), while the richest 20% had more than \$76,000 in disposable income. Statistics Canada. 2003e. *Income Trends in Canada, 1980-2001*. Catalogue no. 13F0022XCB. Minister of Industry. Ottawa. Table 701.

percentage drop in income. However, while the poorest Nova Scotians lost the most in both percentage terms and in actual constant dollars – \$1,782 between 1990 and 2001 – the richest Nova Scotians gained \$5,512 in constant dollars, an increase of 7.2%.⁷⁹⁷

Growing inequality, declining real incomes, and increasing indebtedness among the poorest Canadians during much of the 1990s, brought increased financial insecurity for many Canadians, and even concerns about how to feed themselves.⁷⁹⁸ Statistics Canada's National Population Health Survey found that in 1998/99, 10% of Canadians, or 3 million people, experienced "food insecurity" – not being able to get enough food to eat or being unsure about getting it.⁷⁹⁹

Statistics Canada's most recent income data for 2001 shows that the average real disposable incomes of all families (economic families and unattached individuals) in Canada stagnated or declined between 1992 and 1997, except for the highest quintile which registered improvements starting in 1995. Between 1997 and 2001, improvements in disposable income were seen for all quintile groups. However, the data confirms that throughout the 1990s the greatest gains were enjoyed by the highest quintile.⁸⁰⁰ Between 1996 and 2001, inequality in income distribution between the quintiles grew. Statistics Canada found that the after-tax (disposable) income of the highest 20% (fifth quintile) of families in Canada in 1996 was 8 times that of the lowest quintile. By 2001 the richest 20% had disposable incomes that were 8.7 times that of the lowest 20%. Between 1993 and 2001 the gains by the highest quintile were largest and gains by the lowest quintile were smallest, contributing to further growth in inequality.⁸⁰¹

The recent improvements in disposable income for 3rd, 4th and 5th quintiles have not been experienced by the poorest 40% of households in Canada. In fact, the increase in income inequality and the growing gap between rich and poor has become increasingly pronounced in the last decade.⁸⁰²

Over the last two decades (1980-2001) there were "major changes" in the labour market. According to Andrew Heisz of Statistics Canada, some of the best evidence of this change is seen among distributional outcomes including:

- declining earnings of young men and recent immigrants;

⁷⁹⁷ Idem.

⁷⁹⁸ Between 1991 and 1996 real incomes for all economic families (two persons or more) in all quintiles, except the highest, showed little, if any, improvement. Statistics Canada. 2002b. *Income in Canada 2000*. Catalogue no. 75-202-XIE. Ottawa. Table 7.2.

⁷⁹⁹ Study cited in Wark, Bruce. 2002. "Deposits and Withdrawals." *The Coast*. December 26, 2002. Halifax. p. 5. For many this means going to a food bank. In 2002, the Canadian Association of Food Banks reported its highest numbers ever – an annual "hunger count" of nearly 750,000 people using more than 620 food banks across the country. This was up 12.5% from 1997 and nearly double the number of food bank users in 1989. Of those using the food bank in 2002, nearly 12% had jobs. Canadian Association of Food Banks. 2002. *Hunger Count 2002*. Available from http://www.cafb-acba.ca/public_e.cfm. Accessed May 6, 2003.

⁸⁰⁰ The term "quintile" simply means "one-fifth," and refers to five income groups ranked from the top 20% of incomes to the bottom 20% of incomes. To assess quintiles, all incomes in a given population are ranked from the lowest to the highest and then divided into five groups. Thus the bottom one-fifth of incomes is referred to as the "first quintile," the top one-fifth as the "fifth quintile," and the middle 20% of incomes as the "third quintile."

⁸⁰¹ Statistics Canada. 2003f. *Income in Canada 2001*. Catalogue no. 75-202-XIE. Ottawa. p. 74. and Table 7.2.

⁸⁰² Statistics Canada, 2003e, op. cit., Table 701.

- stable-family-income inequality reflecting the influence of the tax-transfer system;^{803 804}
- rising earnings of women in absolute terms, and relative to men, but persistence in the male- female wage gap;
- declining labour market attachment of low income persons;
- rising low income rates in cities associated with high levels of recent immigration;
- stable education premiums despite the massive increase in the educational attainment of the workforce (implying a parallel shift in demand for highly skilled workers).⁸⁰⁵

8.2 Causes of Inequality⁸⁰⁶

8.2.1 Hours Polarization

Statistics Canada found that the increase in earnings inequality that took place in the 1980s and 1990s occurred in conjunction with changes in the distribution of annual and weekly hours worked. As Part 1 of this report demonstrated, the standard workweek (35-40 hours) is shrinking while the proportion of workers working long hours (50 hours or more) and short hours rose, particularly between 1976 and 1996. Although there has been some reversal of this trend in recent years, the proportions of long-hours and short-hours workers in 2001 are still considerably greater than they were 25 years ago, even if down somewhat from their mid-1990s peaks. Statistics Canada analyst, Rene Morissette, found that the growing inequality in weekly earnings that occurred in the 1980s in Canada was tied to three factors: 1) The decline in the real hourly

⁸⁰³ Using the gini coefficient, Heisz et al. found that disposable income inequality among families (two persons or more) and among unattached individuals changed little over a 30-year period (1977-1997), but that inequality did increase in the latter part of the 1990s. They also noted that data collection over the last 30 years may have affected their results and that more research is needed "to better understand the change in family-income inequality in the late 1990s." Heisz, Andrew, A. Jackson, and G. Picot. 2002. *Winners and Losers in the Labour Market of the 1990s*. Statistics Canada. Catalogue no. 11F0019, no. 184. Ottawa. pp. 6-7. Report provided by Heisz as part his review of the GPI Work Hours report.

⁸⁰⁴ The gini coefficient represents the ratio of the gap between perfect income distribution and actual income distribution. While the gini coefficient is a well recognized overall measure of of income inequality it does not necessarily register changes in the gap between the rich and poor or the shares of income held by various quintile groups. For instance, the gini coefficient can stay the same while the gap between rich and poor increases. Messinger, Hans. Statistics Canada. Personal communication. December 12, 2003.

⁸⁰⁵ Summary of distributional outcomes provided by Heisz, Andrew. Senior Research Economist, Business and Labour Market Analysis Division, Statistics Canada. Reviewer comments. Received October 23, 2003.

⁸⁰⁶ In his book, *Created Unequal*, James K. Galbraith points out that more equal societies have three basic characteristics in common: 1) "More equal societies have less poverty and since there is less poverty the transfer programs can be more generous and therefore help blur the distinction between the poor and the middle class so that the stigma of poverty falls away." 2) "More equal societies have fewer rich people.... But as society polarizes, the rich develop an ethos all their own – an ethos of exaggerated individualism, of independence from the state and rejection of public institutions. The usual political response to this development has been to allow the wealthy to reduce their share of payment for the burden... having the effect of shifting the burden of supporting transfer programs from the wealthy toward the middle class, a burden that becomes heavier as transfers increase and the weight of income shifts up the scale from the middle-class toward the wealthy." 3) "More equal societies tend to have lower private transfer burdens – less private capital, less debt, less conspicuous consumption and pecuniary emulation. People are willing to pay higher taxes for social insurance if they face a lower burden of private debts." From Galbraith, James K. 1998. *Created Unequal: The Crisis in American Pay*. The Free Press. New York. pp. 15-16.

wages of young workers; 2) The decline of the standard workweek coupled with hours polarization; 3) A growing tendency for workers with high wages to work longer hours and for lower-wage workers to work below average hours.⁸⁰⁷

Morissette partially attributes this third factor to the tendency of firms to use part-time employment for low-skilled workers in order to reduce fixed labour costs, while at the same time increasing hours for high-skilled (and high-paid) workers.⁸⁰⁸

8.2.2 Poverty and Low Wages

When is someone's income low enough to define him or her as "poor"? Internationally, there is no official measure of poverty. Until recently in Canada, the only available measures that could potentially be used to point towards the prevalence of poverty in the country provided only relative rather than absolute measures of poverty.⁸⁰⁹ One such measure, the Low Income Cut Off (LICO), has been widely used as an indicator of poverty, although its changing definition makes such usage questionable.⁸¹⁰ In fact, LICOs are also often called "poverty lines" despite the fact that Statistics Canada clearly does not endorse their use as an indicator of poverty.⁸¹¹ Essentially, LICOs are the after-tax income level at which a family may be in "straitened circumstances" because it has to spend a higher proportion of its income on food, shelter, and clothing than does the average family. The relative nature of LICOs is well illustrated by the fact that "straitened circumstances" were defined in 1968 as spending 70% or more of income on basic necessities, and since 1992 as spending 54.7% or more of income on these necessities. So families now classified as low-income would not have been so classified 35 years ago.⁸¹²

⁸⁰⁷ Morissette, Rene. 1995. *Why has Inequality in Weekly Earnings Increased in Canada?* Business and Labour Market Analysis, Statistics Canada. No. 80. Ottawa. p. 5.

⁸⁰⁸ Ibid. p. 6.

⁸⁰⁹ Maxwell, Judith. 2002a. "No Way up the Pay Scale." *The Globe and Mail*. October 8, 2002. Toronto. p. A21.

⁸¹⁰ LICOs were first introduced in Canada in 1968 based on income data and family expenditure patterns collected from the 1961 Census income data and 1959 expenditure patterns. At that time, spending patterns showed that Canadian families spent about 50% of their incomes on the basics of food, shelter and clothing. It was decided then that families spending 70% on the basics were considered living in "straitened circumstances." Based on this assumption, LICOs were set for five different sized families. Subsequent to these initial cut-offs, revised cut-offs were established based on national family expenditure data from 1969, 1978, 1986 and 1992. These data indicated that on average, Canadian families spent 42% in 1969; 38.5% in 1978; 36.2% in 1986; and 34.7% in 1992 of their total income on basic necessities. Since 1992, this latest proportion has remained relatively stable. When the original arbitrary 20 percentage points were added on, families spending 54.7% or more of family income on basic necessities were now classified as living in "straitened circumstances." Based on these changes in definition, new cutoffs were set for seven different family sizes. As a result of these 1992 adjustments, low-income cutoffs are now lower for smaller families and higher for bigger ones than they used to be. As well, many families now classified as "low-income" would not have been so classified in 1968, when spending of 70% of income on basic necessities was classified as low-income. LICOs also vary depending on whether a family lives in a city or rural area. For example, in 2000, a family of four in a city of 500,000 or more would be counted as low-income if after-tax income was below \$34,572. For the same family living in a rural area, the cutoff was \$23,892. Since 1992, these cut-offs have been updated annually for the CPI. Statistics Canada. 2001a. *Low Income Cut-offs (LICOs)*. Available from <http://www.statcan.ca/english/census2001/dict/fam021.htm>. Accessed May 7, 2003.

⁸¹¹ Statistics Canada's opposition to the use of LICOs as poverty lines is explained in Statistics Canada. 1997b. *On Poverty and Low Income*. Available from <http://www.statcan.ca/English/concepts/poverty/pauv.htm>. Accessed December 9, 2002.

⁸¹² Statistics Canada. 2001a. *Low Income Cut-offs (LICOs)*. Available from <http://www.statcan.ca/english/census2001/dict/fam021.htm>. Accessed May 7, 2003.

In May, 2003, the Canadian government released a long awaited “absolute” measure of poverty – the Market Basket Measure (MBM), which essentially provides the cost to households of a basket of goods and services “needed for a healthy lifestyle,” based on household size and type.⁸¹³ The poor are classified as those families who can’t afford the basket. As stated previously, the MBM found that more than 15% of Canadian families (13.1% of all Canadians) are poor, while in Nova Scotia more than 16% of the population is poor.⁸¹⁴ However, the MBM is controversial because someone has to decide what is considered “necessary” enough to put in the basket in the first place, and such decisions are necessarily subjective and open to interpretation. As Statistics Canada points out, “it is through the political process that democratic societies achieve social consensus in domains that are intrinsically judgmental.”⁸¹⁵ In other words, Statistics Canada holds that it is the responsibility of governments, not statistical agencies, to define poverty.^{816, 817}

⁸¹³ HRDC and the Working Group on Social Development Research and Information had been developing the MBM since 1998. CBC. “New Poverty Indicator shows 1 in 8 Canadians Poor.” *CBC*. May 27, 2003.

http://www.cbc.ca/cgi-bin/templates/print.cgi?/2003/05/27/poverty_basket030527. Accessed May 28, 2003.

⁸¹⁴ *Idem*.

⁸¹⁵ Statistics Canada. 1997b. *On Poverty and Low Income*. Available from

<http://www.statcan.ca/English/concepts/poverty/pauv.htm>. Accessed December 9, 2002.

⁸¹⁶ Prior to the release of the MBM in 2003, the Fraser Institute estimated a “basic needs poverty line” which is 38% to 48% lower than Statistics Canada’s 1986 LICOs and roughly 13% lower than the MBM for all family sizes or household types. The Institute estimates that a family of four can eat nutritiously on \$16 a day – or \$4 a person. The following table is from http://oldfraser.lexi.net/publications/forum/2001/10/section_07.html:

Size of family or household	Canadian Council on Social Development (estimate)	Statistics Canada's Low-Income Cut Offs (1986 base)	Man-trial Diet Depen-sary (Minimum Ade-quate Living Stan-dard)	Market Basket Measure (esti-mate)	Man-trial Diet Depen-sary (Basic Needs)	Basic Needs Poverty Line	Annual Net Income at Mini-mum Wage in New-found-land and Labra-dor*	Annual Net Income at Mini-mum Wage in British Colum-bia*
1	15,151	16,969	10,234	11,700	8,405	8,875	10,186	13,920
2	25,151	25,000	16,389	15,945	12,731	13,926		
3	30,302	29,237	23,237	19,362	17,341	16,926		
4	35,363	33,665	29,602	22,779	21,859	19,962	20,953	25,840
5	40,423	36,780	33,656	26,196	24,510	22,206		
6	45,484	39,924	37,710	29,613	27,081	24,602		
7	50,544	42,940	n/a	n/a	n/a	n/a		
over 7	n/a	42,940	n/a	n/a	n/a	n/a		

Sources: Christopher A. Sarlo (2001), *Measuring Poverty in Canada*, The Fraser Institute; Human Resources Development Canada website; federal and provincial tax forms; calculations by the author.

*Details on the annual net income calculations are provided in the endnote.

⁸¹⁷ HRDC. 2003. *The Market Basket Measure? Constructing a New Measure of Poverty*. HRDC. Ottawa.

In any case, critics of the new measure say that it has "reduced poverty immediately by about a third – without improving the standard of living of a single child."⁸¹⁸ While the MBM is more generous than the Basic Needs Poverty Line proposed by the Fraser Institute, which counts only physical necessities like food, shelter and clothing, and excludes items like books, toys, haircuts, dental visits, and school supplies, the MBM still falls short of Statistics Canada's LICOs. For a family of four, the MBM is about 32% lower than the LICO, and the Fraser Institute's Basic Needs Poverty Line is 41% lower than the LICO.⁸¹⁹

The LICOs are still the most commonly used way of identifying those who fall far below the average. Based on these cutoffs, in 2001, the most recent year for which data were available at time of writing, an estimated 646,000 families of two or more people had low income in 2001, down from 666,000 in 2000. Of these, 786,000 were children (under 18 years of age) in low income families in 2001, down from 868,000 in 2000. The low income rate for families also declined, from 10.7% in 1996 to 7.6% in 2001, the lowest since 1989 when it was 7.5%. It was the fifth consecutive year in which low-income rates declined.⁸²⁰ Table 27 shows the breakdown in the number of families with low income in 2001. It is estimated that of the 512,000 lone-parent families headed by women in Canada, 32% had low income in 2001, down from 34% the previous year, and 49% in 1996. However, of those without jobs and wage earnings, 90% had low income.⁸²¹

Although the low income rate dropped between 2000 and 2001, the "overall financial situation of families below the low-income cutoff deteriorated somewhat."⁸²²

*"Families in low income would have needed, on average, an additional \$7,200 in after-tax dollars to reach the low-income cutoff. In relative terms, this gap was 33% of the low-income cutoff. During the years 1996-2000, the gap for low income families was between 30% and 32%."*⁸²³

In addition, while this decline in low-income rates signifies genuine progress on one front, it is important to examine why single mothers' incomes have increased. Closer analysis reveals that

⁸¹⁸ Shillington, Richard. "Newspeak on Poverty." *Straight Goods*. May 28, 2003. Available from <http://www.straightgoods.com/Analyze/010305.asp>. Accessed May 28, 2003. See also Shillington, Richard, "What do we Mean by Poverty, or HRDC Reduces our Obligations to Poor Children," January, 15, 1999. Available from <http://www.shillington.ca/poverty/mbm.htm>. Accessed September 3, 2003.

⁸¹⁹ For a comparison of Statistics Canada's LICO, the MBM, the Fraser Institute's "Basic Needs Poverty Line", and other measures, see *Fraser Forum*. October, 2001. The Fraser Institute. Available from http://oldfraser.lexi.net/publications/forum/2001/10/section_07.html. Accessed September 3, 2003. According to Shillington (2003), the Fraser Institute's Basic Needs Measure says that a single elderly woman, for instance, can live on an astonishing \$17.48 worth of food in a week (of that, 17 servings of vegetables for only \$1.33 and 14 servings of fruit for a mere \$2.11). For more on the Fraser Institute's measures of poverty, see also Sarlo, Christopher. 2001. *Measuring Poverty in Canada*. The Fraser Institute. Available from http://oldfraser.lexi.net/publications/critical_issues/2001/poverty/. Accessed September 3, 2003.

⁸²⁰ Statistics Canada. 2003f. *Income in Canada, 2001*. Catalogue no. 75-202-XIE. Minister of Industry. Ottawa. pp. 90-93.

⁸²¹ Ibid. p. 91.

⁸²² Statistics Canada. 2003f. *Income in Canada, 2001*. Catalogue no. 75-202-XIE. Minister of Industry. Ottawa. p. 91.

⁸²³ Idem.

cuts in the mid-1990s to social programs, which had previously allowed single mothers to care for their children at home, forced many of them into the paid labour market. The employment rate for single mothers with infants aged 0-2 increased dramatically from 25.7% in 1993 to 46% in 2001. For those with toddlers aged 3-5, the employment rate increased from 44.6% in 1993 to 60.8% in 2001.⁸²⁴

So, in addition to their paid work hours, single mothers must shoulder the entire burden of unpaid household work alone. Not surprisingly, full-time employed single mothers are classified by Statistics Canada as the most time-stressed group in Canada.⁸²⁵ Robin Douthitt quantifies this stress according to family size and type in terms of “time poverty,” defined as time below the minimum necessary for basic household production like food preparation and cleanup, housecleaning, laundry, and shopping. She calculates that when time poverty and low income are both considered, poverty rates of working single mothers in Canada are 70% higher than official estimates. When sleep deprivation is taken into account, she finds that working single mothers experience nearly twice the absolute time-poverty rates of their non-employed or married counterparts.⁸²⁶

Statistics Canada’s time use surveys reveal that full-time employed single mothers have 23% less dedicated time to spend with their own children than their full-time employed married counterparts, and 60% less time than their non-employed single parent counterparts.⁸²⁷ As well, the decline in low-income rates does not reveal how much of this new earned income stays in the pockets of employed single mothers. According to Statistics Canada, single mothers with pre-school aged children spend 12% of their income on paid child care, nearly three times the proportion of their married counterparts.⁸²⁸ In sum, there may be significant trade-offs involved in higher rates of labour force participation among single parents in terms of health, income, and wellbeing that are not captured by the decline in low-income rates alone.

In Nova Scotia the incidence of low income among families increased in the 1990s from 7.4% in 1990 to 10.5% in 1996, 11.1% in 1998 and then declined to 7.9% in 2001, still above the 1990 rate.⁸²⁹

Table 27 below indicates that single mothers have the highest rates of low income among all demographic groups in Canada, but also shows that low-income rates declined from 2000 to 2001. In Nova Scotia, average real incomes (in constant 2001 dollars) of single mothers rose

⁸²⁴ Statistics Canada. 2002c. *Women in Canada: Work Chapter Updates*. Catalogue no. 89F0133-XIE. April 2002. pp. 6, 13, Table 6.

⁸²⁵ Statistics Canada. 1999b. "General Social Survey: Time Use." *The Daily*. November 9, 1999. Statistics Canada. Available from <http://www.statcan.ca/Daily/English/>. Accessed April 30, 2003. pp. 2-4. Respondents classified as “severely time stressed” by Statistics Canada are those that give affirmative answers to seven out of 10 questions on a time stress questionnaire that includes questions such as: “Do you worry that you don’t spend enough time with your family and friends?” and “Do you feel that you’re constantly under stress trying to accomplish more than you can handle?”

⁸²⁶ Douthitt, Robin. 1993. "The Inclusion of Time Availability in Canadian Poverty Measures." In *Time Use Methodology: Toward Consensus*. Istituto Nazionale di Statistica. Rome. pp. 88, 90.

⁸²⁷ Frederick, Judith. 1995. *As Time Goes By...Time Use of Canadians*. Statistics Canada. Catalogue no. 89-544E. p. 25.

⁸²⁸ Statistics Canada. 1991. *Canadian Social Trends*. Autumn. Catalogue no. 11-008-XPE. p. 14.

⁸²⁹ Statistics Canada, 2003e, op. cit. Prevalence is based on after-tax income.

from \$18,229 in 1997, the lowest in the country, to \$26,352 in 2001, an increase of 44.6%, largely due to sharp increases in employment among single mothers.⁸³⁰

In Nova Scotia in 2001, 38,000 or nearly one in five children (19.2%) lived below the base low income cut-off – above the Canadian average of one in six children (15.6%). The children experiencing the highest rates of poverty are those living with lone-parent mothers – 53.9% compared to 12.8% living in a two-parent family.⁸³¹

A recent *Report Card* on child poverty in Nova Scotia found that the between 1996 and 2001 overall rates of child poverty fell nationally and in every province. Yet between 1999 and 2001 Nova Scotia "stands apart as the only province whose rate began to climb again."⁸³² The study also cautioned that declines in child poverty in recent years in Canada may not signal a long-term trend since there were similar fluctuations in the period 1980-2001 when rates rose, fell, rose and fell again. "We must not assume the recent declines will be sustained, particularly if there are downturns in the economy."⁸³³

Table 27. Low Income by Main Family Type, Canada. 2001.

Family Type	Low Income Rate	Number in Low Income (000s)	% Change from 2000
Economic families, two or more persons	7.6 %	646	- 3.0
Elderly families	3.3 %	38	1.2
Non-elderly couples without children	5.8 %	113	3.7
Two-parent families with children	6.7 %	208	- 10.7
Female lone-parent families	32 %	164	- 8.9
Unattached individuals	27.6 %	1,127	- 2.5

Note: Table is using 1992 base after-tax income LICO.

Source: Statistics Canada. 2003f. *Income in Canada, 2001*. Catalogue no. 75-202-XIE. Minister of Industry. Ottawa.

In Nova Scotia the minimum wage is \$6.00 per hour. With a 40-hour a week job, a person on minimum wage would make \$12,500 a year – an amount that could hardly support a single person, let alone a family.⁸³⁴

⁸³⁰ Statistics Canada. 2003f. *Income in Canada 2001*. Catalogue no. 75-202-XIE. Ottawa. Especially Tables 6.1 and 8.1, and p. 90.

⁸³¹ Raven, Pauline, and Lesley Frank. 2003. *Promises to Keep: The Nova Scotia Child Poverty Report Card, 1989-2001*. The Canadian Centre for Policy Alternatives. Halifax. p. 1.

⁸³² *Idem*.

⁸³³ *Ibid.* p. 8.

⁸³⁴ Using 2000 figures for Statistics Canada's low-income cut-offs (LICO) for a single person (\$1,313/month) and a minimum wage of \$5.80/hour, a single person would fall \$325 a month short of the LICO. From Workman, W. Thom and John Jacobs. 2002. *Undermining Wages in Nova Scotia: The Minimum Wage from 1976-2002*. The Canadian Centre for Policy Alternatives – Nova Scotia. Halifax. p. 4.

In 1999, one in four wage workers in Nova Scotia earned less than \$8.00 per hour and at least half of all wage earners earned less than \$11.42 an hour. Women earned less than men – 25% of women worked for less than \$7.00 per hour, and at least half of all employed women worked for under \$10 per hour.⁸³⁵ In fact, Nova Scotian women earned an average of only 81 cents an hour for every dollar earned by men. In 2001, the average hourly wage rate for women in Nova Scotia was \$12.91 an hour compared to \$15.96 for men.⁸³⁶

The low wages of many Nova Scotians do not suffice to lift them or their families out of poverty. Table 28 illustrates that a family of four with one full-time earner working 40 hours a week, and one part-time earner working 20 hours a week, cannot get by on low hourly wage rates. In fact, on an income of \$8.00 per hour, the average family of four working a combined 60-hour week was making 22% below Statistics Canada's low-income cut-off (LICO) for 2000. Those earning minimum wage fell 42% short of the LICO. This wage gap, and the need to work more just to get by, illustrates one reason for multiple job-holding and long work hours that may threaten the balance between working hours and child-care needs.

In addition, the real minimum wage has not kept up with the rate of inflation. The cost of living in 2003 is considerably higher than it was in the 1970s. For the minimum wage to have the same purchasing power today as it did in the mid-1970s it would have to be closer to \$8.00 per hour.⁸³⁷

Table 28. Monthly Wages of the Working Poor in Halifax and Sydney, Nova Scotia, compared to Statistics Canada's Low-income Cut-off, 2000. Based on 60 hours of household employment per week.

	Statistics Canada LICO for Family of 4	Lowest Quartile Wage Income (\$8/Hr)	Gap between Wage and LICO	Monthly Minimum Wage Income (\$6/Hour)	Gap between Wage and LICO
Halifax	\$2,471	\$1,920	\$551 22%	\$1,440	\$1,031 42%
Sydney	\$2,454	\$1,920	\$534 22%	\$1,440	\$1,014 42%

Note: The 60 hour week was chosen by Workman and Jacobs as a point of comparison, because it is roughly equivalent to one full-time and one part-time job and is intended to "be sensitive to the balance a family must strike between working hours and child-care needs."

Source: Table adapted from Workman and Jacobs, p. 9. Data have been updated. Minimum wage in October 2002 was \$6/hour. Updated LICOs are from Statistics Canada's 2000 matrix. Available at <http://www.statcan.ca/english/census2001/dict/fam021.htm>.

In both Canada and the U.S., low-paid employment is more common than in European countries. Table 29 presents 1994 data on low-paid work in various countries, as reported by the OECD.

⁸³⁵ Ibid. p. i.

⁸³⁶ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

⁸³⁷ Workman and Jacobs. 2002. op. cit., pp. 2-3.

The U.S. ranks the highest at 25%, and Sweden and Finland the lowest at 5.2% and 5.9% respectively. Japan has the greatest disparity between male and female rates of low-paying work, and Canada has the second highest rate of low-paying work for women after Japan. According to the OECD classification, more than one-third of women in Canada work for low pay, compared to 8% of Swedish women.

Table 29. Incidence of Low-Paid Employment in OECD countries, 1994.

Country	Total	Men	Women	Under 25 Years Old
Canada	23.7	16.1	34.3	57.1
Finland	5.9	3.3	8.7	27.1
France	13.3	10.6	17.4	49.5
Germany	13.3	7.6	25.4	50.4
Japan	15.7	5.9	37.2	36.4
Netherlands	11.9	-	-	-
Sweden	5.2	3.0	8.4	18.7
United Kingdom	19.6	12.8	31.2	45.8
United States	25.0	19.6	32.5	63.0

Source: OECD. 1996. *Employment Outlook*. OECD. Paris. p. 72.

8.2.3 Changes in Real Wages

Between 1990 and 1998 the real wages of working Canadians fell by 3% before taxes and by 7% after taxes.⁸³⁸ Between 1990 and 1998, the real disposable incomes of low-income earners also fell proportionately more than the disposable incomes of higher-income earners. In Nova Scotia, for example, real average disposable household incomes fell by nearly 30% for the poorest 20%, and by just over 1% for the richest 20%.⁸³⁹

Statistics Canada's most recent income data for 2001 show that the average real disposable incomes of all families (economic families and unattached individuals) in Canada stagnated or declined between 1992 and 1997, except for the highest quintile which saw improvements starting in 1995. Between 1997 and 2001, improvements in disposable income were seen for all quintile groups. However, the data confirms that throughout the 1990s the greatest gains were enjoyed by the highest quintile. Statistics Canada found that the after-tax (disposable) income of the highest 20% (fifth quintile) of all families in Canada rose by \$18,127 – an increase of 21.7% from 1993 to 2001. In the same time period, the lowest quintile fared the least well on the basis of after-tax income with an increase of \$182 or 1.6%. The middle three quintiles had increases of 11-14% in disposable income. Therefore, "gains by the highest quintile were largest and gains by the lowest quintile were smallest," contributing to further growth in inequality.⁸⁴⁰

⁸³⁸ Stanford, Jim. 1999a. "Upside-down Economics: Unemployment Used to be Bad, but now it's Good for Business." In *The CCPA Monitor*. December. Canadian Centre for Policy Alternatives. Ottawa. p. 26.

⁸³⁹ Dodds and Colman, 2001, op. cit., p. 10.

⁸⁴⁰ Statistics Canada. 2003e. *Income Trends in Canada, 1980-2001*. Catalogue no. 13F0022XCB. Minister of Industry. Ottawa. p. 74. Incomes cited are not adjusted for family size.

In Nova Scotia the situation was similar. Real disposable incomes of all families stagnated or declined for all quintile groups between 1990 and 1997. Between 1997 and 2001 real disposable incomes increased for all quintiles except for the lowest quintile. Between 1997 and 1999 the poorest Nova Scotian's saw their real disposable income fall from \$10,047 to \$9,404 and then increase slightly to \$10,604 by 2001. At the same time the richest Nova Scotians (fifth quintile) saw their real disposable incomes increase by 10.6% (or \$7,866) between 1997 and 2001. The middle three quintiles had increases of 9.7% to 10% in disposable income.⁸⁴¹

Interestingly, the stagnation or decline in real incomes in the early to mid-1990s occurred despite increases in the GDP, and challenges the widely held assumption that economic growth necessarily benefits the poor. For example, a World Bank study asserts that “income of the poor rises one-for-one with overall growth.”⁸⁴² For most of the 1990s, only the incomes of the wealthy in Canada were correlated with economic growth. The poorer the household was in the 1990s the less correlation there was with economic growth. In fact, between 1990 and 1998, for the poorest 40% of households there was a negative correlation between disposable income and GDP per capita.⁸⁴³ Although there has been some improvement in the incomes of low-income Canadians since 1997, the data for most of the 1990s indicate that GDP can increase even while most people are worse off and while inequality grows.

In the U.S. the situation is similar. Between 1973 and 1997, real hourly wages declined by more than 13%.⁸⁴⁴ According to the U.S. Bureau of Labor Statistics, the real average hourly earnings of all production (goods and services) or nonsupervisory workers declined by 14% between 1973 and 1997. For many, the only way to compensate for the lost income was to work longer hours. The situation improved somewhat between 1997 and 2003 when real hourly earnings increased by 7.8%. However, 2003 earnings remain below 1973 levels.⁸⁴⁵

Thus, the decline in U.S. real wages through most of the 1990s likely contributed to the sharp increase in work hours in that country during those years, as U.S. workers put in more hours in order to make ends meet and maintain their previous standard of living. Similarly, higher real incomes in recent years (i.e. an increase of 2.5% between 2000 and 2002) may help explain the 1% decline in annual work hours in the U.S. between 2000 and 2002.⁸⁴⁶

⁸⁴¹ Idem.

⁸⁴² Kray, Aart, and David Dollar. 2000. *Growth is Good for the Poor*. World Bank. Available from www.worldbank.org/research/growth/, See also Brian Lee Crowley. 2001. “Growth, not Government, best friend of the poor.” *The Chronicle-Herald*. Halifax. March 14, 2001. p. C2. In that article, Crowley, of the Atlantic Institute of Market Studies, writes that “growth is a tide that lifts all boats, and the poor in both wealthy and impoverished countries get their full share of the fruits of growth. Nor do the incomes of the poor fall harder than those of the better-off during economic crises.”

⁸⁴³ Dodds and Colman, 2001, op. cit., pp. 25-26.

⁸⁴⁴ Bluestone and Rose, 1997, op. cit., p. 3.

⁸⁴⁵ U.S. Bureau of Labor Statistics. *Average Hourly Earnings of Production or Nonsupervisory workers on Private Nonfarm payrolls by Industry Sector and Selected Industry, Seasonally Adjusted*. Table B-4. Available from <http://www.bls.gov/news.release/empsit.t17.htm>. Accessed November 3, 2003. Comparisons based on 1982 constant dollars. Average hourly earnings for 2003 were available up to September, 2003, the most recent month data were available at time of writing.

⁸⁴⁶ Income data from: Idem. Average annual work hours in the U.S. in 2002 were 1,815, down from 1,834 two years earlier. Hours data from: International Labour Organization. 2002. *Key Indicators of the Labour Market*. Table 6b.

A recent study by the Canadian Council on Social Development revealed that while average disposable incomes grew between 1998 and 2001 in Canada, Canadians reached record levels of personal debt. The study compared mortgage and consumer debt to disposable income and found that in 2002 Canadians borrowed the equivalent of 98.4% of their disposable income compared with 56% in 1984.⁸⁴⁷

8.2.4 Cuts to Social Programs

In Canada, transfer payments have provided substantial assistance to low-income families. When transfer payments such as EI, social assistance, and pensions are excluded, inequality in Canada has risen much more dramatically than changes in total income (including transfers) and disposable income (after transfers and taxes) indicate. Using Statistics Canada data, Linda McQuaig found that the richest 20% of Canadians saw their incomes increase by 17% between 1973 and 1993 when transfers are excluded, while the poorest 20% saw their incomes fall by 53%.⁸⁴⁸ When transfers *are* included, the gap between rich and poor actually got smaller between 1973 and 1993. During that period, the incomes of the poorest 20% rose by 39% and the incomes of the richest 20% rose by 16%. McQuaig concludes: "This clearly suggests that Canadian social programs have played a crucial role in acting as a bulwark against the rising inequality in the private marketplace."⁸⁴⁹

But between 1993 and 1996, dramatic changes were made to Canada's social programs that undermined the social safety net that had sustained so many low-income families in previous years. In a study on child poverty, Statistics Canada found that cuts to Employment Insurance (EI) in the 1990s was the single most important reason for loss of income to low-income families. As Table 30 indicates, between 1993 and 1996, EI was cut by 44% to low-income families. Overall, the total incomes of low-income families fell by 7.5%.⁸⁵⁰ Cuts to EI and social assistance in the 1990s led to increased inequality in Canada. By contrast, in the 1980s, even though real wages were falling for low-income Canadians, the social safety net kept poverty levels from increasing and even reduced child poverty.⁸⁵¹

According to a recent study by the Canadian Labour Congress (CLC), insurance coverage for unemployed Canadians has been cut in half since the early 1990s, when Ottawa began changing the rules and the hours of work required to qualify for benefits. The study also found that in 2001

Available from <http://www.ilo.org/public/english/employment/strat/kilm/table.htm>. Accessed July 4, 2002. Also: International Labour Organization. 2003a. *New ILO Study Highlights Labour Trends Worldwide: US productivity up, Europe Improves Ability to Create Jobs*. Press Release. September 1, 2003. ILO. Geneva. Available from <http://www.ilo.org/public/english/bureau/inf/pr/2003/40.htm>. Accessed October 25, 2003.

⁸⁴⁷ CBC. "Personal Debt at Record Level in Canada: Study." *CBC*. November 3, 2003. Available from http://www.cbc.ca/cgi-bin/templates/print.cgi?/2003/11/03/ccsd_report031103. Accessed November 4, 2003.

⁸⁴⁸ Figures adjusted for inflation. McQuaig, 1998, op. cit., p. 132. Original data from Statistics Canada.

⁸⁴⁹ McQuaig, 1998, op. cit., p. 132.

⁸⁵⁰ Myles, John and Garnett Picot. 2000. *Social Transfers, Earnings and Low Income Intensity among Canadian Children. 1981-1996*. Analytical Studies Branch Research Paper Series. no. 144. Statistics Canada. Minister of Industry. Ottawa.

⁸⁵¹ Canadian Labour Congress. 1999. *Unemployment Insurance Bulletin*. Vol. 2, no. 1. Ottawa.

only 44% of affected men and 33% of affected women had access to EI benefits, compared with 45% and 39% respectively in 1996.⁸⁵²

Table 30. Average Income of Low-income Families with Children, Canada. 1993-1996 (\$1996). Based on Statistics Canada's Low Income Cut-offs.

	Sources of Income			
	Earnings \$	Employment Insurance \$	Other transfers less taxes \$	Total Income \$
1993	8,107	2,560	9,368	20,035
1996	8,276	1,436	8,831	18,543
\$ Difference	+ 169	- 1,124	- 537	- 1,492
% Difference	2%	- 44%	- 5.7%	- 7.5%

Note: According to a recent study by the CLC higher eligibility requirements have resulted in reduced insurance protection for the unemployed in Canada. The study found that EI reduced insurance protection to 39% by the end of 2001. Coverage fell further to 38% in 2002. This is down from 1990 when 74% of unemployed received benefits. From Canadian Labour Congress. 2003. *Falling Unemployment Insurance Protection for Canada's Unemployed*. Available at <http://www.unemployed.ca>. Accessed October 23, 2003.

Source: Canadian Labour Congress. 1999. *Unemployment Insurance Bulletin*. Vol. 2, no. 1. Ottawa. Original reference: Myles, John and Garnett Picot. 2000. *Social Transfers, Earnings and Low Income Intensity among Canadian Children. 1981-1996*. Analytical Studies Branch Research Paper Series. no. 144. Statistics Canada. Minister of Industry. Ottawa.

A 2003 National Council on Welfare report strongly criticized the provinces for their "punitive and cruel" welfare rates, which it described as not only "disgracefully low," but which have also left social assistance recipients further beneath the poverty line. The report found that while working poor Canadians are now slightly better off than before (due to the National Child Benefit), those on social assistance have lost ground.⁸⁵³ In Nova Scotia, for instance, between 1989 and 2001 there was a decrease in government transfers to one-parent/one-child families, whereas there was no change for two-parent/two-child families.⁸⁵⁴

Thus, it is not surprising that, by contrast to the trends described by McQuaig in the 20 years prior to 1993, Statistics Canada data for the mid-1990s reveal a growing income gap and rising inequality *after* transfers and taxes are included. Thus, in 1990, the richest 20% of Canadians had 7.2 times as much *disposable* income, *after* transfers and taxes as the poorest 20%. By 2001, they had 8.7 times as much. In Nova Scotia, the gap also increased from 6.2 times in 1990 to 8.5 times in 1998 and then declined to 7.7 times in 2001.⁸⁵⁵ In sum, Canadian social programs are no longer acting as the "bulwark" against increased inequality that McQuaig described.

⁸⁵² Canadian Labour Congress. 2003. *Falling Unemployment Insurance Protection for Canada's Unemployed*. Available from <http://www.unemployed.ca>. Accessed October 23, 2003.

⁸⁵³ National Council of Welfare report cited in Philp, Margaret. 2003. "Welfare Recipients becoming Poorer, report says." *The Globe and Mail*. April 11, 2003. Toronto. p. A9.

⁸⁵⁴ Raven, Pauline, and Lesley Frank. 2003. *Promises to Keep: The Nova Scotia Child Poverty Report Card 2003. 1989-2001*. The Canadian Centre for Policy Alternatives. Halifax. p. 11.

⁸⁵⁵ Statistics Canada. 2003e. *Income Trends in Canada, 1980-2001*. Catalogue no. 13F0022XCB. Minister of Industry. Ottawa.

Looking at long-term trends, based on data from the U.S. Census Bureau, McQuaig found that the gap between rich and poor widened even more dramatically in the U.S. than in Canada. In 1968 the average total household income of the top 20% of Americans was \$73,754. By 1994 it had jumped by 44% to \$105,945 (adjusted for inflation). Over the same time period the bottom 20% of the population saw their average income increase by only 7% from \$7,202 to \$7,762.⁸⁵⁶

In his book *Paper Boom*, Jim Stanford points out that while a good social safety net is crucial to keeping families from slipping into poverty, "there is no more powerful anti-poverty force than strong job-creation. He plots the change in the poverty rate against the change in the employment rate for every year since 1980 and finds that "without exception, if the employment rate falls, poverty grows."⁸⁵⁷

8.2.5 Other Causes of Inequality

According to a 2002 Statistics Canada report on wealth (defined as assets minus debts), several factors may have contributed to the growth in wealth inequality in Canada since 1984:

- Young people stayed in school longer, delaying their entrance into the full-time labour market.
- The decreased incomes and increased student debts of youth lowered their wealth.
- Stock market increases in the 1990s led to an upward revaluation of financial assets, thus adding to the wealth of those who already had stocks and bonds.
- Easy access to credit added to the debt load of many families, thus lowering their net worth, or wealth.
- Increasing contributions to RRSPs by middle-income Canadians increased the gap between them and lower-income families.⁸⁵⁸

Some families, particularly young families with children who have zero or negative wealth (where debts exceed assets), are especially vulnerable to adverse shocks or crises like unexpected illness, death, or job loss of an employed partner. Between 1984 and 1999 there was an increase in the proportion of Canadian families with zero or negative wealth, from 11% to 13% of all families.⁸⁵⁹

⁸⁵⁶ McQuaig, 1998, op. cit., p.131. Original data from U.S. Census Bureau. Dollar figures are in 1994 constant U.S. dollars. "Total income" is defined by the U.S. Census Bureau as: "the sum of the amounts reported separately for wage or salary income; net self-employment income; interest; dividends; or net rental or royalty income or income from estates and trusts; social security or railroad retirement income; Supplemental Security Income (SSI); public assistance and welfare payments; retirement, survivor, or disability pensions; and all other income." In other words, total income is the sum of market income and government transfers. From U.S. Census Bureau. 2003. *2000 Census of Population and Housing. Technical Documentation*. Washington DC. Available from <http://www.census.gov/prod/cen2000/doc/sf3.pdf>. Accessed November 5, 2003.

⁸⁵⁷ Stanford, Jim. 1999. *Paper Boom. Why Real Prosperity requires a new approach to Canada's Economy*. CCPA and James Lorimer and Co. Ltd. Ottawa. p. 121.

⁸⁵⁸ Morissette, Rene, Xuelin Zhang, and Marie Drolet. 2002. "Are Families Getting Richer?" *Canadian Social Trends*. Statistics Canada. Catalogue no. 11-008. Ottawa. p. 17.

⁸⁵⁹ Ibid. p. 15.

8.3 Poverty and Health

"There has been a growth in recent years in non-standard work (which tends to be low paying and often of short duration). The resulting decline in purchasing power has been exacerbated by the dropping real value of the minimum wage.... The socioeconomic environment affects the health of populations. Poverty, unemployment, living and working conditions, families, friends, workplaces, social support and physical environments all significantly affect health.... The first priority of healthy public policy must be to ensure all Canadians have access to adequate amounts of nutritious foods, adequate housing, meaningful work and adequate income."⁸⁶⁰

– Canadian Public Health Association, 1997

"The relationship between socioeconomic status and health is one of the most pervasive in the epidemiologic literature and has held up over time and in countries throughout the world."⁸⁶¹

– Statistics Canada, 1999

"If one of you were to ask me for a list of my best tips on how to live a long and healthy life, here's what I would tell you: Don't be poor. Rich people live longer than poor people and they're healthier at every stage in life.... Don't work in a stressful, low-paid, manual job in which you have little decision-making authority or control. Poor jobs equal poor health. Don't lose your job and become unemployed. Unemployed people suffer from stress and isolation and can become poor...."

"There is a growing body of evidence that money is the single largest determinant of health. We've known that for a long time. If you're at the bottom of the income ladder, odds are you're going to find yourself at the bottom of the health ladder. Here in Canada, life expectancy drops for every step down the ladder: the very rich live longer than the somewhat rich; the upper middle class live longer than the merely middle class; and the poorest 20 per cent are more likely to die of every possible disease from which people can die."

"But in developed countries there is something more important than the average income, and that's the size of the gap between rich and poor. In Canada, we have a wide gap between rich and poor and the gap is growing by the year. Just two years ago, a study carried out by a York University professor showed that of all of the years of life lost in Canada before the age of 75, about 23 per cent can be traced to differences in income."

⁸⁶⁰ Canadian Public Health Association. 1997. *Health Impacts of Social and Economic Conditions*. CPHA. Ottawa. pp. 10-11.

⁸⁶¹ Statistics Canada. 1999e. "Income Inequality and Mortality among working-age people in Canada and the U.S." *Health Reports*. Catalogue no. 82-003. Ottawa. p. 77.

"So if we're serious about making Canadians the healthiest people in the world, then we have to be serious about closing the gap between rich and poor."

– Roy Romanow⁸⁶²

In conventional public policy, poverty has not generally been treated as a public health threat. However, poverty is one of the best predictors of ill health. According to the World Health Organization (WHO) people who are poor "run at least twice the risk of serious illness and premature death of those near the top."⁸⁶³ Low income Canadians are more likely to have poor health and die earlier than other Canadians.⁸⁶⁴ Socio-economic status has been identified as a precursor of cancer, cardiovascular disease, arthritis and musculoskeletal disorders, diabetes mellitus, dental diseases, drug dependence and abuse, and infant mortality and morbidity.⁸⁶⁵ Job insecurity, low-wage work, and unemployment can and do lead to low income and poverty. As noted above, the gap between rich and poor increased in Canada through the 1990s, and many of the poor saw their indebtedness increase and their real incomes decline further.

Poverty and low income produce direct social costs in the form of transfer payments and social assistance, including subsidized housing, employment insurance, and child benefits to individuals and families in need.

But there are many health costs associated with low income and poverty that may not be as obvious. For example, people with the lowest incomes are at least twice as likely to be hospitalized. A detailed Statistics Canada profile of hospital users, which controlled for a variety of other factors, found that men between 15 and 39 years of age with inadequate incomes were 46% more likely to be hospitalized than men with adequate incomes. Poor women in the same age group were 62% more likely to be hospitalized than non-poor women. For men and women aged 40 to 64 with inadequate incomes, the odds jumped to 57% and 92% respectively.⁸⁶⁶ Since hospitals are the single largest health care expenditure, alleviating poverty is likely to be highly cost effective in the long run.

⁸⁶² Romanow, Roy. "Connecting the Dots: From Health Care to Illness and Wellbeing." Speech to the International Foundation upon receiving the 2003 Canadian Public Service Award, Ottawa, May 8, 2003. Reprinted in *Reality Check: The Canadian Review of Wellbeing*. Vol. 3, no. 2. July, 2003. p. 3.

⁸⁶³ Marmot, Michael and Richard Wilkinson (eds). 1998. *Social Determinants of Health: The Solid Facts*. World Health Organization, Regional Office for Europe. Copenhagen. p. 10;

⁸⁶⁴ Colman, Ronald. 2002a. *The Cost of Chronic Disease in Nova Scotia*. GPI Atlantic. Halifax. p. 53. Original references: Health Canada. 1999. *Toward a Healthy Future: Second Report on the Health of Canadians*. Ottawa, p. 31; for a summary of similar data in the U.S., see Blumenthal, Susan (U.S. Assistant Surgeon-General), and Jessica Kagen (U.S. Department of Health and Human Services). 2002. "The Effects of Socioeconomic Status on Health in Rural and Urban America." *Journal of the American Medical Association*. 287, p. 109.

⁸⁶⁵ Colman, 2002a. op. cit., p. 53. Original reference: Almer, Robert, and Donald Eddins. 1987. "Cross-Sectional Analysis: Precursors of Premature Death in the United States." In *Closing the Gap: The Burden of Unnecessary Illness*. Amler, Robert, and Bruce Hull (eds). Oxford University Press. New York and Oxford. Table 1, p. 183.

⁸⁶⁶ Colman, 2002a, op. cit., p. 54. Original reference: S.J. Katz, T.P Hofer and W.G. Manning. 1996. "Hospital Utilization in Ontario and the United States: The Impact of Socioeconomic Status and Health Status." *Canadian Journal of Public Health*. Vol. 87, no. 4. pp. 253-256.; Kathryn Wilkins and Evelyn Park. 1997. "Characteristics of Hospital Users." *Health Reports*. Vol. 9, no. 3. pp. 34-35.

Similar results have been found for use of other medical services. For example, a Dalhousie University study found that low-income Nova Scotians use 43% more physician services than upper-income groups, and lower-middle income groups use 33% more.⁸⁶⁷

A recent study by a York University professor found that Canadians were more likely to get heart disease as a result of being poor than from smoking, being obese, or having or high blood cholesterol levels. The study attributed 6,366 Canadian heart disease deaths a year to poverty, and nearly \$4 billion a year in health care costs to poverty-related heart disease.⁸⁶⁸ Extrapolating from these figures, it can be estimated that if all Nova Scotians were as heart-healthy as the richest Nova Scotians, the province could avoid 200 deaths and \$124 million a year in costs due to heart disease alone.⁸⁶⁹

Another recent study that echoed these findings explored the relationship between cardiovascular disease (CVD) and socioeconomic status in Ontario and found that socioeconomic variables accounted for a "significant proportion of the variation in heart disease among counties in Ontario." The study concluded that living conditions, education and occupation levels were "key predictors of heart disease." Based on its findings, the study recommended that:

"[I]ncreasing the overall level of education in the population by providing more support for residents to obtain higher education (for example more affordable housing, subsidized day care, and lower tuition rates) may be an important strategy for improving the health of the population. Policies and strategies that address the socioeconomic context in which people live might also decrease the inequalities in CVD risk factors and provide a more physically and mentally healthy community environment."⁸⁷⁰

A growing body of evidence indicates that income *distribution* is one of the most important determinants of population health. After reviewing the evidence, the editor of the *British Medical Journal* concluded:

"What matters in determining mortality and health in a society is less the overall wealth of the society and more how evenly wealth is distributed. The more evenly wealth is distributed, the better the health of that society."⁸⁷¹

⁸⁶⁷ Kephart, George, Vince Salazar Thomas, and David MacLean. 1998. "Socioeconomic Differences in the Use of Physician Services in Nova Scotia." *American Journal of Public Health*, 88 (5): 800-803.

⁸⁶⁸ Colman, 2002a, op. cit., p. 54. Original reference: Raphael, Dennis, *Inequality is Bad for our Hearts*, York University, 2001: *Inequality is bad for our hearts: why low income and social exclusion are major causes of heart disease in Canada* can now be read and downloaded from <http://depts.washington.edu/eqlhth/paperA15.html>. See also "Having Healthy Heart is Often a Question of Income." *The Toronto Star*. November 9 2001. p. F02.

⁸⁶⁹ Colman, 2002a, op. cit., p. 54.

⁸⁷⁰ Central West Health Planning Information Network. 2002. *Exploring the Relationship between Cardiovascular Disease and Socioeconomic Status in Ontario*. Hamilton. p. 13.

⁸⁷¹ Colman, 2002a, op. cit., p. 55. Original reference: "Editorial: The Big Idea." *British Medical Journal*. April 20, 1998. p. 985, cited in Health Canada. 1999. *Toward a Healthy Future: Second Report on the Health of Canadians*, Ottawa. p. 39.

If growing inequality is bad for health then the trends of the 1990s are cause for concern. These trends have been outlined in the previous section titled *Growing Inequality*. In 1990 the richest 20% of Nova Scotian households had 6.2 as much disposable income as the poorest 20%. By 2001 they had 7.7 times as much. Based on the *British Medical Journal's* findings, it can be expected that this widening of the income gap will also widen the health gap in the province and undermine efforts to improve the health of Nova Scotians. Between 1990 and 2001, the poorest Nova Scotians lost 14% (\$1,782) of their real disposable income.⁸⁷² By 2001, families in every province registered increases in average disposable income, except for NS and PEI.⁸⁷³

According to Statistics Canada, there are two reasons why income distribution may affect health. Individuals at the bottom of the income ladder may feel greater "anxiety and shame" about their lot in comparison with those on the upper rungs. Over time this negative emotion can lead to chronic stress, which in turn can lead to adverse physical health outcomes. Another view referred to as the *neo-material* approach, suggests that the poor suffer adverse health effects from not having access to the same resources, such as education and health care.⁸⁷⁴

The World Health Organization (WHO) describes a range of factors that strongly affect health, including access to nutritious food, housing, secure employment, and a sense of social belonging.⁸⁷⁵ Therefore, the WHO concludes, efforts to improve health must not only be directed at the individual but at their social and living conditions.

The association between inequality and mortality is particularly strong in the U.S., where access to health care and high-quality education is extremely limited for the poor. In Canada, by contrast, basic health care services remain publicly funded and universally available. Examining the comparative U.S. and Canadian data, Statistics Canada finds that: "As a consequence, in the United States, an individual's income, in both a relative and absolute sense, is a much stronger determinant of one's life chances, and, in turn, their health chances, than in Canada."⁸⁷⁶

According to a recent study by *GPI Atlantic*, chronic illnesses including heart disease, cancer, diabetes, and lung disease cost the Nova Scotia health care system \$750 million a year in hospital, doctor, and drug costs. Additional private spending on health care and home care costs brings total direct medical expenditures for chronic diseases to \$1.23 billion a year. Since the poor are generally less healthy, suffer higher rates of these chronic illnesses, and use hospitals and doctors more often, poverty accounts for a significant portion of these costs to the health care system.⁸⁷⁷

⁸⁷² Statistics Canada. 2003e. *Income Trends in Canada, 1980-2001*. Catalogue no. 13F0022XCB. Minister of Industry. Ottawa.

⁸⁷³ Statistics Canada. 2003. "Family Income 2001." *The Daily*. June 25, 2003. Available from <http://www.statcan.ca/Daily/English/030625/d030625b.htm>. Accessed November 11, 2003.

⁸⁷⁴ Statistics Canada. 1999e. "Income Inequality and Mortality among working-age people in Canada and the U.S." *Health Reports*. Catalogue no. 82-003. Ottawa. pp. 78-79.

⁸⁷⁵ Marmot, Michael and Richard Wilkinson (eds). 1998. *Social Determinants of Health: The Solid Facts*. World Health Organization, Regional Office for Europe. Copenhagen. pp. 16-17.

⁸⁷⁶ Statistics Canada. 1999f. "Income Inequality and Mortality among working-age people in Canada and the U.S." *Health Reports*. Catalogue no. 82-003. Ottawa. p. 82.

⁸⁷⁷ Colman, Ronald. 2002a. *The Cost of Chronic Disease in Nova Scotia*. GPI Atlantic. Halifax.

According to researchers at Dalhousie University, 17.4% of physician costs or \$42.2 million/year (out of a total of \$242.4 million) can be attributed to educational inequality, and an additional 11.3% of physician costs or \$27.5 million a year can be attributed to income inequality. In other words, nearly \$70 million a year would be saved annually in avoided physician services if all Nova Scotians were as healthy as those with university degrees and higher incomes.⁸⁷⁸

In sum, the evidence demonstrates that alleviating poverty and reducing inequality by closing the gap between rich and poor would bring savings to the health care system. The Canadian Public Health Association has emphasized the strong connection between wellbeing and income distribution:

"The evidence shows conclusively that reducing relative poverty and narrowing income distribution are likely to have a much greater effect on improving wellbeing than increasing aggregate wealth.... This redistribution is crucial: we now know that in modern, wealthy societies, wellbeing is associated more with relative income than growth in overall, average wealth."⁸⁷⁹

Poverty is not an independent variable, but has causes that can often be found in employment characteristics. Thus, non-standard work – characterized by poor pay, tenuous stability, frequent bouts of unemployment, and a polarization of work hours – contributes to both income inequality and poverty in our society, and thus to adverse health outcomes. The following sections indicate that changing the nature of work, redistributing work hours, and reducing unemployment can also improve the living and working conditions and health of Canadians.

8.4 Shift work and Health

In May 2000, Richard Ross, an employee of Michelin Tire in Bridgewater, Nova Scotia, was granted Worker's Compensation benefits for a condition called "shift work maladaptation syndrome." It was a precedent-setting case that received national attention. Recognized by the American Psychiatric Association, the symptoms of the syndrome include not being able to fall asleep or wake up at the times allowed by the work schedule, and having difficulty staying alert on the job – a result of the disruption of the body's circadian rhythms. Michelin argued that the condition was a personal one and was not caused by the nature of the work schedule. Michelin appealed the decision at the Nova Scotia Court of Appeal and won. During the case, Michelin expressed concern that the Tribunal's decision was "capable of giving rise to an array of compensation claims for health conditions only tenuously related to the workplace." The Appeals

⁸⁷⁸ Colman, 2002a, op. cit., p. 58. Original reference: Kephart, George, Vince Salazar Thomas, and David MacLean, "Socioeconomic Differences in the Use of Physician Services in Nova Scotia," *American Journal of Public Health*, 88 (5): 800-803, May, 1998. According to Kephart and his colleagues, after adjusting for age and other factors, those with no high school diploma use 49% more physician services than those with a B.A. and those with a high school diploma use 12% more. Lower income groups use 43% more services than upper income groups, and lower-middle income groups use 33% more.

⁸⁷⁹ Canadian Public Health Association, 1997, op. cit., p. 29.

Court found that Ross' own intolerance to the disruption of his body's natural rhythms was the cause of his sleep problems and that the shift work itself was not to blame.⁸⁸⁰

Despite this judicial decision, there is a growing body of empirical evidence suggesting that shift work not only causes insomnia but is also associated with a wide range of other medical conditions. Statistics Canada states:

"The most common health complaint of shift work is lack of sleep, but shift work has also been associated with cardiovascular disease, hypertension and gastrointestinal disorders, and for women, with reproductive health problems and breast cancer. Shift work may exacerbate conditions such as asthma, diabetes and epilepsy. Mental health disorders such as anxiety and depression have also been linked to shift work."⁸⁸¹

Approximately 30% of working Canadians worked shift or non-standard hours in 2001, and their main reason for doing so was that it was a requirement of the job and they had no choice.⁸⁸² Prior to 1990, few data exist on the incidence of shift work, but Statistics Canada notes that historical evidence "points to a rise in the prevalence of shift work in both Canada and the United States throughout the 1970s and 1980s because of the growth of the service sector and dramatic increases in the proportion of students working during the school year."⁸⁸³ In general, shift workers tend to be young, single, less educated, and less affluent.

According to Statistics Canada, researchers have pointed to three "interrelated pathways" to explain the connections between shift work and ill health:⁸⁸⁴

- Disruption of circadian rhythms that have been linked to numerous health problems;
- Adoption or worsening of unhealthy behaviours such as heavy drinking, smoking and poor diets, in an attempt to cope with sleep/wake disturbances, disruptions to family life, and stress brought on by shift work.
- Stress, which leads to unhealthy behaviours as well as to a number of mental and physical disorders.

Our body's circadian rhythm follows a 24-hour clock, which regulates biological functions such as body temperature, blood pressure, cognitive performance, digestive secretions, and hormonal secretions. The circadian clocks of shift workers are usually awry because they are working

⁸⁸⁰ CBC. "Michelin appeals decision that man was injured in shift work." *CBC*. December 3, 2002. Available from http://www.cbc.ca/stories/2002/12/03/insomnia_appeal021203. Accessed May 9, 2003. Also: Harnden, Emond. 2003. "Controversial Nova Scotia Workers' Compensation Insomnia Decision Overturned on Appeal." *Labour and Employment Law for Employers*. Available from http://www.emond-harnden.com/jan03/shift_work/html. Accessed May 9, 2003. Business groups such as the Canadian Federation of Independent Business (CFIB) protested against the original ruling in favour of Ross and said it opened a "dangerous Pandora's box." Contrary to evidence that shift work is mostly choiceless, Peter O'Brien, the Vice-President of CFIB for the Atlantic Region was quoted as saying that the ruling allows "someone who makes a career choice to work shift work" to be "eligible for compensation because they get deprived of sleep."

⁸⁸¹ Shields, Margot. 2002. "Shift work and Health." *Health Reports*. Statistics Canada. Catalogue no. 82-003. Minister of Industry. Ottawa. p. 11.

⁸⁸² *Idem*. Original data sources include Statistics Canada's 1991 and 1995 Surveys of Work Arrangements.

⁸⁸³ *Ibid.* p. 28.

⁸⁸⁴ *Ibid.* p. 13.

when their bodies are telling them to sleep, and they are trying to get to sleep when their bodies are sending signals to be active. Part of the problem is that most shift workers try to lead normal lives on their days off – and so their bodies never get used to a regular schedule. This upheaval in the circadian rhythm has been linked to a variety of mental and physical conditions, including cardiovascular disease.⁸⁸⁵

A drug that is increasingly being prescribed to shift workers who have trouble staying awake on the job is Provigil, which was designed to treat the sleep condition narcolepsy, which causes people to fall asleep involuntarily. There is some concern that shift workers will use the drug as a replacement for sleep, and will suffer ill health from not getting enough real sleep.⁸⁸⁶

Data from the 1994/95 National Population Health Survey indicate that men and women working evening or rotating shifts are more likely to be stressed than workers with normal daytime schedules.⁸⁸⁷ Shift work and non-standard hours can also lead to psycho-social problems because irregular hours can lead to social isolation and limit the time available for a worker to participate in family and leisure activities.

Substantial medical evidence links work stress to numerous physical and mental disorders, many of which were listed in Chapter 7 of this report. According to Statistics Canada: "It is believed that stress may increase susceptibility to disease and play a pivotal role in the onset and progression of autoimmune diseases such as rheumatoid arthritis."⁸⁸⁸

The London Hazards Centre cites a study that showed that disorders such as anxiety, depression, and digestive disorders such as ulcers are more common among shift workers in the United Kingdom. Shift workers were also found to be 40% more likely to suffer heart disease than day workers.⁸⁸⁹

Sleep deprivation and difficulty staying awake while on the job not only have serious implications for the health of shift workers, but also produce substantial costs in productivity losses and exhaustion-related accidents. According to one U.S. estimate, industrial deaths and accidents related to shift work cost the U.S. economy more than US\$77 billion a year. This figure includes deaths, plant explosions, plane crashes, fatigue-related car/truck accidents, and lost productivity – which alone accounts for more than 70% of the costs.^{890, 891}

⁸⁸⁵ Idem.

⁸⁸⁶ BBC News. "Sleep Drug Boost for Shift Workers." *BBC*. October 31, 2002. Available from <http://news.bbc.co.uk/2/low/health/2376179.stm>. Accessed November 31, 2002.

⁸⁸⁷ Shields, Margot, 2002, op. cit., p 18.

⁸⁸⁸ Ibid. p. 13.

⁸⁸⁹ London Hazards Centre, 1994, op. cit., p. 13.

⁸⁹⁰ In 1998 Jolene Molitoris, the Federal Railroad Administrator for the U.S. Department of Transportation, spoke before a Senate Committee on Commerce and Science, and a Transportation Subcommittee on Surface Transportation and Merchant Marine. She warned that the "enormous restructuring" of the railroads in the U.S. "raised issues of safe operation." While rail traffic has expanded, the numbers employed by the railroads have fallen to the lowest in a century – and in 1998 stood at about half the employment numbers in 1980. "Not surprisingly," said Molitoris, "operations on these huge systems have dramatically increased fatigue in employees and supervisors, increased the complexity of communications, and created other human factor safety hazards." Molitoris pointed to the relationship between shift work and fatigue, and concluded that "advancing safety initiatives against fatigue and other hazards throughout an industry of 265,000 employees and 220,000 miles of track, 280,000 highway-rail

For example, some of the world's worst disasters – including the Exxon Valdez oil spill, the Chernobyl nuclear catastrophe (estimated cost \$300 billion), the Three-Mile Island nuclear accident, and the deadly Union Carbide chemical leak in Bhopal, India – have been attributed to work fatigue (all occurring during the night shift), as have more than 50% of trucking accidents. Studies point to an estimated 25% decline in sleep time, a 15% increase in clinical insomnia, and a 2-8 fold increase in ulcers and related gastrointestinal problems – all related at least in part to overwork and work stress. Shift workers have a 60% higher rate of divorce than workers putting in regular hours.⁸⁹²

8.5 The Impact of Work Casualization on Health and Safety

According to the London Hazards Centre, health and safety on the job is not just about hazardous substances or dangerous working conditions:

"It is also about the organization of work – the way jobs are designed, the amount of control workers have over them, the speed of work and the length of time spent doing it. It is about pressure put on workers to produce so that they cut corners – and a lack of job security which force workers to accept unsafe procedures because, if they do not, someone else will. It is about the 'twenty-four hour society' which forces workers into shifts and exhausting working patterns designed for robots rather than human beings. The end result of these practices is the condition known as stress."⁸⁹³

The London Hazards Centre argues that the move toward a more casualized work force has three main implications for health and safety:

- "Peripheral" workers are generally not unionized, and it is the "organization" of a workplace that generally helps to ensure health and safety standards.
- Safety and health typically take a back seat or are ignored entirely in a society where market forces seeking the lowest labour costs rule. Citing a series of recent transportation disasters, Sir John Cullen, Chair of the U.K. Health and Safety Commission stated in 1989: "The enterprise culture, the opening up of markets, and the need to survive competition place businesses under unprecedented pressure which means that increasing numbers of people – the public as well as employees – are potentially at risk."⁸⁹⁴ In

crossings, 20,000 locomotives and more than a million cars, is a daunting but absolutely essential task." From Molitoris, Jolene. 1998. *Fatigue in Rail and Truck Operations*. Congressional Testimony. Washington. Available from <http://www.elibrary.ca>. Accessed November 24, 2002.

⁸⁹¹ Marchant, Valerie. 1999. "In the Deep of the Night: The New Economy is Making more Companies Confront the Challenges of Unorthodox Hours." *Time Magazine*. November 11, 1999. p. 110.

⁸⁹² Available from numerous sources including CNN. *Lack of Sleep America's top health problem, doctors say*. Available from <http://www.cnn.com/HEALTH/9703/17/nfm/sleep.deprivation/>; Canada Safety Council. *Fatigue*. Available from <http://www.safety-council.org/info/OSH/fatigue.htm>.

⁸⁹³ London Hazards Centre, 1994, op. cit., pp. 9-10.

⁸⁹⁴ Quoted in 1989 after the Piper Alpha, Kings Cross, and Zeebrugge Ferry disasters. Cited in London Hazards Centre, p. 3.

addition to the impact of job casualization, Cullen's statement raises the issue of the potential impact of privatization on health and safety, especially when rail service, ferry service, water provision, and airlines are considered.

- Direct impact on workers of declining job stability, resulting in increased stress, which can have other mental and physical health implications.⁸⁹⁵

Job casualization has resulted in part from a move toward "just-in-time" production, which puts workers under intense pressure, because stocks/inventory are kept at the lowest possible levels and any fluctuation in demand must be met by increased/decreased work hours. Similarly, the idea of "lean production" or "constant improvement" – *Kaizen* in Japanese – assigns the smallest number of workers to a job as possible. Once workers show that the job can be done with so few staff, pressure is stepped up for them to work harder and faster so that the numbers of employees can be reduced yet again.⁸⁹⁶

According to Professor Cary Cooper, a U.K. expert on stress in the workplace:

"It is now recognized that the way a job is designed or the way people are managed can affect their health and wellbeing as much as exposing them to a bit of machinery or a toxin."⁸⁹⁷

⁸⁹⁵ London Hazards Centre, 1994, op. cit., p. 3.

⁸⁹⁶ London Hazards Centre, 1994, op. cit., pp. 9-10.

⁸⁹⁷ Cited in London Hazards Centre, 1994, op. cit., p. 12.

Chapter 9. Costs of Unemployment

"Unemployment: An expensive luxury. So expensive that industrialized societies cannot afford more than a certain percentage of the adult population unemployed for more than a few years.... Unfortunately there is no practical relationship between this little funding problem and the economic policies which have held sway in the west throughout the last quarter of the twentieth century. To all intents and purposes they exist on separate planets. It is therefore entirely possible to follow faithfully all of the recommended policies relating to growth, competitiveness, efficiency, trade and retraining, only to find that the economy is being bankrupted by the level of unemployment. What this suggests is that our economic policies are abstract ideologies unrelated to the real societies they are invented to serve."

– John Ralston Saul⁸⁹⁸

Since 1976, unemployment in Nova Scotia has consistently exceeded the Canadian average. The 1980s saw average jobless rates in Nova Scotia around 11.8%, and in the 1990s the proportion out of work averaged 12%. In 2001, the official unemployment rate in the province was 9.7%. But unemployment varied from region to region within the province. In 2001, unemployment was least severe in the Halifax area at 7.1% and the Annapolis Valley at 7.8%, but the official jobless rate reached 10.8% in southern Nova Scotia, 11.4% on the North Shore, and 17% in Cape Breton. In Sydney, in industrial Cape Breton, the official unemployment rate was a staggering 19.1%.⁸⁹⁹

As high as the official rates are, they underestimate the real levels of unemployment and underemployment in the province. The official unemployment rates exclude "discouraged workers" – those who are out of work but have given up looking for work; the underemployed – those who are working part-time but would rather be working full-time (involuntary part-timers); and those who are working beneath their skill levels.⁹⁰⁰ Statistics Canada acknowledges that the official definition is a narrow one and therefore, in 1997, began collecting and publishing "supplementary" rates of joblessness, which include at least a portion of the so-called "hidden" unemployed, and therefore present a more comprehensive and realistic picture of unemployment. Statistics Canada's underemployment estimates assess only the difference between full-time hours and the actual hours worked by involuntary part-time workers, calculated as full-time job

⁸⁹⁸ Saul, John Ralston. 1994. *The Doubter's Companion. A Dictionary of Aggressive Common Sense*. Viking. Toronto. p. 298.

⁸⁹⁹ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

⁹⁰⁰ Official unemployment statistics also exclude many women who are at home with children and would like to have work but who cannot find jobs flexible enough to accommodate their child-care responsibilities or who cannot afford daycare; students who are in school or stay at school longer than they want because they cannot find work; people on short-term job creation projects; the prematurely retired who would rather continue working; and those in prisons. All these categories of hidden unemployment are *also* excluded from Statistics Canada's supplementary unemployment rates, indicating that even Statistics Canada's 14% comprehensive unemployment rate for Nova Scotia may be conservative, when the full range of those wanting paid work is considered.

equivalents. In 2001 this more comprehensive rate of unemployment for Nova Scotia was 14%, considerably higher than the official rate of 9.7%.⁹⁰¹

In 1994 the Advisory Group on Working Time and the Distribution of Work released an important report that looked at work time issues facing Canada. Since then the issues have not changed much. We still have high levels of unemployment while an ever-increasing number of workers toil long hours of paid and unpaid overtime or moonlight.⁹⁰² In addition to calling for a redistribution of work hours in Canada, the report's authors pointed to the high costs associated with unemployment. They wrote:

*"Society as a whole endures heavy social and economic losses from high rates of joblessness. The tax base of governments is eroded, and income security programs lose taxpayers' support as they become more expensive precisely because they are needed. Unemployment has been directly linked to ill health, crime, child abuse, family breakdown, and a host of other problems that are ultimately costly to our society"*⁹⁰³

In the following sections of this report we shall try to quantify some of these economic and social costs of unemployment for Nova Scotia. In the estimates that follow, 2001 official and supplementary unemployment figures for Nova Scotia are used.

9.1 Economic Costs

"Those without work are draining our collective resources. The result has been a sudden surge in our deficit, as the costs of financing our debt have outstripped the growth of our economy, like a bushfire consuming a dry forest."

– Linda McQuaig⁹⁰⁴

Maintaining large numbers of unemployed people is expensive. In addition to the obvious direct costs of providing the unemployed with a portion of their lost income through benefits or various other programs intended for those on low income, the unemployed have less income and pay less income tax (if any at all) than those with jobs. They also spend less and therefore generate less sales tax and smaller revenues for businesses and workers whose livelihoods depend on consumer spending. Reduced tax revenues in turn mean less public spending on health, education, transportation and other public goods. In addition the unemployed represent lost productive potential to both the economy and society, since they are not producing potentially useful goods and services. These productivity losses and other hidden and indirect costs to the economy are substantial.

⁹⁰¹ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

⁹⁰² As previously noted, the incidence of overtime in both Canada and Nova Scotia increased between 1997 and 2001 by 15%. Among those who work overtime in this province, nearly 38% get paid for it, while a striking 59% do not. An additional 3% work both paid and unpaid overtime hours. In other words, in a typical week in 2001, roughly 373,000 hours were worked free of charge in Nova Scotia. Statistics Canada. 2002. *Labour Force Historical Review 2001*. Minister of Industry. Ottawa.

⁹⁰³ Advisory Group on Working Time and the Distribution of Work, 1994, op. cit., p. 3.

⁹⁰⁴ McQuaig, Linda. 1995. *Shooting the Hippo: Death by Deficit and other Canadian Myths*. Viking. Toronto. p. 65.

Measuring these productivity and other economic losses due to unemployment does not translate into a doctrine promoting economic growth for its own sake, or an assumption that more production necessarily increases wellbeing. Indeed, the Genuine Progress Index as a whole demonstrates that these assumptions are seriously flawed, and that higher levels of particular types of production may not be sustainable in the long term. In calculating the output losses and economic costs associated with unemployment, we do not therefore preclude the need to ask and examine what *kind* of productive activity is most conducive to wellbeing. As Simon Kuznets, Nobel prize-winner and a principal architect of national income accounting, noted 40 years ago:

*“The welfare of a nation can scarcely be inferred from a measurement of national income.... Goals for ‘more’ growth should specify of what and for what.”*⁹⁰⁵

In short, GDP statistics were never meant to be used as a measure of progress, as they are today. While they are still essential to gauge the overall size of the economy, a *quantitative* measure of total economic output cannot, by definition, make *qualitative* distinctions between those productive activities that signify an improvement in wellbeing and those that signify a decline. Similarly, the calculation of productivity losses due to unemployment in the following costing exercise, does not implicitly argue for more production for its own sake. If the unemployed became fully productive, the question would still remain – what *kind* of productive activity on the part of these newly employed workers would best improve quality of life?

That question is addressed *throughout* the GPI – in measures of natural resource health, equity, unpaid work, population health, environmental quality, livelihood security, and other aspects of wellbeing. The following section on the direct and indirect costs of unemployment must therefore be understood in this larger context. To give just one example, the GPI Forest Accounts demonstrate that selection harvesting and value-added production can *increase* forest industry employment and the value of the province’s natural forested wealth, while *reducing* clearcutting and overall timber production, and *improving* the long-term sustainability of the province’s forest industries. In sum, it is possible to reduce unemployment and its associated direct and indirect costs as detailed below without imperilling sustainability and wellbeing.

There have been a number of estimates of the direct economic costs associated with unemployment in Canada and the U.S. These costs have not only been monetized, but have also been illustrated graphically and metaphorically. For example, Dalhousie University economist, Lars Osberg, assesses the magnitude of unemployment in Canada and its cost in a creative way which McQuaig uses to illustrate her assertion that the huge “army” of unemployed is an “enormous waste of its idleness.”⁹⁰⁶

Imagine for a moment that the unemployed were mobilized to spend their idle hours doing something productive and labour-intensive like building pyramids. In ancient Egypt building pyramids went something like this:

⁹⁰⁵ Kuznets, Simon. 1962. In *The New Republic*. Cited in Cobb, Clifford, Tom Halstead, and Jonathan Rowe. 1995. “If the GDP is Up, Why is America Down?” *The Atlantic Monthly*. October. p. 67.

⁹⁰⁶ McQuaig, Linda. 1998. *The Cult of Impotence. Selling the Myth of Powerlessness in the Global Economy*. Viking. Toronto. pp. 15-17.

"When the pyramid was just getting going it would take about 2,840 men per day to work in the quarry, and some 5,540 to work in transport (that is, pulling the stones). As the pyramid got taller (it eventually reached the equivalent of a 48-storey building), it took fewer quarry workers and more haulers – eventually some 6,870 a day. When the pyramid was sixty metres high, 2,380 men were needed for lifting.... [I]t would have taken some 10,000 men – about 1 per cent of the population of ancient Egypt – about 23 years to complete Khufu's resting place."⁹⁰⁷

Assuming the Canadian "army" of unemployed didn't use any machines either and worked a more sane schedule of five days a week, with a month off for vacation and all statutory holidays, Osberg calculated that Canada's unemployed could have built at least 7 equivalent pyramids between 1990 and 1998 alone.⁹⁰⁸ The question raised by Osberg's graphic illustration of the potential productive capacity of Canada's unemployed is simply – what *could* they have done to benefit Canada if given the opportunity?

Economic Costs cited in the Literature (in current dollars)

There have been several efforts to monetize the economic costs of unemployment:

1983: A Canadian study calculated the economic costs of unemployment in Canada to be \$65.4 billion. The estimate included lost production, lost earnings, benefit payments, and lost tax revenue.⁹⁰⁹

1985: The Edmonton Social Planning Council found that the direct economic costs of unemployment in Alberta were \$6.6 billion, or the equivalent of 71.3% of the 1983/84 Alberta government budget. These included costs associated with lost production such as lost earnings, lost business profits, and lost tax revenue to the government.⁹¹⁰

1977-1986: It was estimated that benefits, food stamps, public assistance, and other similar transfer payments attributable to unemployment cost the U.S. taxpayer US\$90 billion/year over the 10-year period. The same study also estimated that the loss of output due to unemployment cost the economy an additional US\$1.2 trillion over the same period (or 120 billion per year).⁹¹¹

1994: Human Resources and Development Canada (HRDC) calculated economic costs associated with cyclical unemployment and structural unemployment, and included both lost

⁹⁰⁷ Idem.

⁹⁰⁸ Idem.

⁹⁰⁹ Kirsh, Sharon. 1983. *Unemployment: Its Impact on Body and Soul*. Canadian Mental Health Association. Toronto. p. xii. Canadian study cited: Deaton, R. 1983. "Unemployment. Canada's Malignant Social Pathology." *Perception* 6(5). Spring /Summer. pp. 14-19.

⁹¹⁰ Sykes, Barbara, P. Faid, and H. Dembicki. 1985. *Counting the Costs. A Literature Review of the Social and Psychological Costs of Unemployment*. Edmonton Social Planning Council. Edmonton.

⁹¹¹ Indirect costs include: money spent to treat the unemployed for illnesses/diseases; money spent to incarcerate them; loss of goods and services that the unemployed would have produced had they been working. Yates, Michael, D. 1994. *Longer Hours, Fewer Jobs. Employment and Unemployment in the United States*. Monthly Review Press. New York. pp. 72-73. Yates is citing a book by Philip Harvey titled *Securing the Right to Employment*.

output, government transfers, and foregone tax revenues in its estimates. HRDC found that the economic costs of cyclical unemployment in terms of lost output were between \$16 and \$55 billion in 1994. The net budgetary costs of unemployment to government in that same year were \$8 to \$12 billion. Lost output due to structural unemployment was roughly \$13 to \$22 billion. Therefore total direct and indirect economic costs due to both cyclical and structural unemployment in 1994 ranged from \$37 to \$89 billion.⁹¹²

1990-1996: Economist Pierre Fortin calculated the cumulative cost of unemployment in Canada between 1990 and 1996 to be \$400 billion in foregone national income, or 30% of the losses of the Great Depression.⁹¹³

1994: The Canadian Centre for Policy Alternatives calculated the economic costs of unemployment for Canada in 1992 as follows:

- costs to the unemployed (lost wages): \$12.4 billion
- costs to employed (lost wages and additional premiums): \$33.1 billion
- costs to enterprises and other owners (lost profits and additional premiums): \$38.7 billion
- costs to governments (direct/indirect taxes and additional social spending): \$46.8 billion

- Total cost of unemployment in 1992 (subtracting direct taxes of \$24.2 billion) was \$107 billion. The CCPA estimated the cost for the following year (1993) to be \$109 billion.⁹¹⁴

9.1.1 Methodology for Calculating Costs

GPI Atlantic's assessment of the economic costs of unemployment in Nova Scotia is based on methodologies used on the following two studies:

- 1) Bellemare, Diane and Lise Poulin-Simon. 1994. *What is the Real Cost of Unemployment in Canada?* The Canadian Centre of Policy Alternatives (CCPA). Ottawa.
- 2) Junankar, P.N. 1986. *Programme of Research and Actions on the Development of the Labour Market. Costs of Unemployment. Main Report.* Commission of the European Communities. Luxembourg.

Assessments of the costs of unemployment demonstrate that unemployment is costly for everyone in society, not just the unemployed. Unemployment results in *lost output* because people who are idle are not producing goods and services. This lost output in turn produces spin-off costs in lost incomes, business revenues, and sales tax proceeds. There are a number of ways

⁹¹² Bedard, Marcel. 1996. *The Economic and Social Costs of Unemployment.* Applied Research Branch. Human Resources Development Canada. Ottawa. pp.14-19.

⁹¹³ Pierre Fortin's figures are cited in Dobbin, Murray. 1998. *The Myth of the Good Corporate Citizen. Democracy under the Rule of Big Business.* Stoddart. Toronto. p. 227. Fortin cites numbers used in an analysis in *The Globe and Mail*, September 26, 1997.

⁹¹⁴ Bellemare, Diane and Lise Poulin-Simon. 1994. *What is the Real Cost of Unemployment in Canada?* Canadian Centre for Policy Alternatives. Ottawa. p. 7.

of calculating lost output. This study uses Okun's Law Method, used by Bellemare and Poulin-Simon and described in detail by Junankar. Other methods outlined by Junankar include the average product method, the average wage method, and the trend method.⁹¹⁵ Okun's Law Method attempts to calculate the output loss resulting directly from unemployment and indirectly from lower average hours worked and lower participation rates.⁹¹⁶

Output losses include both short-term costs and long-term costs. Short-term costs are the "opportunity costs of unemployment"—what would the alternative level of national income (GDP) be if unemployment were lower? To answer this question several assumptions must be made. First, in order to determine the value of the extra output, we have to make assumptions about the kinds of jobs in which the unemployed would be engaged. In other words, if all the unemployed suddenly found work, what kinds of work would this be? Junankar's study assumed that the previously unemployed found work in different industries in the same proportions as the existing employed. Once this assumption is made, then the productivity (average output per hour of labour) and wage averages of those currently employed can be used to assess the potential economic gains resulting from a given reduction in unemployment.⁹¹⁷

The long-term output costs are much more difficult to calculate, as they involve estimates of projected future output losses. For instance, long-term unemployment can lead to the deterioration of human capital, as skills deteriorate or become obsolete. Similarly, high levels of youth unemployment may point to lower future levels of production.⁹¹⁸ In this report we shall discuss these costs but will not quantify them, because of the methodological difficulties in doing so.

According to Junankar, assessments of output loss are subject to measurement errors. They can be under-estimates when output-loss assessments rely on official unemployment rates, which ignore the army of "hidden" unemployed. To avoid this error, in this report we shall present figures for both the official and supplementary rates of unemployment.

However, it must be acknowledged that even the more comprehensive supplementary unemployment data provided by Statistics Canada exclude many individuals who would work if suitable employment were available. Some of these categories – including mothers without access to suitable day-care, and students who stay in school due to absence of suitable work – have been described above. These exclusions indicate that the cost estimates provided in this report, even using the supplementary unemployment statistics, may still under-estimate potential output losses attributable to under-utilization of potential workers.

In the following calculations, for example, the unemployment numbers also do not include those individuals on social assistance in the province who are employable but unable to find work. This exclusion is due to difficulties in capturing the data required for accurate cost estimates. The latest figures provided by the N.S. Department of Community Services indicate there were 33,262 cases of social assistance as of March 2003. These are identified as individuals in a

⁹¹⁵ For more information on these methods, please refer to Junankar, 1986, op. cit., pp. 22-45.

⁹¹⁶ Junankar, 1986, op. cit., pp. 22-45.

⁹¹⁷ Idem.

⁹¹⁸ Idem.

family who receive a social assistance cheque. When the spouses and children of these social assistance recipients are included, a total of 58,333 Nova Scotians are currently dependent on social assistance. According to Lori Nearing, the Manager of Employment Support Services, the Department does not know how many of these individuals would fall under the category of "unemployed." She says some of the individuals are employed and are receiving income support, others are unemployed and receiving employment counselling, while others are unemployable. She notes that the numbers in these categories are always changing, and there is no way of determining accurate figures.⁹¹⁹

Due to difficulties in obtaining these data we have therefore not included this segment of the population in the economic cost calculations for lost output. We have, however, noted the fiscal costs associated with social assistance to indicate some of the taxpayer-funded costs that might be avoided through higher levels of employment. As noted, the exclusion of those on social assistance who are employable but unable to find work means that the cost calculations presented below may be an underestimate.

In addition, output loss estimates may be over-estimates for the following reasons:

- Many argue that a large portion of the unemployment rate is "natural" and should be deducted from the measured rate. See the discussion about NAIRU in Chapter 5, on Unemployment.
- Some of the officially unemployed are involved in the "informal sector" or underground economy. Some argue that if unemployment is reduced in part through a shift of workers from the informal to the formal economy, then the informal sector would decline as well, resulting in a small net increase in the GDP. However, as noted earlier, sociologists have found that the vast majority of those involved in the underground economy are employed, not unemployed. See discussion about "informal" work in Chapter 5.
- High levels of unemployment may put pressure on those with jobs to work harder to avoid being laid off. It has been argued that as unemployment falls, so does productivity among workers. Further empirical evidence is required to assess the accuracy of this assumption, and, if correct, to quantify the relationship and calculate the degree to which productivity rises in response to higher unemployment rates.

In addition to output loss costs attributable to unemployment, there are also *fiscal costs* to government as a result of unemployment. These include:

- Employment Insurance and Social Assistance payments to the unemployed;
- loss of direct tax revenue because the unemployed generally pay little if any income tax; and
- loss of indirect tax revenue because the unemployed likely spend less on goods and services.

As Junankar points out, these payments and revenues are all transfers between government and individuals, and are particularly important to assess and evaluate in light of their relation to

⁹¹⁹ Nearing, Lori. Manager of Employment Support Services, Nova Scotia Department of Community Services. Personal communication. April 9, 2003.

government policy. For example, an economic policy that stimulates employment may have a very low net cost to government when the savings due to increased tax revenues and decreased benefit payments are figured into the equation.

Following Junankar's approach, in calculating fiscal costs for Nova Scotia it is assumed that the unemployed were originally employed in the private sector. As Junankar notes, if the unemployed were originally employed in the public sector, then the government would save on their wages and salaries.⁹²⁰

In order to calculate *fiscal costs*, it is necessary to determine:

- What would be the average earnings of the unemployed if they become employed?
- On average what are the direct taxes paid by the unemployed?
- On average how much less does an unemployed person consume and therefore contribute to indirect tax base?
- On average what does an unemployed person receive in benefits?

In addition to costs of unemployment borne by society at large, there are also financial and other costs borne by the unemployed themselves. An unemployed person who receives benefits still suffers a loss of income, because benefits only cover a portion of their original income.

According to a recent study by the Canadian Labour Congress (CLC) the situation has worsened since 1990 when 74% of the unemployed received benefits. The study found that as eligibility requirements were tightened fewer and fewer unemployed were covered by EI.⁹²¹ By 1996 only 42% of the unemployed (39% of unemployed women and 45% of unemployed men) had access to EI benefits. In 2001 39% (33% of women and 44% of men) had access. In 2002 it dropped further to 38%. The study says that women are at a disadvantage because they hold more part-time positions. The study also found that insurance coverage has been cut in half since the early 1990s, when Ottawa began changing the rules and the hours of work required to qualify for benefits. The CLC also examined the rate of coverage in various Canadian cities and found that only 31% of unemployed in Halifax were eligible for benefits in 2001.⁹²²

According to Lars Osberg and Andrew Sharpe, for the minority that received Employment Insurance in 1997, benefits only compensated them for approximately 42% of their previous income.⁹²³

Evidence suggests that not only do workers incur substantial earnings losses when unemployed, but they may also never find new work that pays what their previous jobs did.⁹²⁴ For instance,

⁹²⁰ Junankar, 1986, op. cit., p. 47.

⁹²¹ The CLC study cites a number of legislative changes which made it more difficult for the unemployed to qualify for benefits. In 1990 Bill C-21, 1993 Bill C-113, 1994 Bill C-17, and 1996 Bill C-12. Canadian Labour Congress. 2003. *Falling Unemployment Insurance Protection for Canada's Unemployed*. Canadian Labour Congress. Ottawa. Available from <http://www.unemployed.ca/report-summary.htm>. Accessed October 23, 2003.

⁹²² Idem.

⁹²³ Osberg and Sharpe, 1998, op. cit., p. 28.

⁹²⁴ Jacobson, Louis, Robert LaLonde, and Daniel Sullivan. 1993. *The Costs of Worker Dislocation*. W.E. Upjohn Institute for Employment Research. Kalamazoo, Michigan. pp. 137-138.

one study which looked at 11.5 million American workers who lost their jobs between 1979 and 1984 due to plant shutdowns ascertained that 60% found new jobs and nearly half of them were at lower pay.⁹²⁵ Aside from these financial costs, the unemployed suffer from higher rates of illness, victimization, family breakdown and other problems, which carry both financial and emotional costs.

9.1.2 Output Loss Costs

Measuring the productivity losses due to unemployment does not by any means translate into a doctrine promoting economic growth for its own sake, or adherence to a notion that more production necessarily increases wellbeing. In calculating the output-loss costs associated with unemployment here, as noted above, we do not therefore obviate the need to ask and examine what *kind* of productive activity is most conducive to wellbeing.

Based on a series of statistical tests between 1947 and 1960, economist Arthur Okun found that each percentage point above 4% in the unemployment rate is related to a 3% reduction in the real GDP. This is called Okun's Law. According to the CCPA report, Okun's Law was used to calculate lost production costs related to unemployment in the mid-1970s, but when unemployment reached record post-war levels in the early 1980s, the formula was abandoned.⁹²⁶

Okun's Law is as follows: Loss of production = actual production x [3(actual unemployment rate – 4)]/ 100, where 3 is called the Okun coefficient and where 4 represents the "natural" rate of unemployment.

GPI Atlantic will use the CCPA report as a model for calculating output losses. The CCPA used Okun's Law, but made some important adjustments to it in the light of more recent evidence. In its 1994 report, the CCPA argued that since it does not "endorse" the notion of a "natural" rate of unemployment (see Part 1, Chapter 5), it chose to use a 3.5% rather than 4% unemployment rate as the basis for its calculations. The CCPA argued that a 3.5% baseline unemployment rate is a more reasonable foundation for application of Okun's Law, based on a number of studies and highly viable low unemployment rates in Europe as well as in Canada in the 1960s and 1970s. That evidence, according to the CCPA, indicates that the 4% "natural" unemployment rate is by no means natural, but rather an artefact used to justify unemployment rates that were already unnecessarily high.⁹²⁷

Stated as potential gain rather than loss, Okun's Law indicates that a one percentage point reduction in the national or provincial unemployment rate would bring about a 3% increase in production and national/provincial income. Okun found that the increase in production is amplified beyond the shift of personnel from the ranks of the unemployed to employed status, because of three additional "phenomena" that occur when the jobless rate goes down:

⁹²⁵ Cited in Ehrenreich, Barbara. 1989. *Fear of Falling. The Inner Life of the Middle Class*. Pantheon Books. New York. p. 207. Original source: Bluestone, Barry and Bennett Harrison. 1982. *The Deindustrialization of America: Plant Closings, Community Abandonment, and the Dismantling of Basic Industry*. Basic Books. New York.

⁹²⁶ Bellemare and Poulin-Simon, 1994, op. cit., p. 2.

⁹²⁷ Ibid. p. 5.

- 1) Not only do a portion of the unemployed find jobs, but also others who previously did not participate in the labour force because the chances of finding a job were slim (and who were not therefore officially classified as unemployed) become active in the labour market and also find work.
- 2) Some part-time jobs become full-time jobs, and rates of overtime tend to increase.
- 3) Labour productivity increases. The rise in employment generally means a more than proportional increase in employment in the most productive sectors.

The CCPA also changed Okun's coefficient from 3 to 2 based on a number of new studies that show that it has been lower since the mid-1980s in both Canada and the U.S. than in the preceding decades. The CCPA summarized the reasons given for this decrease:

- Women's participation rates are less sensitive to cyclical variations in production.
- Due to shorter-term management of human resources in North American firms, labour productivity and hours worked display less procyclical variation than previously.
- The shift to the tertiary sector in the economy is partly responsible for the reduction.⁹²⁸

Therefore, the formula used for Okun's Law in the CCPA report by Bellemare and Poulin-Simon, based on more recent evidence, is:

Lost production = actual production x [2 (actual unemployment rate – 3.5)]/100

Using this formula, the CCPA calculated that the direct cost of unemployment in Canada in 1992 was \$107 billion, and in 1993 was \$109 billion, or 15.5% of Canada's GDP. This was equivalent to \$3,956 per capita.⁹²⁹

Based on these same assumptions, lost output resulting from an unemployment rate of 9.7% in Nova Scotia in 2001 was \$3.1 billion. This amounts to 12.4% of GDP, or \$3,288 per capita.⁹³⁰ When the more comprehensive unemployment rate of 14% is used, including discouraged workers and the underemployed portion of involuntary part-time work, lost output due to unemployment in Nova Scotia was \$5.3 billion in 2001. This amounts to 21% of Nova Scotia's GDP, or \$5,622 per capita.

When we assume full-employment (0% unemployment rate), lost output resulting from an unemployment rate of 9.7% in Nova Scotia in 2001 was \$4.9 billion. Lost output resulting from the more comprehensive rate of 14% was \$7.1 billion.

⁹²⁸ A detailed discussion about the origins of Okun's coefficient and the reasons for revising it in light of more recent evidence are beyond the scope of this report. For more information on this issue, please refer to the CCPA report by Bellemare and Poulin-Simon, 1994, op. cit., pp. 5-7.

⁹²⁹ Ibid. p. 6.

⁹³⁰ Based on a total population of 942,691 in 2001. From N.S. Dept. of Finance. 2002. *Statistical Review*. Halifax. p. 1.

9.1.3 Fiscal Costs

As previously stated, fiscal costs are related to transfers between government and citizens – money paid to government by citizens and businesses and then paid back to citizens in the form of income supports and other transfer payments. Unemployment produces both lower tax revenues and higher transfer payments. Fiscal costs are particularly important to assess and evaluate in light of their relation to government policy. For example, an economic policy that stimulates employment may have a very low net cost to government when the savings due to increased tax revenues and decreased benefit payments are figured into the equation.

The Nova Scotia government does not calculate lost revenue due to unemployment. According to Bruce Hennebury, Executive Director of the Fiscal and Economic Policy Branch at the N.S. Department of Finance, this is difficult to do with accuracy because of "a number of variables that would affect such an estimate which are difficult to predict, such as what rate of pay would someone receive if they did work, was it their choice not to work, would the labour income to that person be deductible by another person reducing their income, etc."⁹³¹

However, many analysts do not regard such acknowledged difficulties as reason to make no estimate at all. Not assigning a value implies there are no costs, and this is clearly not the case. Indeed, until governments account explicitly for these actual costs, they will be ignored and will not figure into economic policy decisions.

As noted, there have been numerous attempts to estimate the economic and social costs associated with unemployment, *including* fiscal costs. Some of those efforts have been summarized above. Given the very real difficulties in fiscal cost assessments noted by Hennebury, several of these studies have in fact attempted to estimate the potential earnings of the unemployed if they became employed, the average level of benefits they receive, and the difference between the direct and indirect taxes paid by the employed and unemployed.

In calculating fiscal costs for Nova Scotia we have assumed that the unemployed came from the private sector. If they came from the public sector, then the government would save on their wages and salaries.

At time of writing, the most recent available data for government spending on Employment Insurance and Social Assistance was 1999. To allow comparability to the 2001 cost estimates for output losses above, these 1999 figures have here been converted to constant 2001 dollars, using the Consumer Price Index.

In 1999, federal EI benefits to persons in Nova Scotia were \$524.8 million (\$2001). Provincial transfers to Nova Scotians on social assistance in 1999 amounted to \$250.8 million (\$2001).⁹³²

In order to calculate the loss of direct taxes, we have taken the difference between the income taxes paid on the average income of an employee in Nova Scotia and the income taxes paid on

⁹³¹ Hennebury, Bruce. Executive Director, Fiscal and Economic Policy Branch, N.S. Department of Finance. Personal communication. April 11, 2003.

⁹³² Nova Scotia Department of Finance. 2002. *Statistical Review*. Statistics Division. Halifax. p. 76.

the average income of someone on EI benefits, and then multiplied that by the number of unemployed.

According to Statistics Canada's Labour Force Historical Review (2002), the average weekly wage of an employee in Nova Scotia in 2001 was \$540.89. This includes part-time and full-time workers, and all goods and services jobs. This amounts to \$28,126/year. The income taxes paid on this average wage would be \$4,862 per year. Statistics Canada also provides data on average weekly Employment Insurance benefits. In 2001 average regular benefits were \$279.36/week. Over a year this would be \$14,527. The income tax payable on an income of \$28,126/year is \$4,862. Approximately \$1,516 is paid in income tax on the average income of an unemployed person receiving benefits.⁹³³ Thus, an employee in NS receiving the average wage would pay \$3,346 more in income taxes per year than a person receiving the average EI benefits.

There are two key assumptions involved in this assessment. First, we assume that when an unemployed person gets a job, he or she will earn the average industrial wage. Second, even though a majority of unemployed do not qualify for EI benefits, we assume that the income and taxes paid by those without benefits are the same as those who receive benefits. The first assumption may overestimate taxes paid, as the unemployed are likely to have lower than average skills, education, and experience, and thus earn less, and the second assumption may underestimate taxes paid, as those without benefits are likely to have lower incomes than those receiving benefits. Data on social assistance were not included in the calculations for direct taxes lost, due to the unavailability of data.

In order to verify these assumptions we would need to know what percentage of the unemployed have not finished high school compared to what percentage of the employed; or conversely what percentage of the employed *vs.* unemployed have a university degree. Then we could get wages by educational level and estimate the average wages that an unemployed person is likely to get when he/she finds a job. From that we could adjust the tax estimate accordingly, or at least point to the degree of overestimate.

Time and resources did not permit this extra work in this initial release of the GPI Work Hours Component. We recommend it for future updates of this report. Even though the direct tax estimate may vary depending on verification of these assumptions, it is still far more accurate to acknowledge an approximation of the likely tax loss than to ignore this hidden cost of unemployment and not to estimate it at all.

Based on a 9.7% unemployment rate, the federal and provincial governments lost \$152.6 million (\$2001) in potential direct taxes that would have been collected had these Nova Scotians been employed. Based on a 14% comprehensive unemployment rate (including discouraged workers and the underemployed portion of involuntary part-time work), the loss would be \$219.5 million (\$2001).

⁹³³ Average weekly employment insurance benefits are from Statistics Canada. CANSIM II, table 276-0016. Available from <http://www.statcan.ca/english/Pgdb/labor17.htm>. Accessed April 8, 2003. Income tax data were provided by McInnis, Mary. Certified General Accountant. Chester, Nova Scotia. Personal communication. April 9, 2003.

It should be noted that this assumes full employment, and does not make allowances for a “natural” rate of unemployment. If the 2001 official unemployment rate of 9.7% were brought down to 3.5%, as the CCPA analysis assumes, then government would have collected an additional \$107.8 million in direct taxes in 2001. If the 2001 comprehensive unemployment rate of 14% were brought down to 3.5%, government would have taken in an additional \$174.7 million.

In order to calculate the loss in indirect taxes, we have taken the difference between the average expenditures of those at the average wage level and the average expenditures of those on EI benefits, based on Statistics Canada data on expenditures by income quintile.⁹³⁴ Then we have estimated the percentage of those consumption items which are subject to HST (harmonized sales tax)⁹³⁵, calculated the difference in HST paid by the higher quintile compared to the lower quintile, and then multiplied by the number of unemployed to determine the loss in indirect taxes.

According to Statistics Canada the total current consumption of a person in Canada in the lowest income quintile (less than \$21,216) averaged \$11,068 in 2000. The total current consumption of a person in the second quintile (\$21,216 to \$37,000) averaged \$11,968 in 2000. When these amounts are converted to constant 2001 dollars for the sake of consistency with other data, they are \$11,343 for the bottom quintile and \$12,265 for the second quintile.⁹³⁶ As the average industrial wage in Nova Scotia in 2001 was \$28,126, and average EI benefits were \$14,527, the expenditures of these two bottom quintiles approximate those of the average employed person and the average unemployed person.

The calculations here involve several assumptions.

- 1) As these consumption data are provided by Statistics Canada for Canada, we have assumed here that the ratio of consumption to income in Canada applies also to Nova Scotia.

⁹³⁴ The term “quintile” simply means “one-fifth”, and refers to five income groups ranked from the top 20% of incomes to the bottom 20% of incomes. To assess quintiles, all incomes in a given population are ranked from the lowest to the highest and then divided into five groups. Thus the bottom one-fifth of incomes is referred to as the “first quintile,” the top one-fifth as the “fifth quintile,” and the middle 20% of incomes as the “third quintile.”

⁹³⁵ According to the N.S. Department of Finance Web site, HST applies to all goods and services except residential rentals, financial services, medical services, basic groceries and prescription drugs. According to Bruce Hennebury at the Department of Finance, approximately 50% of all goods and services in Nova Scotia are subject to HST. Sources: N.S. Department of Finance. Accessed April 8, 2003. Also, Hennebury, Bruce. Executive Director of Fiscal and Economic Policy Branch, Nova Scotia Department of Finance. Personal communication. April 11, 2003.

⁹³⁶ Statistics Canada. 2000c. *Spending Patterns in Canada*. Catalogue no. 62-202-XPE. Table 2. pp. 50-51. Average consumption per person is calculated by dividing the average consumption per household by the household size. The average total consumption for the lowest quintile is \$17,378 (\$2001) and the household size for the bottom quintile is 1.53 persons. The average total consumption for the second quintile is \$26,897 (\$2001) and household size is 2.19 persons. Method for calculating consumption per person from Statistics Canada. 2001b. *User Guide. Survey of Household Spending, 2000*. Income Statistics Division. Statistics Canada. Minister of Industry. Ottawa. p. 31.

- 2) As well, the latest Statistics Canada consumption data available at time of writing were for 2000, so we have also assumed here that the ratios of consumption expenditures to income in 2001 were the same as in 2000.
- 3) We have taken EI benefits as a proxy for the income of the averaged unemployed person. As only a minority of unemployed persons receive EI benefits, their use here may overestimate the consumption expenditures of the unemployed.
- 4) Data on social assistance were not included in the calculations for indirect taxes lost due to the unavailability of data.

Following the steps outlined above, and based on a hypothetical 0% unemployment base rate, the unemployment rate of 9.7% in 2001 (45,600 people) in Nova Scotia resulted in a loss of \$3.15 million (\$2001) in indirect taxes. Based on the 14% comprehensive unemployment rate (65,600 people) there was a loss of \$4.5 million (\$2001). If the 2001 official unemployment rate of 9.7% were brought down to 3.5%, the provincial government would have collected an additional \$2.2 million in indirect taxes. If the more comprehensive rate of 14% were brought down to 3.5%, an additional \$3.6 million would have been collected in indirect taxes.

9.1.4 Summary of Economic Costs

Assessments of the costs of unemployment demonstrate that unemployment is costly for everyone in society, not just the unemployed. Table 31 demonstrates that unemployment in Nova Scotia cost the provincial and national economy at least \$4 billion in 2001 in lost output and taxes and in direct payments to the unemployed.

Cost calculations for output loss have been made using both a hypothetical 0% unemployment base rate (full employment) and a 3.5% unemployment base rate. However, the same EI and Social Assistance figures were used in all scenarios since:

- EI and Social Assistance don't refer to all unemployed in any case;
- Unlike the other two sets of figures – output and tax loss – EI and Social Assistance expenditures are not hypothetical numbers, but actual direct payments.

Table 31. Summary of Economic Costs of Unemployment, Nova Scotia, (\$2001 million).

Losses	Estimated Economic Costs of Unemployment
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	Based on 9.7% Unemployment Rate (using hypothetical 0% unemployment base rate)	Based on 14% Comprehensive Unemployment Rate (using hypothetical 0% unemployment base rate)	Based on 9.7% Unemployment Rate (using hypothetical 3.5% unemployment base rate)	Based on 14% Unemployment Rate (using hypothetical 3.5% unemployment base rate)
1. Output loss	\$4,900	\$7,100	\$3,100	\$5,300
2. Fiscal costs				
• Employment Insurance	\$525	\$525	\$525	\$525
• Social Assistance	\$251	\$251	\$251	\$251
• Lost Direct Taxes	\$153	\$220	\$108	\$175
• Lost Indirect Taxes	\$3.15	\$4.5	\$2.2	\$3.6
TOTAL	\$5.8 billion	\$8.1 billion	\$4.0 billion	\$6.2 billion
Cost per capita	\$6,153	\$8,592	\$4,243	\$6,577

Notes:

- Some of the data used to derive these calculations were from 1999, while others were from 2000 and 2001. In all cases the most recent data were used. All dollar amounts were converted to \$2001 for consistency, using Statistics Canada Consumer Price Index.
- Some of the costs in Table 31 are borne by the province and others, such as employment insurance and lost federal income taxes, are borne by the country as a whole.
- Data on social assistance were not included in the calculations for direct/indirect taxes lost due to the unavailability of data. Those on social assistance would pay some taxes and these have not been included in the calculations above.
- Use of hypothetical 3.5% unemployment base rate in keeping with the Canadian Centre for Policy Alternatives' paper on the *Real Cost of Unemployment in Canada*, and assumes that even in a situation of "full employment," there will always be some people between jobs who are on the unemployment rolls. However, the experience of some countries like the Netherlands, which have experienced rates of unemployment below 3%, indicates that the CCPA's 3.5% base unemployment rate may be too high.
- Numbers have been rounded.
- Population figure for N.S. in 2001, used to calculate per capita costs, was 942,691 (N.S. Department of Finance, *Statistical Review*, 2002).

9.2 Social Costs

*"[Unemployment] is taking a significant toll on the health of Canadians.... the evidence that unemployment kills – particularly the middle-aged – now verges on the irrefutable."*⁹³⁷

In 1992, when unemployment had reached record post-war levels, the federal government issued a small, cheerfully written handbook for the unemployed, ironically titled *At the Controls: Charting your Course through Unemployment*. If anything, lack of control is precisely what characterizes the life of most newly unemployed individuals and their families. Typically their lives and daily routines have been seriously disrupted, and their financial security threatened in dangerous ways. Yet the government handbook omits mention of the most serious potential consequences of unemployment, and understates some of the changes the unemployed might experience, including: loss of money and social status; changes in duties at home; changes in relationships with family members, including an increased dependence on other family members (they may need to borrow money or move back to the family home, the guide says); and rapid emotional changes. The handbook suggests the unemployed should arrange a meeting with their banker: "[R]emember your creditors want to see their money again as much as you want to pay it back." It ends on an upbeat note, reminding the jobless to give themselves "positive messages," and to tell themselves they are still "valuable."⁹³⁸

But dealing with the impacts of job loss is rarely so simple.

Nearly 70 years ago, the true social costs of unemployment were recognized by the U.S. Supreme Court and characterized far more graphically than in the 1992 Canadian government handbook. The Court asserted in 1936 that unemployment "sapped morale, broke up existing families and delayed the formation of new ones, reduced physical wellbeing, depressed the birth rate, and led to crime, suicide and vagrancy."⁹³⁹ It is true that social transfers since that time have ameliorated some of the worst consequences of unemployment, but there is still strong empirical evidence today linking unemployment to the same ills described by the U.S. Supreme Court in the 1930s.

This is not surprising, as paid work fulfills crucial functions for people, even beyond its role as the main source of sustenance for most Canadians. In addition to providing income, work literally "shapes the experience of the employed." In her classic and oft cited book, *Employment and Unemployment: A Social-Psychological Analysis*, Marie Jahoda outlines how paid work shapes our experience:⁹⁴⁰

- It imposes a time structure;

⁹³⁷ Canadian Public Health Association, 1996, op. cit., p. 2.

⁹³⁸ Amundson, N. and W. Borgen. 1992. *At the Controls: Charting your Course through Unemployment*. Employment and Immigration Canada. Toronto. pp. 19-39.

⁹³⁹ As cited in Bedard, Marcel. 1996. *The Economic and Social Costs of Unemployment*. Applied Research Branch. Human Resources Development Canada. Ottawa. p. 11.

⁹⁴⁰ Jahoda, M. 1982. *Employment and Unemployment: A Social-Psychological Analysis*. Cambridge University Press. London. Cited in Kirsh, Sharon. 1983. *Unemployment. Its Impact on Body and Soul*. Canadian Mental Health Association. Ottawa. p. 68.

- It enlarges the scope of social experience into areas less emotionally charged than family life;
- It allows the worker to participate in a collective purpose or effort;
- It assigns status or identity;
- It requires regular activity.

According to Jahoda, the absence of these functions due to job loss can have "destructive" psychological consequences, and existing social norms allow very few of the unemployed to establish their own substitutes for these functions outside employment. In the end, the unemployed suffer "impoverishment of social experience," which can ultimately lead to mental and physical health problems, family breakdown, crime, and a loss of human capital.^{941 942}

This is not to say that people who are employed do not suffer from low self-esteem, stress, depression, or physical ailments. As already indicated, there are also substantial costs associated with poor working conditions as well as unsatisfactory work characterized by lack of autonomy, long work hours, low income, limited social contacts, and little opportunity to experience variety.⁹⁴³

But the evidence indicates that the unemployed suffer higher rates of a wide range of physical and mental ills than those with jobs, and studies confirm that unemployment is accompanied by specific sets of consequences ranging from distress at best to increased risks of death and suicide at worst.⁹⁴⁴ The Canadian Public Health Association notes that unemployment "is taking a significant toll on the health of Canadians" and that "the evidence that unemployment kills – particularly the middle-aged – now verges on the irrefutable."⁹⁴⁵

In short, the loss of a job can have devastating consequences that often manifest themselves in stages. The initial emotional reaction to unemployment has been described as a "roller-coaster" ride alternating from initial shock to optimism that a new job will soon be found, and then plummeting to pessimism and even fatalism if job searches are unsuccessful. Then comes the realization of the full consequences of lost income and lost access to opportunities, which in our society are in turn tightly linked to social status and identity. The loss of co-workers over time diminishes the social circle that work relationships produce. These losses frequently culminate in a sense of low self worth, which in turn can lead to chronic stress and mental and physical illness.⁹⁴⁶

⁹⁴¹ Jahoda cited in Fryer, David and Stephen McKenna. 1987. "The Laying of Hands – Unemployment and the Experience of Time." In *Unemployment: Personal and Social Consequences*. Stephen Fineman (ed). Tavistock Publications. London. pp. 47-73.

⁹⁴² Bedard, 1996, op. cit., p. 11; Canadian Mental Health Association. 1984. *Work and Well-being. The Changing Realities of Employment*. CMHA. Toronto. p. 1; and other sources.

⁹⁴³ Feather, Norman. 1990. *The Psychological Impact of Unemployment*. Springer-Verlag. New York. pp. 210-211.

⁹⁴⁴ Canadian Public Health Association (CPHA). 1996. *Discussion Paper. The Health Impact of Unemployment*. CPHA. Ottawa. Available from: <http://www.cpha.ca/english/policy/pstatem/unempl/htm>. Accessed December 29, 2002. p. 1; Kirsh, Sharon. 1983. *Unemployment. Its Impact on Body and Soul*. Canadian Mental Health Association. Toronto. pp. 47-48; Harvey Brenner, cited in Yates, Michael, D. 1994. *Longer Hours, Fewer Jobs. Employment and Unemployment in the United States*. Monthly Review Press. New York. pp. 67-69.

⁹⁴⁵ CPHA, 1996, op. cit., p. 2.

⁹⁴⁶ Kirsh, 1983, op. cit., pp. 47-48.

When the loss of work is also accompanied by poverty, the health outcomes may be significantly amplified.⁹⁴⁷

In addition to the effects on mind and body, unemployment has also been linked to increased rates of spousal and child abuse, divorce, criminal acts, and suicide.

The social costs associated with these many social, psychological, and health problems cannot be calculated precisely or comprehensively. However, attempts have been made by a number of economists and medical professionals to estimate some of those costs, and a few of those estimates are summarized below.

Social Cost Estimates cited in Literature

The cost estimates that follow cite the actual costs stated in the studies themselves, and are *not* converted to constant 2001 Canadian dollars. As some of these studies are from the 1970s and 1980s, and as costs are given variously in U.S. and Canadian dollars, these estimates are not comparable.

1970: Economists from the Joint Economic Committee in the U.S. tried to calculate a cost for hospitalization, morbidity, loss of productivity, and imprisonment attributable to unemployment, and found that a 1.4 percentage point increase in unemployment (which occurred in 1970) cost US\$6.6 billion.⁹⁴⁸

1976: Harvey Brenner estimated the cumulative cost over five years of a 1.4 percentage point increase in unemployment (above the 1970 rate) for suicide, hospital admissions, imprisonment, and deaths due to cirrhosis and cardiovascular diseases at US\$7 billion.⁹⁴⁹

1982: A Canadian study calculated the social costs of unemployment to be \$10 billion in that year. This estimate included the costs of suicide, homicide, heart disease, mental institution admissions and incarceration, total mortality, lost education/training, and the depreciation of human capital. Lost education and training and the depreciation of human capital were also costed separately from the other social costs and estimated at \$2.7 billion. The study did not include costs of child abuse, divorce, child poverty, and alcoholism. The same study also estimated the economic costs of unemployment (excluding social costs) at \$65.4 billion in 1982.⁹⁵⁰

1993: The Ontario Medical Association (OMA) calculated the proportion of total Canadian health care costs attributable to unemployment. Data from Saskatchewan were extrapolated for Canada as a whole, although it was acknowledged that Saskatchewan costs were lower than the national average on a per capita basis. The report authors estimated the total excess cost of health

⁹⁴⁷ Please refer to section on Inequality in Chapter 8.

⁹⁴⁸ Joint Economic Committee. 1980. *The Social Costs of Unemployment*. Hearing before the Joint Economic Committee. Congress of the United States. October 31, 1979. U.S. Government Printing Office. Washington. p. 5.

⁹⁴⁹ Bedard, 1996, op. cit., p. 20.

⁹⁵⁰ Deaton R. 1983. "Unemployment: Canada's Malignant Social Pathology." *Perception* 6 (5). Spring/Summer. pp. 14-19, cited in Kirsh, 1983, op. cit., p. xii.

care in Canada attributable to unemployment (including discouraged workers and the underemployed) at \$1.1 billion in 1993.⁹⁵¹ This study excluded costs associated with family breakdown, crime, and other social problems.

Another study in the early 1980s by Frank Reid of the University of Toronto's Centre for Industrial Relations estimated that each percentage point increase in Canada's unemployment rate had a social cost of \$270 million.⁹⁵²

Costs vary greatly depending on which variables are included in the calculation. Nevertheless it is clear from all these estimates that there would be considerable economic and social savings if there were fewer unemployed.

In the following sections we shall attempt to put a dollar figure on some of the social consequences of joblessness in Nova Scotia. As noted earlier, despite the difficulties in monetizing the social costs associated with unemployment, they remain invisible in our current system of accounting unless a dollar value is placed on them. Thus, while the costing of such things as family breakdown and suicide is fraught with difficulties, *not* putting a value on these variables suggests they cost nothing, which in turn effectively keeps the full costs of unemployment off the policy agenda.

Because a growing body of evidence indicates that the social costs of unemployment are very substantial indeed, estimates have been made for health, crime, and family breakdown costs attributable to unemployment insofar as the data and evidence permit. In the context of the total social costs attributable to unemployment the following are likely to be significant underestimates, since they exclude many intangible costs for which insufficient quantifiable data are available, including social exclusion, loss of identity, and psychological effects on children.

9.2.1 Health

"Two years ago, they announced they were downsizing the company and told me I was being laid off. I went into shock. Almost twenty years with the company, where was I going to get a job at fifty years old? They told us they were bringing in outside part-time contractors to do our jobs. Temps. We were welcome to apply for the jobs – at half our former wage. I just couldn't do it."

"So," I interrupted, "how many prescriptions did you eventually go on?"

"Six," he replied, without missing a beat. "Prozac, Xanax, Pepcid, Lasix, Clonidine for my blood pressure..."

"...And something to help you sleep at night?"

"Yeah, Ambien. How did you guess?"

– Michael Moore⁹⁵³

⁹⁵¹ OMA study cited in Canadian Public Health Association, 1996, op. cit., p. 10.

⁹⁵² Reid cited in Sykes, et al., 1985, op. cit., p. 70. The year Reid's study was conducted was not given.

⁹⁵³ Michael Moore in conversation with a laid-off Delta Airlines employee. Excerpted from his 1996 book, *Downsize This!* p. 8.

In his 1981 book, *Work and Health*, Robert Kahn cites a case study, conducted by the U.S. Department of Health and Welfare, of nearly 50 men who lost their jobs at an industrial auto paint plant in Baker, Michigan in the 1960s. The study found that of the men who lost their jobs, two committed suicide, one attempted suicide and one made suicide threats. Four of the men died of heart attacks, although three of the four had no previous history of coronary disease. During the first year of unemployment six of the men developed ulcers and arthritis, and there were increases in other stress-related illnesses. Those who were out of work the longest showed signs of depression, low self-esteem, anxiety, insomnia, anger, irritation, resentment, and suspicion.⁹⁵⁴

Since then, there have been numerous other studies that have shown a positive correlation between unemployment and a wide range of adverse health outcomes. However, many of the studies that have demonstrated a clear association or correlation between unemployment and illness have not necessarily established a causal link. According to Bedard, in order for a correlation between two variables to be seen as causal, three criteria are necessary: 1) The causal variable (in this case unemployment) must occur *before* the affected variable (in this case, health). 2) There must be a demonstrated *relationship* between the variables (i.e. the association must not be due to chance). 3) The occurrence of both events must not be due to some other variable.⁹⁵⁵ In other words, did the sickness come before the unemployment, and did other factors, such as age, diet, or housing (which are also associated with poor health and mortality) play a role in the illness?⁹⁵⁶

One 1994 Canadian meta-analysis by Jin, Shah, and Svoboda reviewed 46 studies, including aggregate level assessments (of entire populations) and studies of individuals, that had examined the relationship between unemployment and health. The authors concluded that the evidence suggested a "strong, positive association between unemployment and many adverse health outcomes." They found evidence that linked high unemployment rates with higher rates of overall mortality and of deaths due to heart disease and suicide in particular. The study concluded that the unemployed were more likely than either the employed or the general population to get sick and to die prematurely. However, they cautioned there are many "mediating and confounding factors, which may be social, economic or clinical."⁹⁵⁷

Among the 46 studies reviewed by Jin and his colleagues, the work of Harvey Brenner of Johns Hopkins University stood out as one of the most rigorous and perhaps the first to meet all three criteria establishing a causal link between unemployment and ill-health.⁹⁵⁸ Some of the other earlier studies found positive associations, but did not prove causal links. Brenner has been

⁹⁵⁴ Kahn, Robert L. 1981. *Work and Health*. John Wiley and Sons Inc. New York. pp. 84-90, citing Cobb, S and Kasl, S. 1977. *Termination: The Consequences of Job Loss*. U.S. Department of Health and Welfare. Washington.

⁹⁵⁵ Bedard, 1996, op. cit., p. 12.

⁹⁵⁶ For further information on establishing a causal link between unemployment and disease, see Harvey Brenner's testimony to the Joint Economic Committee of the U.S. Congress. 1980. *The Social Costs of Unemployment*. Hearing, October 31, 1979. Washington. pp. 3-25.

⁹⁵⁷ Bedard, 1996, op. cit, citing Jin, R.L, Shah, C.P, Svoboda, T.J. 1994. *The Health Impact of Unemployment: A Review and Application of Research Evidence*. Working Paper for the Population Health Committee. Ontario Medical Association. Toronto.

⁹⁵⁸ Bedard, 1996, op. cit., p. 12. Brenner's work has been cited as pioneering work in almost all the literature on the social costs of unemployment.

studying the effects of unemployment since the mid-1960s, and in 1979 testified before the Joint Economic Committee of the U.S. Congress, which at that time was investigating what unemployment was costing the country. In his opening statement to the Committee hearings on the subject, Representative Parren Mitchell asked: "[A]re we, as a society, absorbing the real costs of unemployment?"⁹⁵⁹

By the early 1980s the Canadian Mental Health Association notes there was a good deal of evidence to suggest that stress (or distress) associated with job loss "destroys the human spirit," and can make a person sick. People tend to develop irregular sleeping habits, eat less nutritious food, increase smoking and drinking, are less physically active, and "experience symptoms of diseases that are exacerbated by emotional distress."⁹⁶⁰

Kirsh argues that evidence available by the early 1980s had successfully established a causal link between chronic social stress and several infectious diseases, cancer, heart disease, stroke, and ulcers. She argues that unemployment can be a source of this stress, and that the anticipation of job loss can be as stressful as the event itself.⁹⁶¹ In the mid-1980s, the World Health Organization concluded that chronic stress due to unemployment was a major contributor to cardiovascular disease, ulcers, and asthma, as well as other mental and physical disorders.⁹⁶²

Since that time, new Canadian data have become available, allowing better assessments of the relationship between job loss and health in this country. According to data collected by Statistics Canada in its General Social Surveys, uncertainty about job security increased sharply in the early 1990s. In 1991, 11% of respondents were worried about being laid off. By 1994 this had more than doubled to 23%, no doubt as a consequence of the severe recession that afflicted the country in the early 1990s. By 2000, 13% of workers cited fear of job loss or layoff as a source of workplace stress. According to Statistics Canada's General Social Survey conducted in 2000, more than four in 10 of these individuals felt it was somewhat likely or very likely that they would lose their jobs sometime in the next year.⁹⁶³

In both 1994 and 2000, 34% of working Canadians cited too many demands or too many hours as the most common source of workplace stress.⁹⁶⁴

Table 32 below indicates that union members were most stressed by fear of job loss in 1994, with 34% worried about their job security, compared with only 15% three years earlier. Dramatic increases in job insecurity were also felt by managers and professionals, jumping from 11% in 1993 to more than 26% in 1994.

In 2000, the occupations that were most prone to stress caused by threat of job loss/layoff were the natural and applied sciences and occupations unique to processing, manufacturing, and utilities. Eighteen per cent of those surveyed in these fields experienced stress due to threat of

⁹⁵⁹ Joint Economic Committee, 1980, op. cit., p. 1.

⁹⁶⁰ Kirsh, 1983, op. cit., p. 54.

⁹⁶¹ Ibid. p. 56.

⁹⁶² World Health Organization cited in Junankar, 1986, op. cit., p. 67.

⁹⁶³ Williams, Cara. 2003. "Sources of Workplace Stress." *Perspectives*. Catalogue no. 75-001-XPE. Statistics Canada. Minister of Industry. Ottawa. p. 25.

⁹⁶⁴ Ibid. p. 24.

job loss or layoff. In business and in trades and transportation, 16% experienced stress associated with threat of job loss. In the health professions, 15% did.⁹⁶⁵

Table 32. Job Insecurity – Stress from Threat of Job Loss, Canada, 1991, 1994, and 2000.

Categories	Experienced Stress from Threat of Job Loss		
	1991 (%)	1994 (%)	2000 (%)
All workers	10.9	23.5	13
men	12.5	23.8	n/a
women	9.0	23.1	n/a
union	15.3	34.2	n/a
non-union	8.7	18.5	n/a
managerial/professional	10.6	26.3	n/a
skilled/semi-skilled	10.7	21.4	n/a
unskilled	12.3	22.8	n/a

Sources: **1991 and 1994 data:** Jackson, Andrew and David Robinson. 2000. *Falling Behind. The State of Working Canada, 2000.* Canadian Centre for Policy Alternatives. Ottawa.p. 92, citing Statistics Canada, General Social Surveys, 1991 and 1994, and Statistics Canada Catalogue no. 71-539; **2000 data:** Williams, Cara. 2003. "Sources of Workplace Stress." Perspectives. Statistics Canada. Minister of Industry. Ottawa. pp. 23-28, using data from General Social Survey, 2000. Categories provided by Williams did not correspond to those provided by Jackson and Robinson. Therefore, direct comparisons of data were not possible.

A person's chances of getting permanently or temporarily laid off also increased as a result of the early 1990s recession, but then decreased again after 1994. Between 1994 and 1995 there was a 17% decrease in the number of permanent layoffs. According to Statistics Canada, temporary layoffs are more sensitive than permanent layoffs to economic cycles. In an economic downturn, employers "tend to resort more frequently to temporary layoffs, attrition and reduced hiring in an effort to reduce labour costs."⁹⁶⁶ Table 33 shows that the permanent lay-off rate for Canadian men was 9% higher in 1993 than it had been in 1981, while temporary lay-off rates increased by 20% during the same period. Lay-off rates for women were lower but the increase over the time period was more dramatic. Permanent lay-off rates for women were 14% higher in 1993 than in 1981 and temporary lay-off rates were 25% higher.

The most recent Statistics Canada data for layoff rates shows that between 1994 and 1998 layoff rates (permanent and temporary combined) decreased from 5.5% to 3.6%. In the Atlantic provinces, the layoff rate in 1994 was 7.3% and by 1998 it had dropped to 4.9%, still above the Canadian average.⁹⁶⁷

According to one Statistics Canada study using longitudinal data on workers in Canada, temporary layoffs, quits and hirings are very cyclically sensitive but permanent layoffs are not as responsive to changes in the unemployment rate. For instance, the permanent layoff rate in

⁹⁶⁵ Ibid. p. 27.

⁹⁶⁶ Galarneau, D. and L. Stratychuk. 2002. "After the Layoff." *Canadian Economic Observer.* Statistics Canada. Catalogue no. 11-010-XPB. Minister of Industry. Ottawa. pp. 3.1- 3.2.

⁹⁶⁷ Ibid. p. 3.2.

Canada ranged from 8.7% in 1982, to 6.2% in 1989, to 7.6% in 1991. Whereas between 1979 and 1982, the number of temporary layoffs increased by 78%. During a more recent recession (1989-1991), the number of temporary layoffs increased by 23%. During both of these recessions permanent layoffs increased by 34% and 13% respectively.⁹⁶⁸

The Statistics Canada study found that permanent layoffs are caused by "more complex processes" including the worker-employer job-matching process, and the reallocation of market share and labour demand. Structural changes within the economy (trade globalization and competition) may also result in the long-term decline in labour demand, which has been especially pronounced in the goods-producing sectors in the 1980s and 1990s. Permanent layoffs may also result from "decreases in aggregate demand during recessions."⁹⁶⁹

According to Jackson and Kumar, the probability of a job lasting for more than six months also declined between 1981 and 1993.⁹⁷⁰

Table 33. Permanent and Temporary Lay-off Rates for Men and Women, Canada. 1981, 1993, and 1998.

	Year	Permanent Lay-Off Rate
Men	1981	8.6
	1993	9.4
Women	1981	4.3
	1993	4.9
	Year	Temporary Lay-Off Rate
Men	1981	7.6
	1993	9.1
Women	1981	5.7
	1993	7.1
	Year	Permanent and Temporary Rate Combined
Men	1998	3.9
Women	1998	3.0

Sources: **1981 and 1993:** Jackson, Andrew and Pradeep Kumar. 1998. *Measuring and Monitoring the Quality of Jobs and the Work Environment in Canada*. Centre for the Study of Living Standards. Ottawa. pp. 45-46. Original source: Picot, G., and Z. Lin. 1997. "Are Canadians more likely to lose their jobs in the 1990s." *Canadian Economic Observer*. Statistics Canada. Catalogue no. 11-010-XPB, Table 2; Statistics Canada. *Permanent Layoffs, Quits and Hirings in the Canadian Economy. 1978-1995*. Catalogue no. 71-539-XPB, Table 5; **1998:** Galarneau, D. and L. Stratyckuk. 2002. "After the Layoff." *Canadian Economic Observer*. Statistics Canada. Catalogue no. 11-010-XPB. Minister of Industry. Ottawa. p.3.2. Table 2.

⁹⁶⁸ Picot, Garnett, Zhengxi, Lin, and Wendy Pyper. 1997. *Permanent Layoffs in Canada: Overview and Longitudinal Analysis*. Analytical Studies Branch Series. no. 103. Statistics Canada. Minister of Industry. Ottawa. pp.1, 3.

⁹⁶⁹ Ibid. p. 6.

⁹⁷⁰ Jackson, Andrew and Pradeep Kumar. 1998. *Measuring and Monitoring the Quality of Jobs and the Work Environment in Canada*. Centre for the Study of Living Standards. Ottawa. p. 9.

Mental Illness

As noted previously, work helps shape a wide range of basic experiences, including security, daily routines, social status, family structure, self-esteem, and social relationships, and when we no longer have work, there are psychological consequences.⁹⁷¹ According to the Canadian Public Health Association there is a "consensus" that the "harmful effects of unemployment on mental and physical health are now well established."⁹⁷²

For many, the psychological consequences of unemployment can be very destructive, and may lead to severe anxiety, depression, disturbed sleep, self-harming behaviour, feelings of apathy, isolation, hopelessness, low self-esteem, and reduced decision-making ability.⁹⁷³

In 1996, the Canadian Public Health Association (CPHA) summarized the findings of four studies, two aggregate-level and two individual-level cohort studies, that examined the mental illnesses associated with unemployment. The two aggregate-level studies conducted in 1985 and 1986 used results from the 1978-1979 Canadian Health Survey and found that of the 12 measures of self-reported health status, the unemployed fared worse in seven categories including the scale of psychological distress, anxiety or depressive symptoms, and hospitalizations in the past year, even after adjusting for demographic and socioeconomic variables.⁹⁷⁴

The CPHA also cited two other Canadian individual-level studies by J.P. Grayson that documented the impact of major factory closures on the lives of the workers and their families. The first study examined the closure of a ball-bearing manufacturing plant in Toronto during the 1981-1982 recession. In all, 310 men were laid off at the factory. Those who remained jobless during the two-year study reported higher levels of stress than those who found jobs, visited their physicians more often, and reported taking prescription medications more frequently. Their spouses also reported increased stress levels that were worse if they too were unemployed. Grayson concluded, "the stress attributed to factory closure was significantly associated with worse health status, especially among older workers (over age 40)."⁹⁷⁵

Grayson also studied 400 workers who were laid off from a Toronto General Electric plant in 1984. These workers were mostly male, highly skilled, and well paid. They were followed for approximately two years after the shutdown and were found, along with their spouses, to experience "considerable trauma." Half of them ranked the stress as being "greater than or equal to divorce." The workers and their spouses were compared to the reference population of Ontario respondents to the Canada Health Survey. They were found to report "significantly more chronic

⁹⁷¹ Kirsh, 1983, op. cit., p. 68, citing Marie Jahoda (1982).

⁹⁷² Canadian Public Health Association. 1996. *Discussion Paper: Health Impact of Unemployment*. CPHA. Ottawa. Available from: <http://www.cpha.ca/english/policy/pstatem/unempl/htm>. Accessed December 29, 2002. p. 6.

⁹⁷³ Idem.

⁹⁷⁴ Idem. The two aggregate-level studies cited were D'Arcy, C. 1986. "Unemployment and Health: Data and Implications." *Canadian Journal of Public Health*. May/June. 77: 124-131. and D'Arcy and Siddique. 1985. "Unemployment and Health: An Analysis of the Canada Health Survey." *International Journal of Health Services*. 15(4): 609-635.

⁹⁷⁵ Grayson cited in CPHA, 1996, op. cit., p. 6. Grayson, J.P. 1985. "The Closure of a Factory and Its Impact on Health." *International Journal of Health Services*. 15(1): 69-93; and Grayson, J.P. 1989. "Reported Illness from a CGE Closure." *Canadian Journal of Public Health*. Jan/Feb; 80(1): 16-19.

symptoms especially headaches, hay fever and allergy, back, limb or joint disorder, and arthritis." One finding was particularly noteworthy. Many of the negative health effects were reported "long after" the study subjects found new jobs, indicating persistent residual feelings of stress due to economic insecurity.⁹⁷⁶

Suicide

The "crushing grief" that can result from unemployment can also lead to the most extreme expression of depression – suicide.⁹⁷⁷

In 1985, *Business Week* reported on the shutdowns of numerous plants, which had resulted in the lay off of more than a million white-collar workers. The magazine article was aptly titled "Suddenly, the world doesn't care if you live or die." According to the article, alcoholism, stress-related diseases, and suicide were among the consequences of the massive job losses.⁹⁷⁸

At the aggregate population level, there have been numerous studies that have shown a "strong same-directional association between 'economic insecurity' and suicide incidence."⁹⁷⁹ Among them is Harvey Brenner's oft-cited work, which found that the suicide rate among the unemployed is higher than among the general population. According to Brenner, the relationship between unemployment and suicide is "highly stable and predictable."⁹⁸⁰ He estimated that a 10% increase in the U.S. unemployment rate would lead to a 0.7% rise in the suicide rate.⁹⁸¹ According to Brenner, the rise in the unemployment rate between 1989 and 1990 led to 1,900 more suicides over a five-year period.⁹⁸²

The results cited below, in Tables 34, 35, and 36, both in this sub-section and the following two sub-sections, are summarized from Marcel Bedard's 1996 review of evidence, *The Economic and Social Costs of Unemployment*, published by Human Resources Development Canada (HRDC). Based on a number of studies, Bedard assessed excess risks of suicide, death to cardiovascular and renal diseases, and other health effects attributable to unemployment. Bedard summarized these risks as odds ratios compared to either the general population or employed workers, in which general or employed population rates of suicide, death, and disease are scaled at 100, and numbers in excess of 100 represent the excess risks among the unemployed. The studies controlled for confounding factors, including economic and socio-demographic variables, and health risk behaviours.⁹⁸³

⁹⁷⁶ Idem.

⁹⁷⁷ Rao, Rama K. 1986. *Unemployment, Stress, and Suicide: An Annotated Bibliography*. Vance Bibliographies. Vance Bibliographies. Vance. p. 2. Also, Joint Economic Committee, 1980, op. cit., p. 4; CPHA, 1996, op. cit., p. 5; Yates, Michael, D. 1994. *Longer Hours, Fewer Jobs. Employment and Unemployment in the United States*. Monthly Review Press. New York. pp. 67-68.

⁹⁷⁸ Rao, 1986, op. cit., p. 11.

⁹⁷⁹ CPHA, 1996, op. cit., p. 5.

⁹⁸⁰ Joint Economic Committee, 1980, op. cit., p. 3.

⁹⁸¹ Bedard, 1996, op. cit., p. 16.

⁹⁸² Yates, 1994, op. cit., p. 67.

⁹⁸³ Bedard, Marcel. 1996. *The Economic and Social Costs of Unemployment*. Applied Research Branch. Human Resources Development Canada. Ottawa.

Table 34 lists various studies that show an increased risk of suicide among the unemployed. The Danish study cited below showed that the risk of death by suicide among the unemployed was 2.5 times as high as the general population. The CPHA has noted that the relationship between unemployment and suicide is complicated by the fact that suicides are often underreported and disguised as "accidents."⁹⁸⁴ This could partly explain the differences in risk cited below. It also cautioned that studies did not rule out prior "health selection," or a predisposition to suicide unrelated to unemployment.⁹⁸⁵

Table 34. Results of Studies on the Excess Risk of Death by Suicide among the Unemployed Compared with the General Population.⁹⁸⁶

Study	Study Population	Study Period	Risk of Death Among the Unemployed, Compared to General Population (= 100)
Moser, Fox et al.	British men 15-64 years of age	1971-1981	160
Martikainen	Finnish men 30-54 years of age	1981-1985	192
Iversen et al.	Danish men 20-64 years of age	1970-1980	250

Source: Bedard, 1996, op. cit., p. 16.

Another study by Stack, Steven, and Ain Haas found that an increase in the *duration* of unemployment also led to increased suicide rates.⁹⁸⁷ The CPHA also pointed out studies which found a positive association between suicide and prosperous times among the marginalized who fail to benefit from the economic upturn. According to one study cited by the CPHA, "suicide risk could increase during either economic good or bad times, since both destabilize the existing social fabric. Mental health consequences could result from both the inability to lower expectations during economic downturns and to cope with unrealistic rising expectations during economic booms."⁹⁸⁸

Cardiovascular Disease

The CPHA reviewed numerous studies that found a same-direction relationship between heart disease and unemployment even after adjusting for trends in epidemiological risk factors such as tobacco and alcohol consumption. Beginning with evidence nearly four decades ago indicating

⁹⁸⁴ CPHA, 1996, op. cit., p. 5.

⁹⁸⁵ Idem.

⁹⁸⁶ Bedard, 1996, op. cit., p. 16, citing Moser, K., Fox, J. and D. Jones. 1984. "Unemployment and Mortality in OPCS Longitudinal Study." *Lancet*. ii: 1324-1329.; Martikainen, P.T. 1990. "Unemployment and Mortality among Finnish Men, 1981-1985." *British Medical Journal*. 301: 407-411.; Iversen, L., Anderson, O., Anderson, P.K., et al. 1987. "Unemployment and Mortality in Denmark, 1970-1980." *British Medical Journal*. 295: 878-884.

⁹⁸⁷ Stack, Steven, and Ain Haas. 1984. "The Effect of Unemployment Duration on National Suicide Rates: A time series analysis." *Sociological Focus*. 17 (1). pp. 17-29, cited in Rao, 1986, op. cit.

⁹⁸⁸ CPHA (1996) citing Durkheim, E. 1951. *Suicide*. The Free Press. New York.; Adams, O.B. 1981. *Health and Economic Activity: A Time-Series Analysis of Canadian Mortality and Unemployment Rates*. Health Division. Statistics Canada. Ottawa; Lester, D., Motohashi, Y., and B. Yang. 1992. "The Impact of the Economy on Suicide and Homocide Rates in Japan and the United States." *International Journal of Social Psychiatry*. 38(4): 314-317.

stress to be a risk factor for cardiac disease and hypertension, studies in turn found that unemployment can lead to severe chronic stress.⁹⁸⁹

Based on historical, aggregate population-level data, Brenner predicted that the increase in the unemployment rate in the U.S. between 1989 and 1990 would result in 27,800 more cardiovascular deaths over a five-year period.⁹⁹⁰

Table 35 presents the findings of four studies that examined the impact of unemployment on mortality due to cardiovascular and renal diseases. The studies found that unemployed men were between 7% and 59% more likely to die of cardiovascular and renal diseases than the general population. The two studies that also examined the impact of job loss on the spouses of unemployed men found that, in both cases, the spouses were at greater risk of death than the unemployed themselves.⁹⁹¹

Table 35. Results of Studies on the Excess Risk of Death due to Cardiovascular and Renal Disease among Unemployed People Compared with the General Population.

Study	Study Population	Study Period	Risk of Death Among the Unemployed Compared to General Population (= 100)
Moser, Goldblatt et al.	British men 15-65 years of age	1981-1983	159
Moser, Fox et al.	British men 15-64 years of age and their spouses	1971-1981	men: 107 spouses: 129
Martikainen	Finnish men 30-54 years of age	1981-1985	154
Iversen et al.	Danish men 20-64 years of age and their spouses	1970-1980	men: 128 spouses: 141

Source: Bedard, 1996, op. cit., p. 15.

Other Health Effects

One 1985 Canadian study by D'Arcy and Siddique indicated that the mental and physical health of the unemployed was *generally* worse than that of the employed population on a wide range of health indicators. Their study findings, as summarized by Bedard for HRDC, are presented in Table 36 below. The unemployed tend to be less satisfied with their mental and physical

⁹⁸⁹ CPHA, 1996, op. cit., p. 4.

⁹⁹⁰ Brenner cited in Yates, 1994, op. cit., p. 67. In 1989 the unemployment rate in the U.S. was 5.3%. In 1990 it was 5.6%. From U.S Bureau of Labor Statistics. *Unemployment Rate, 1980-2003*. Available from <http://data/bls.gov/servlet/SurveyOutputServlet>. Accessed November 20, 2003.

⁹⁹¹ Moser, Goldblatt, Fox et al. 1987. "Unemployment and Mortality: Comparison of the 1971 and 1981 Longitudinal Study Census Samples." *British Medical Journal*. 294: 85-90.; Moser, Fox et al. 1984. "Unemployment and Mortality in OPCS Longitudinal Study." *Lancet*. ii: 1324-1329.; Martikainen. 1990. "Unemployment and Mortality among Finnish Men, 1981-1985." *British Medical Journal*. 301:407-411.; Iversen, L., Anderson, O., Anderson, P.K., et al. 1987. "Unemployment and Mortality in Denmark, 1970-1980." *British Medical Journal*. 295: 878-884. Cited in Bedard, 1996, op. cit., p. 15.

wellbeing; they report more long and short-term disabilities; are sick almost twice as often; and visit their physician more frequently than those with jobs. D'Arcy and Siddique also found that the unemployed are 20% to 25% more at risk for heart disease, chest pain, high blood pressure, and joint pain than the general employed population.⁹⁹² Whether unemployment causes these adverse health outcomes is clear, as there "are likely many mediating and confounding factors, which may be social, economic or clinical."⁹⁹³

Table 36. Mental and Physical Health of the Unemployed compared to the Employed, Canada, 1978-1979.

Indicators of Mental and Physical Health	Relative Risk of Unemployed Subjects Compared to Employed Population (= 100)
Index of psychological stress	106
Symptoms of anxiety/depression	117
Short-term physical disability	173
Long-term physical disability	112
Number of health problems	112
Visits to physician during previous year	133
Admissions to hospital in previous year	133
Heart disease	124
Heart and chest pain	121
High blood pressure	125
Joint pain	124
Hypertension	119

Source: Bedard, 1996, op. cit., p. 18. Original Source: D'Arcy and Siddique. 1985. "Unemployment and Health: An Analysis of the Canada Health Survey." *International Journal of Health Services*. 15(4): 609-635.

D'Arcy and Siddique found that the unemployed are one-third more likely to use physician and hospital services than their employed counterparts, indicating that unemployment is costly to the health care system and to the taxpayer. Other studies support these findings and show that doctors and hospitals can expect to see more patients during hard economic times. It should be pointed out however, that D'Arcy and Siddique's findings are based on Canadian data that assume equal access to health care and may not apply to countries where there is no universal health care system. In fact, in the U.S., economic slumps have been found to result in emptier waiting rooms, since the loss of a job may mean the loss of health coverage. Lack of health coverage results in an "inverse care law in which people most in need of health services (such as the unemployed and poor) become the least likely to get it."⁹⁹⁴

⁹⁹² Bedard, 1996, op. cit. pp. 16-17, citing D'Arcy and Siddique. 1985. "Unemployment and Health: An Analysis of the Canada Health Survey." *International Journal of Health Services*. 15(4): 609-635.

⁹⁹³ Bedard, 1996, op. cit., p. 12.

⁹⁹⁴ CPHA, 1996, op. cit., p. 7. The "inverse care law" concept originated in Frey, J. 1982. "Unemployment and Health in the U.S." *British Medical Journal*. April 10: 284.

Unemployed people who are also poor are at even greater risk than those who are unemployed but better off, for a number of health and social problems, including mental illness, alcohol and drug abuse, and premature mortality. They also have a higher rate of suicide, homicide, and imprisonment.⁹⁹⁵ Please refer to the previous chapter for an in depth discussion on the association between poverty, inequality, and illness.

The authors of the Ontario Medical Association report mentioned above also published a paper in the *Canadian Medical Association Journal* in 1995, in which they reviewed the scientific evidence on the association between unemployment and adverse health outcomes. They concluded:

"In keeping with the common perception than unemployment is an adverse life event or condition, we found that the evidence strongly supports an association between unemployment and a greater risk of morbidity (physical or mental illness or use of health care services), both at the population and individual levels, and a greater risk of mortality at the population level.... Although more research can be done to elucidate mechanisms and mediating factors, there is enough evidence to recommend that intervention research, to determine ways to reduce the adverse effect of unemployment on health, be a priority.... Although unemployment and economic issues may seem beyond the usual bounds of health care, physicians and other health care professionals have the opportunity to recognize, treat and possibly prevent the adverse consequences of unemployment for their patients."⁹⁹⁶

What about Women?

How does joblessness affect women? Most studies conducted in the 1970s and 1980s that examined the impact of unemployment on women looked at the spouses of unemployed men, rather than at women who had themselves lost their jobs. According to the CPHA this omission was largely due to the fact that it was "difficult to know how many women were in the official labour force, how many were actively seeking work, and how many had left or never entered the workforce because of discouragement."⁹⁹⁷ The CPHA argues that there is now a need for more longitudinal studies on the mental and physical health of unemployed women, especially since they are more likely to be laid off and much more likely to be single parents than are men.⁹⁹⁸

9.2.1.1 Methodology for Calculating Health Costs

Below is a breakdown of some health costs associated with unemployment in Nova Scotia, and a description of the methodology used to calculate these costs. GPI Atlantic used this same method in 2000 to assess the cost of obesity in Nova Scotia, and in 2002 to assess the cost of physical inactivity in Nova Scotia. The 1994 Ontario Medical Association (OMA) study, mentioned

⁹⁹⁵ Kirsh, 1983, op. cit., p. 51.

⁹⁹⁶ Jin, R.L., C.P. Shah, and T.J. Svoboda. 1995. "The Impact of Unemployment on Health: A Review of the Evidence." *Canadian Medical Association Journal*. September. Vol. 153, no. 5. Toronto. pp. 529-540.

⁹⁹⁷ CPHA, 1996, op. cit., p. 7.

⁹⁹⁸ Idem.

earlier, which calculated the proportion of total health care costs in Canada attributable to unemployment, also used this method. The OMA study used data from Saskatchewan and extrapolated those data to Canada as a whole. Based on these assumptions, the OMA study estimated the total excess annual costs of health care in Canada attributable to unemployment in 1993 to range from \$845 million to \$1,085 million (in 1993 Canadian dollars and using official and supplementary rates of unemployment respectively).⁹⁹⁹

To estimate these social costs of unemployment (or any other risk factor) in Nova Scotia, the following steps are necessary.¹⁰⁰⁰

1) The epidemiological evidence is examined to ascertain the relationship between unemployment and various diseases, as well as the relationship between unemployment and various indicators of mental and physical health. This is expressed as the "relative risk" (RR) of developing a particular disease for an unemployed person compared to an employed person.¹⁰⁰¹ The relative risk is determined by dividing the rate of the disease among unemployed people by the rate of disease among employed people. For example, if unemployed people are twice as likely as employed people to develop heart disease, then the relative risk is two.

In this case, the relative risks of three diseases, and six other health indicators were taken from a 1996 analysis and review of relevant literature prepared by Marcel Bedard for Human Resources Development Canada, titled *The Economic and Social Costs of Unemployment*.¹⁰⁰² However, one study used by Bedard cautioned that there could be "mediating and confounding factors, which may be social, economic or clinical," and that further research is necessary to prove causation.¹⁰⁰³ The relative risk ratios provided here should therefore be viewed as preliminary estimates.

2) The second step is to determine the prevalence of a risk factor within a given population. In this case, the unemployment rate in Nova Scotia in 2001 was 9.7%. We will also be assessing costs associated with "hidden" unemployment (discouraged workers and the underemployed portion of involuntary part-time work) and in this case will be using Statistics Canada's comprehensive unemployment rate of 14% for Nova Scotia in 2001.

It may be argued that using even a 14% prevalence rate will produce conservative cost estimates. First, as noted earlier, Statistics Canada's supplementary unemployment rates do not include several categories of potential workers who are currently not employed but who would like to have a job if a suitable one were available. This includes mothers unable to find suitable, affordable child-care or to balance job requirements with child-rearing responsibilities; students who stay in school longer because they cannot find suitable work; and those forced to retire earlier than they wish.

⁹⁹⁹ Canadian Public Health Association. 1996. *Discussion Paper on the Health Impact of Unemployment*. p. 10. Available from: <http://www.cpha.ca/english/policy/pstatem/unempl/htm>. Accessed December 29, 2002.

¹⁰⁰⁰ Later in this report, this same methodology is used to calculate divorce costs associated with unemployment.

¹⁰⁰¹ Methodological explanation based on Colman, Ronald. 2002. *The Cost of Physical Inactivity in Nova Scotia*. GPI Atlantic. Halifax. pp. 14-18.

¹⁰⁰² Bedard, Marcel. 1996. *The Economic and Social Costs of Unemployment*. Applied Research Branch. Human Resources Development Canada. Ottawa. pp. 14-19.

¹⁰⁰³ *Ibid.* p. 12.

Second, the *duration* of unemployment has been increasing over time.¹⁰⁰⁴ Although this may lead to increased health risks and even death among the unemployed, we have been unable to account for this factor in this study. Several studies indicate that the long-term unemployed are at particular risk, with relative risks of morbidity and premature mortality increasing in proportion to duration of unemployment. For example, one Finnish study cited in Bedard (1996) found that mortality rates among the unemployed varied with the length of their unemployment. For instance, men between the ages of 30-54 years who were unemployed from 1-3 months were 40% more likely to die prematurely than those with jobs (RR = 1.4). As the duration of unemployment increased, so did their risk of dying. Those out of work for 7-10 months had a relative risk of 2.74, and those unemployed longer than a year were more than three times more likely to die.¹⁰⁰⁵

In fact, the relative risk ratios used in this study are based on D'Arcy and Siddique's 1985 analysis for all of Canada using 1978-79 Canada Health Survey Data. In 1978, the average duration of unemployment in Canada was 15.4 weeks per year. In 2001, the latest available year for which evidence was available at the time of writing, the average duration of unemployment in Nova Scotia was 15.9 weeks, for which the relative risk ratios are therefore likely to be slightly higher than those used in this report. This again is likely to underestimate somewhat the current health costs associated with unemployment in this province.

Third, a study of 3,000 young people in Australia found that those who were dissatisfied with their jobs had the same low mental health scores as those who were unemployed.¹⁰⁰⁶ It is also likely that those who are unhappily working in insecure jobs, with the stress and dissatisfaction that frequently accompany such work, experience at least some of the same ailments as the unemployed. A recent Community GPI survey, for example, found that 17.3% of employed Glace Bay residents, and 12.2% of employed Kings County residents, experienced stress about the threat of lay-off – a stress likely to manifest in poorer health status.¹⁰⁰⁷ Thus, because unemployment is only the most extreme form of job insecurity, which is associated with poor health outcomes even in its milder manifestations, the health costs attributable to unemployment represent only a portion of the costs associated with job insecurity as a whole.

For all these reasons, using Bedard's relative risk ratios and risk factor prevalence rates of 9.7% and 14% for Nova Scotia in 2001, may underestimate the health care costs attributable to unemployment, and almost certainly underestimates costs associated with job insecurity. However, GPI Atlantic here follows the precedent set by the Ontario Medical Association in its

¹⁰⁰⁴ On average, the unemployed were without work for longer periods in 2001 than they were 25 years earlier. In Canada the average number of weeks that an unemployed person was without work increased from 13.9 weeks in 1976 to 24 weeks in 1996, before falling again to 15.4 weeks in 2001, still above 1976 levels. In 2001, unemployed Nova Scotians were without work for an average of 15.9 weeks, up from 13.9 weeks in 1976, and down from 22.1 weeks in 1996. Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

¹⁰⁰⁵ Bedard, 1996, op. cit., p.14.

¹⁰⁰⁶ Colman, 2003, op. cit., pp. 39-40. Original source: Fryer, David. 1995. "Unemployment: A Mental Health Issue." In *The Jobs Letter*. 24:9.

¹⁰⁰⁷ Pennock, Mike. (forthcoming 2004). "Employment and health: Some results from the Community GPI surveys in Kings County and Glace Bay." GPI Atlantic. Halifax. Mike Pennock is the Research Director of the Population Health Research Unit at Dalhousie University.

1994 study, in which it used both the official unemployment rate and "hidden" unemployment rate for Canada to calculate the proportion of health costs attributable to unemployment. The OMA argued that the "hidden" rate reflects the potential "exposure" to the adversity of unemployment better than the official rate. Thus, the OMA's cost estimates were presented as a range – the low end using official unemployment statistics, and the high end using the "hidden" rates.¹⁰⁰⁸ We have followed the same protocol here.

It might be argued that we should only be calculating the costs of unemployment above the "natural rate of unemployment." However, as was previously discussed, many economists do not accept the existence of such a rate.¹⁰⁰⁹ Even if it did exist, it is unlikely to affect the health care costs associated with unemployment, as there is no evidence that those above and below the "natural rate" have different health outcomes. Of course we do not assume that a rate of zero unemployment is possible, as there will always be some individuals without or between jobs for a variety of reasons. But, in light of the fact that health costs are averaged for *all* the unemployed regardless of any "natural rate" of unemployment, and because of the existing biases towards underestimation noted above, Statistics Canada's official and supplementary unemployment rates for Nova Scotia in 2001 are suitable and likely conservative bases for the prevalence estimates in this study.¹⁰¹⁰

3) To assess the public health burden associated with unemployment (both official and hidden), or any other risk factor, the relative risk (step 1) is then combined with the prevalence of unemployment (or other risk factor) in the population. The resulting *population attributable fraction* (PAF) of a disease or health indicator is an estimate of the effects of an individual risk factor on the incidence of a given disease, and the extent to which each disease or health indicator is attributable to the risk factor. The PAF of a disease, therefore, is the proportion of each chronic disease that could theoretically be prevented by eliminating unemployment. The population attributable fraction (PAF) is calculated in the following way:

$$\text{PAF} = [P (RR - 1)] / [1 + P (RR - 1)]$$

where P is the prevalence of unemployment in the population (in this case, 9.7% (0.097) and 14% (0.14)) and RR is the relative risk for the occurrence of the disease or health indicator in an unemployed person by comparison with an employed person. The results from steps 1 to 3 are presented in Table 37 below.

An important methodological caveat must be added here. Unemployment rates are calculated as a percentage of those in the labour force only. However, the PAF refers to the prevalence of an illness or other health indicator in the population as a whole (which includes those not in the labour force). In the formula above, we are therefore using relative risk estimates for those in the labour force (unemployed *vs.* employed) to estimate the *population* attributable fraction of an illness, based on its incidence in the population as a whole (including those not in the labour force). This is methodologically problematic.

¹⁰⁰⁸ Canadian Public Health Association, 1996, op. cit., p. 10.

¹⁰⁰⁹ Please refer to Part 1, Chapter 5, for more information on the "natural rate of unemployment."

Recent analysis of the Community GPI survey indicates that the health of some segments of those not in the labour force – particularly homemakers and the retired – have poorer self-rated health status than those who are employed. On the other hand, others not in the labour force, particularly students, have better health status than the employed.¹⁰¹¹ Further work is needed, particularly using age-standardized logistic regressions, to assess the overall relative health risks of those not in the labour force by comparison with those who are employed and unemployed. These relative risk ratios were not available to the author at time of publication.

Therefore, we have assumed, for the purposes of this analysis, that the relative risk ratios for the health of the unemployed compared to the health of the employed can be applied to the population as a whole. This is uncertain, and may result in overestimates of the PAF if significant portions of those not in the labour force have poorer health status than those who are employed. As the variables noted above (point 2) are likely to result in underestimates of the health costs associated with job insecurity and unemployment, we have assumed that the likely overestimates here will roughly cancel out the earlier underestimates. Also, wherever a range of estimates for unemployment-related relative risk ratios is provided in the literature examined, we shall always use the most conservative estimate.

However, we fully acknowledge the uncertainties here, and the serious methodological problems in extrapolating relative risks within the labour force to the population at large. For this reason, great caution should be exercised in interpreting the results below, and they should be regarded only as illustrative of the fact that higher health care costs are clearly associated with unemployment. The uncertainties here indicate the importance of further research in this area, and particularly the need for the assessment of relative risk ratios for the unemployed by comparison with *all* other sectors of the adult population, including those not in the labour force. Such assessment should allow more accurate calculations of the health care costs attributable to unemployment in the future.

4) The fourth step is to multiply the population attributable fraction (PAF) for each disease or health indicator by the total cost of treating that particular disease or the total cost associated with the indicator, using Health Canada's Economic Burden of Illness in Canada (EBIC), which describes illness costs by diagnostic category and by cost components.¹⁰¹² Thus, subject to the major methodological caveat noted above, we can estimate the total direct health care costs associated with unemployment by (a) first using the PAF of each particular disease/health indicator (step 3 above) to estimate the fraction of the costs of that particular illness that are attributable to unemployment within a given jurisdiction, and then (b) adding together those individual disease-specific costs to derive a total cost estimate of the excess health-care expenditures attributable to unemployment within that jurisdiction.

Provincial breakdowns of costs for treating each disease were provided in EBIC 1998. However, EBIC did not provide provincial cost breakdowns for each disease subcategory. For instance, cost estimates were provided for musculoskeletal disorders, cardiovascular diseases, and mental

¹⁰¹¹ Pennock, Mike. (forthcoming 2004). "Employment and health: Some results from the Community GPI surveys in Kings County and Glace Bay." GPI Atlantic. Halifax.

¹⁰¹² Health Canada. 2002. *Economic Burden of Illness in Canada, 1998*. Policy Research Division. Population and Public Health Branch. Ottawa. pp. 6-7.

disorders for N.S., but not for their subcategories, such as joint pain, heart disease, and anxiety/depression. EBIC did provide cost estimates for disease categories and subcategories for Canada and these proportions were then applied to the Nova Scotia totals to derive provincial figures for heart disease, joint pain, and anxiety/depression. The assumption here is simply that the ratio of heart disease to all cardiovascular diseases, of joint pain to all musculoskeletal disorders, and of anxiety/depression to all mental illnesses, is the same in Nova Scotia as in the country as a whole.

Using the unemployment rate alone to assess risk and health costs within a given population does not account for the fact that spouses of the unemployed, according to some studies (see Table 35 above) experience greater stress and are actually *more* likely to die from certain illnesses than the husbands who actually lost their jobs. For *all* causes of death, however, the wives of unemployed men have a relative risk of dying prematurely (1.20) similar to that of their husbands (1.21), indicating that wives of unemployed men are 20% more likely to die prematurely than wives of employed men, while unemployed men are 21% more likely to die prematurely than employed men.¹⁰¹³ Several other studies have determined that members of the unemployed person's family are more likely to suffer from mental and physical ailments than members of households that do not experience unemployment.¹⁰¹⁴ Thus using the unemployment rate as the prevalence factor is likely to underestimate the degree to which certain illnesses are related to unemployment-induced factors.

It should be emphasized here that the diseases and health indicators listed in Table 37 above are far from exhaustive. In fact, numerous studies, including those reviewed by Bedard, indicate that the unemployed generally suffer from more physical and mental health problems than the employed across a wide range of illnesses. The list would be many times longer if all the diseases from which the unemployed suffer to a greater degree than the employed were included. However, time and resources did not permit a full review of all the relevant epidemiological literature on the subject, and this assessment is therefore confined to the illnesses and indicators for which Bedard provides relative risk ratios. Future updates of this report should include cost calculations for a wider range of diseases and health indicators associated with unemployment than appear here.

As well, a review of literature on the health effects of long-term unemployment should be carried out, with cost assessments broken down according to costs attributable to long-term versus short-term unemployment. Also, as noted above, in order to assess the population attributable fractions (PAFs) for each illness and health indicators more accurately, further research is required to compare the health of the unemployed with that of the population as a whole, including those not in the labour force.

Here the data limitations and methodological obstacles described above did not permit a comprehensive or accurate assessment of health costs by disease category. However, Bedard does provide relative risk ratios both for excess use of health care services (hospitals and physicians) attributable to unemployment that result in direct costs to the taxpayer and also for excess mortality and disability that result in indirect productivity losses to the economy. Because

¹⁰¹³ Bedard, 1996, op. cit., p. 14, based on studies by Harvey Brenner.

¹⁰¹⁴ Argument for including family members made in Yates, 1994, op. cit., pp. 68-69.

those indicators, and their associated relative risk ratios and costs, include a wider range of illnesses than are indicated in Tables 37 and 38, these health care cost and productivity loss estimates can be used at least to illustrate the magnitude of total health costs that may be associated with unemployment.

Table 37. Relative Risk (RR) and Population Attributable Fraction (PAF) for Selected Diseases and Health Indicators Attributable to Unemployment in Nova Scotia, 2001.

Disease or Health Indicator	Relative Risk (RR) by comparison with Employed (= 100)	Population Attributable Fraction (PAF) estimate based on	
		a) Official Unemployment Rate (9.7%)	b) Comprehensive Rate (14%)
Anxiety/Depression	117	a) .016 or 1.6%	b) .023 or 2.3%
Heart Disease	124	a) .023 or 2.3%	b) .033 or 3.3%
Joint Pain	124	a) .023 or 2.3%	b) .033 or 3.3%
Hospitalization	133	a) .031 or 3.1%	b) .044 or 4.4%
Physician use	133 to 183*	a) .031 or 3.1%	b) .044 or 4.4%
Short-term disability	173	a) .066 or 6.6%	b) .091 or 9.1%
Long-term disability	112	a) .012 or 1.2%	b) .017 or 1.7%
Mortality	147 to 193*	a) .044 or 4.4%	b) .062 or 6.2%
Suicide	160 to 250*	a) .055 or 5.5%	b) .077 or 7.7%

Notes:

- For indicators marked with an asterisk, a range of relative risk ratios was provided by Bedard based on various international studies. Bedard's analysis did not indicate why such wide variations existed among the various studies he examined, and it is therefore unclear if the results of the different studies are comparable. Therefore, and because of the major methodological caveat described in #3 above, we will base our cost calculations on the more conservative estimates of relative risk for the purposes of this report.
- 2001 figures for prevalence of unemployment in Nova Scotia (official and comprehensive rates) were used to estimate PAF, bearing in mind that the relative risk ratios in the literature compare the health status of the unemployed to that of the employed rather than to the population at large.

Source: Bedard, 1996, op. cit., pp. 14-19.

Hospital and physician services comprise only a portion of total direct health care costs. Other direct health care expenditures include drugs, research, capital costs, ambulance services, home care, institutional care other than hospitals, and a range of privately financed costs such as

alternative or complementary health care. Therefore, total direct health care expenditures attributable to unemployment are roughly estimated in Table 38 below as follows:

- In Table 37 above, we use Bedard's relative risk ratios for excess hospital and physician use attributable to unemployment, to illustrate the associated fraction of those services that may be attributable to unemployment in Nova Scotia (PAF) in 2001. Thus, Nova Scotia's 9.7% official unemployment rate in 2001 indicates that 3.1% of hospital and physician use in the provinces in that year may have been due to unemployment. If the 14% comprehensive rate is used, including discouraged workers and the underemployed fraction of involuntary part-time work, then 4.4% of hospital and physician use in 2001 may possibly be attributed to unemployment. Another way of saying this is simply that 3.1%-4.4% of hospital and physician use in Nova Scotia in 2001 might possibly have been avoided if the province had full employment.
- Then, in rows 5 and 6 of Table 38 below, we take 3.1% and 4.4% respectively of all expenditures on hospital and physician services in Nova Scotia in 2001 as our estimate of the excess hospital and physician costs attributable to unemployment. There are several possible sources for this cost information, including databases of the Canadian Institute for Health Information, Statistics Canada, and the Nova Scotia government. However, for the sake of comparability between direct and indirect cost estimates, and to ensure inclusion of private expenditures, we have used Health Canada's *Economic Burden of Illness in Canada (EBIC) 1998* database, released for all provinces in December, 2002. Although they are a few years out of date, these data represent the most comprehensive health-cost estimates available in Canada – and the only ones broken down by diagnostic category, and they are based on the other databases listed above. Use of this database at this time will allow future updates of this report to include cost estimates by disease category. The 1998 cost estimates from the EBIC database are converted to 2001 dollars in Table 38.
- We then take the remaining direct health costs attributable to drug expenditures, expenditures for care in other institutions, and additional direct health expenditures for Nova Scotia as a proportion of total health costs from Health Canada's *EBIC 1998*.¹⁰¹⁵ This portion is then used in Row 7 of Table 38 to estimate the cost of all other direct health care costs that may possibly be attributed to unemployment. Because sufficient data for costs attributable to unemployment by diagnostic category are unavailable here, the estimates in Row 7, Table 38 below, assume that the proportion of hospital and physician costs to health care costs for those illnesses particularly associated with unemployment is the same as the proportion of *total* provincial hospital and physician costs to *total* provincial health care costs for all illnesses.

¹⁰¹⁵ Expenditures for care in other institutions includes residential facilities for the chronically ill or disabled (physically or mentally) who reside at the institution. They also include homes for the aged; facilities for people with physical disabilities, developmental delays, psychiatric disabilities, and alcohol and drug problems; and facilities for emotionally disturbed children. Additional direct health expenditures include three major areas of expenditure: other professionals (dentists and physiotherapists), other health spending (public health and health research), and capital expenditures (construction and machinery). Health Canada. 2002. *Economic Burden of Illness in Canada 1998*. Policy Research Division. Population and Public Health Branch. Ottawa.

- Hospital and physician costs (Rows 5 and 6), and the estimate of "other" health care costs (Row 7) are then summed to provide an estimate of total direct health care costs that may be attributable to unemployment (Row 8).
- Productivity losses due to short and long-term disability and premature mortality (Rows 9, 10, and 11) are summed to provide an illustration of the magnitude of the total indirect costs to the economy that may be attributed to excess illness among the unemployed (Row 12). However, it is important here to recognize that these indirect costs are a "theoretical" rather than actual cost, and cannot be aggregated with the output costs described earlier. This is because the unemployed are *already* not producing goods and services, regardless of their health status. Thus the estimates in Rows 9-12 can be described as the indirect costs of productivity losses due to excess disability and premature death among the unemployed that *would* be attributable to the poorer health status of the unemployed if the unemployed were producing goods and services.
- In Row 13, the direct health care costs and indirect productivity-loss cost estimates are summed to provide a theoretical total estimate of the health costs that may be attributable to unemployment. The productivity loss estimates are indeed theoretical for the unemployed. However, we still provide a total cost estimate here in order not to value the life of an unemployed person lower than the life of an employed person. The standard human capital approach to assessing the statistical value of a human life does create a bias in this regard, as estimates of productivity and its loss due to premature death and disability are included in the value of an employed person's life but not in the value of an unemployed person's life.

Table 38 therefore provides an illustration of the health costs that may be associated with unemployment (official and comprehensive rates) in 2001. As noted above, the cost estimates are derived from *EBIC 1998* (2002), and have been converted to \$2001. The official and comprehensive unemployment rates are from 2001.

Based on available data, and bearing in mind the methodological and data limitations described above, the economic burden of illness in Nova Scotia that may be associated with the 2001 official unemployment rate of 9.7% in 2001 is estimated at \$182 million (\$2001). When a portion of the "hidden" unemployed are included and the 14% unemployment rate is used, the potential costs increase to \$256 million (\$2001).

Table 38. Economic Burden of Illness in Nova Scotia linked to Unemployment, 2001.

	Category	Total Cost of Illness or Health Care Utilization in Nova Scotia, 1998 (\$2001) (millions)	Potential Cost Associated with Unemployment A) Official B) Comprehensive (\$2001) (millions)
1	Anxiety/Depression	\$42.2	a) \$ 0.67 b) \$ 0.97
2	Heart Disease	\$206.4	a) \$4.75 b) \$6.81
3	Joint Pain	\$135.0	a) \$3.10 b) \$4.45
4	Suicide	\$68.86	a) \$ 3.79 b) \$5.30
5	Hospitalization	\$1,079.41	a) \$33.46 b) \$47.49
6	Physician use	\$344.96	a) \$10.69 b) \$15.18
7	Other direct health costs	\$1,329	a) \$41.2 b) \$58.5
8	Total direct health care costs (columns 5 + 6 + 7)	\$ 2,753.37	a) \$85.35 b) \$121.17
9	Short-term disability	\$237.61	a) \$15.68 b) \$21.62
10	Long-term disability	\$1,037.68	a) \$12.45 b) \$17.64
11	Mortality	\$1,241.97	a) \$68.31 b) \$95.63
12	Total indirect costs / productivity losses (columns 9 + 10 + 11)	\$ 2,517.26	a) \$96.44 b) \$134.89
13	TOTAL Direct + Indirect Costs (columns 8 + 12)	\$5,270.63	a) \$181.79 b) \$256.06

Notes:

- Numbers have been rounded.
- Suicide cost estimates were extrapolated from Canadian figures in *EBIC 1998* to derive figures for Nova Scotia, because *EBIC 1998* only provides specific cost estimates for suicide for Canada as a whole, but does not provide a breakdown for any of the provinces.
- Anxiety/depression, heart disease, and joint pain are part of hospital, doctor and other costs. Therefore, to avoid double-counting, these disease-specific costs were not added to total health costs above. In addition, as previously stated, specific disease costs were extrapolated for N.S. from Canadian data, which in these three cases, did not provide a breakdown of the physician or additional costs allocated to anxiety/depression, heart disease, or joint pain. Therefore, for these three illness categories, physician and “other” direct costs are omitted from the estimates provided above, and the total cost estimates given here are therefore very likely to be underestimates.
- Physician use includes both Fee For Service (FFS) and Alternative Payment Plans (APP). According to *EBIC*, FFS payments are made by provincial/territorial medical care insurance plans to physicians in private practice. APP are other forms of professional incomes such as salaries, sessional fees, and capitation (monthly payment per patient, whether seen or not).

Table 38 Notes continued:

- Total direct health care costs are higher than estimates in the provincial budget because they include a portion of private (non-taxpayer funded) costs, including drug expenditures.
- Mortality costs, and short and long-term disability costs are indirect costs and are estimated based on loss of production. A detailed explanation of how EBIC calculates these costs can be found in *EBIC 1998* (2002) pp. 37-38 for mortality; pp. 51-52 for short-term disability; and pp. 44-45 for long-term disability. Please see note above on the problems of applying productivity loss cost estimates due to ill-health and premature mortality to the unemployed.
- Long-term disability is defined as "the presence of a restriction of activity that has lasted or is expected to last at least 6 months." Short-term disabilities are those that last or are expected to last less than 6 months.

Sources: Health Canada. 2002. *Economic Burden of Illness in Canada 1998*. Policy Research Division. Population and Public Health Branch. Ottawa; Bedard, Marcel. 1996. *The Economic and Social Costs of Unemployment*. Applied Research Branch. Human Resources Development Canada. Ottawa.

9.2.2 Family Breakdown

"The consequences of prolonged unemployment are insidious. They strike at the heart of identity, personal confidence and self-esteem. They undermine the structure and security of the family unit, the respect of children for their parents and of parents for each other. They split society and destroy trust in the authority and goodwill of those who control or govern. And they sow the seeds of apathy and discontent which will sap the optimism of youth and destroy the natural expectation of an association between effort and reward. This last contingency is, perhaps, the most damaging consequence of all, for a sense of meaning in life can only arise out of a reasonable expectation that plans will be fulfilled."

– Leonard Fagin and Martin Little¹⁰¹⁶

There is consensus in the literature that unemployment jeopardizes the wellbeing of the family and its members. When a family member loses a job, this generally puts financial pressure on the family and results in relationships of dependency that did not previously exist.¹⁰¹⁷ In addition, when one family member is experiencing shock and grief and a loss of identity due to job loss, these mental states inevitably affect other family members. Spouses often feel shock, anger, and resentment as well as anxiety over an uncertain future.¹⁰¹⁸

¹⁰¹⁶ Sykes et al., 1985, op. cit., p. 1 Original source of quote: Fagin, Leonard and Martin Little. 1984. *The Forsaken Families: The Effects of Unemployment on Family Life*. Penguin Books. Harmondsworth.

¹⁰¹⁷ Yates, 1994, op. cit., pp. 68-69; Sykes et al., 1985, op. cit., p. 31; Clark, David. 1987. "Families Facing Redundancy." In *Unemployment: Personal and Social Consequences*. Stephen Fineman (ed). Tavistock Publications. London. pp. 97-117; Dhoge, Yvonne and Jennie Popay. 1987. "Social Services and Unemployment: Impact and Responses." In *Unemployment: Personal and Social Consequences*. Stephen Fineman (ed). Tavistock Publications. London. pp. 157-177.

¹⁰¹⁸ Most studies about the effects of unemployment on spouses have been on wives after husbands have lost jobs following plant shutdowns. One study that focused on wives of managers who lost their jobs is Hartley, Jean. 1987. "Managerial Unemployment: The Wife's Perspective and Role." In *Unemployment: Personal and Social Consequences*. Stephen Fineman (ed). Tavistock Publications. London. pp. 118-137.

Unemployment is clearly an event that can create tremendous stress, which, in turn, has been linked to abusive behaviour. Evidence suggests there is a high risk of child abuse at times of economic distress, and that the internalization of stress can "manifest in such behaviour as family violence."¹⁰¹⁹ The psychological stress and economic strain that can result from unemployment are often more than some families can bear. Studies have shown a correlation between divorce rates and unemployment rates. According to the Centre for International Statistics, 26% of jobless families experience family difficulties compared to 18% of working families.¹⁰²⁰

One U.S. study found that four years after the loss of a job, the separation or divorce rate increased from 7.6% to 24% among poor white families and from 12% to 30% among poor black families.¹⁰²¹ Another study found that the divorce or separation rate was twice as high among families where the husband was unemployed as in families where the husband was employed,¹⁰²² while another reported a 7:2 ratio of separations and divorces among the unemployed compared to those with jobs.¹⁰²³

It is extremely difficult to quantify the economic costs associated with family breakdown. In the U.S., Redefining Progress did attempt to put a dollar value on the costs associated with divorce as part of its Genuine Progress Indicator. It estimated that the "cost of family breakdown" in 2000, including lawyer fees and indirect costs, amounted to US\$63 billion (in 1996 dollars, which is equivalent to US\$69 billion in 2000 dollars.)¹⁰²⁴

In this report, we will use these U.S. figures from Redefining Progress to estimate the divorce costs attributable to unemployment in Nova Scotia. However, since Americans spend so much more on lawyers than Nova Scotians do, we will adjust the number down according to the ratio of lawyers per capita in N.S. compared to the U.S.. Since most relevant U.S. and N.S. data are available for 1998, we will calculate costs for that year, although we shall use the more recent *cost* estimate from Redefining Progress.

The following is an admittedly crude extrapolation, but it does provide at least an illustration of the potential magnitude of the economic costs that may be associated with unemployment-related family breakdown. To extrapolate divorce costs from the U.S. data to Nova Scotia, a number of steps have been taken here:

1) The U.S. figures for total divorce costs have been adjusted for the population of Nova Scotia by taking the Nova Scotia population as a proportion of the U.S. population. In 1998, Nova

¹⁰¹⁹ Sykes, et al., 1985, op. cit., pp. 31-33.

¹⁰²⁰ The CIS study was based on 1990 data from the Ontario Health Survey, cited in Bedard, 1996, op. cit., p. 21.

¹⁰²¹ U.S. study, based on the National Panel Study of Income Dynamics, is cited in Bedard, 1996, op. cit., p. 21.

¹⁰²² Study cited in Eckenrode, John and Susan Gore (eds). 1990. *Stress Between Work and Family*. Plenum Press. New York. p. 189. Original reference: Elder, G and A. Caspi. 1988. "Economic Stress in Lives: Developmental Perspectives." In *Psychological Effects of Unemployment: Journal of Social Issues*. D. Dooley and R. Catalano (eds). 44(4), pp. 25-46.

¹⁰²³ Liem, John Huser, and G Ramsay Liem. 1990. "Understanding the Individual and Family Effects of Unemployment". In *Stress between Work and Family*. Eckenrode and Gore (eds), op. cit., pp. 175-204.

¹⁰²⁴ Cobb, Clifford, Mark Glickman, and Craig Cheslog. 2001. *The Genuine Progress Indicator, 2000 Update*. Redefining Progress. Available from http://www.redefiningprogress.org/publications/2000_gpi_update.pdf. Accessed August 24 and 25, 2003. p. 3.

Scotia's population was 0.35% of the U.S. population. Extrapolating to Nova Scotia from the total cost estimate provided by Redefining Progress for divorce in the U.S., after adjusting for population alone, the total cost of divorce in N.S. would be US\$242 million (US\$2001).¹⁰²⁵

2) The figures in #1 above have been adjusted down according to the ratio of lawyers per capita in N.S. compared to the U.S. in order to account for the fact that Americans spend more than Nova Scotians on lawyers per capita. There is one lawyer for every 300 Americans compared to one lawyer every 700 Nova Scotians. Therefore, three-sevenths of US\$242 million is US\$104 million.¹⁰²⁶

3) Those figures are adjusted down again for the much lower divorce rate in Nova Scotia compared to that in the U.S. According to Statistics Canada the divorce rate in 1998 in Nova Scotia was 2.1 per 1,000. The divorce rate in the U.S. in 1998 was 4.3 per 1,000. Since roughly half as many divorces take place in Nova Scotia as in the U.S., the total economic costs of divorce in Nova Scotia may be about US\$51 million.¹⁰²⁷

These adjustments produce a very rough illustration of the potential total costs of divorce in Nova Scotia, as extrapolated from the U.S. cost estimates provided by Redefining Progress.

4) The next step is to consider the relative risk (RR) of getting divorced for the unemployed compared to the employed. The relative risk (RR) of divorce or separation for the unemployed has been estimated to be between 2.0 and 3.5 times as great as for the employed. To remain on the conservative side, we will arbitrarily use 2.5 as the relative risk ratio in these estimates.

5) Having determined the relative risk, we then apply the same formula used in the previous section on health costs in order to find the population attributable fraction (PAF) of all divorce costs associated with unemployment rates of 9.7% and 14%.¹⁰²⁸ The same caveat noted for health cost estimates must be applied here. Relative risk ratios are assessed for the unemployed compared to the employed, but do not account for those not in the labour force. At time of publication, the author did not have available the data on divorce rates for those not in the labour force compared to those who are unemployed. Future estimates of the population attributable fraction of divorce costs associated with unemployment should also account for the relative divorce rates of those not in the labour force.

6) That population attributable fraction is then applied to the total cost of divorce for Nova Scotia (from Step 3) in order to estimate the portion of total divorce costs that may be attributable to unemployment.

¹⁰²⁵ According to the N.S. Department of Finance Statistical Review (2000) the population of Nova Scotia in 1998 was 934,587. The population of the U.S. in that year was 267.8 million. U.S. data source: National Centre for Health Statistics. 2001. *National Vital Statistics Reports*. Vol. 49, no. 6. Available from <http://www.cdc.gov/nchs/>. Accessed April 3, 2003. Therefore, Nova Scotia's population was 0.35% of the U.S. population in 1998.

¹⁰²⁶ Dodds and Colman, 1999, op. cit., p. 131. Three-sevenths of US\$242,000,000 is US\$104 million.

¹⁰²⁷ N.S. divorce rate is from: Statistics Canada. 2000. *The Daily*. Thursday, September 28, 2000. Available from <http://www.statcan.ca/Daily/English/000928/d000928b.htm>. Accessed April 3, 2003. U.S. divorce figures are from National Centre for Health Statistics. 2001. *National Vital Statistics Reports*. Vol. 49, no. 6. Available from <http://www.cdc.gov/nchs/>. Accessed April 3, 2003.

¹⁰²⁸ See *Methodology for Calculating Health Costs* above, steps 1-3.

7) These final results are then adjusted to Canadian dollars according to the 2001 exchange rate.¹⁰²⁹

Based on these calculations, the divorce costs associated with unemployment in Nova Scotia in 2001 might range from Cdn\$10.1 million to \$13.8 million (Cdn\$2001).

It should be noted here that the costs of divorce are just the tip of the iceberg in relation to the full costs associated with family breakdown. The \$10.1 to \$13.8 million estimate does not include the costs of enforcing child support orders, costs associated with property ownership transfers, and the additional costs (including rentals, mortgages, and household supplies) of establishing separate households and losing efficiencies of scale. Paradoxically, all these additional costs are currently counted as contributions to economic growth, and thus mistakenly interpreted as signs of increased prosperity and wellbeing. The \$10.1 to \$13.8 million estimate also excludes costs associated with the long-term impacts of divorce on children's educational outcomes and the long-term emotional costs of separation and divorce for children and ex-spouses.

9.2.3 Loss of Human Capital

Our conventional accounting mechanisms account for produced capital and its depreciation, and they indicate the need for periodic investments and re-investments in this capital. However, they do not account for natural, human, or social capital, even though these assets are subject to depreciation as surely as manufactured capital such as factories, machinery, or equipment. Human capital includes the education, skills and health of the population. A deterioration in any of these assets can adversely affect productivity and the ability of the human economy to produce goods and services in the future.

Longer spells of unemployment have been found to be more costly than shorter spells in terms of loss of human capital. The longer one is without work, the greater the chance that one's skills will deteriorate or, in conventional accounting language, depreciate. With the speed at which technology is changing the workplace, the unemployed are increasingly likely to find that their skills have become obsolete by the time they find another job.¹⁰³⁰

As previously noted, the loss of a job frequently produces a loss of self-worth and feelings of hopelessness. If these feelings persist, and if the prospects of finding work are grim, the unemployed may eventually withdraw from the job market altogether. In turn, employers may not want to hire someone who has been out of work for a long time, so that the long-term

¹⁰²⁹ The rate of exchange used in the calculations is 1.548 Canadian dollars to one U.S. dollar. Bank of Canada Currency Converter, April 9, 2003. <http://www.bankofcanada.ca/en/exchform.htm>. Exchange rate is for 2001, annual average.

¹⁰³⁰ Martin, Ron. 1998. "Regional Dimensions of Europe's Unemployment Crisis." In *Unemployment and Social Exclusion: Landscapes of Labour Inequality*. Paul Lawless, Ron Martin and Sally Hardy (eds). Jessica Kingsley Publishers. London. p. 39.

unemployed eventually become "excluded" from the labour market. In Europe, unemployment growth in the 1990s was "almost entirely the result of the decline in the likelihood of leaving unemployment."¹⁰³¹

According to Bedard's 1996 analysis prepared for HRDC, it is very difficult to quantify the loss of human capital. However, his report concludes that this loss is nevertheless "real" and "substantial."

"There is the investment in the education of our young people, whose productivity is considerably delayed by high unemployment rates. Also, there is the work experience and on-the-job training that the unemployed miss out on during a time of high unemployment, particularly if they are out of work frequently or for lengthy periods. This deterioration of human capital may well result in significant losses in terms of economic output in the future."¹⁰³²

Empirical studies have shown that the unemployed have increased difficulty concentrating, and that they often lose their skills and have difficulty starting and completing tasks. These trends have been found to increase with longer spells of unemployment.¹⁰³³

Unemployment in Nova Scotia and in Canada is particularly concentrated among young people between the ages of 15 and 24. The unemployment rate for 15 to 24-year-old Canadians in 2001 was 12.8%, and it was 17.7% for their Nova Scotia counterparts.¹⁰³⁴ According to Jackson and Robinson, there was a disproportionate number of unemployed youth in the 1990s because young people entered a job market where jobs were already scarce, especially for those lacking work experience.¹⁰³⁵ Studies indicate that unemployment, while difficult at any age is especially problematic for young people who are just starting out and trying to find work experience:

"What vested interest have these young people in perpetuating the values and aspirations of a society they feel has failed them? Alienated, demoralized young people who are, at least theoretically, at the potential peak of their physical health and power, their energy, and their idealism, are being lost to themselves and, more importantly, to society.... The long-term consequences are more ominous than the immediate. There is a cumulative impact and multiplier effect on the unemployed, and on their society. These young men and women will evidence signs of psycho-social disintegration in the short-run, and the delayed effects do not speak well for their future."¹⁰³⁶

¹⁰³¹ Ibid. p. 40.

¹⁰³² Bedard, 1996, op. cit., p. 21.

¹⁰³³ Fryer, David and Stephen McKenna. 1987. "The Laying of Hands – Unemployment and the Experience of Time." In *Unemployment: Personal and Social Consequences*. Stephen Fineman (ed). Tavistock Publications, London. p. 49.

¹⁰³⁴ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

¹⁰³⁵ Jackson and Robinson, 2000, op. cit., p. 52.

¹⁰³⁶ Kirsh, 1983, op. cit., p. 38. Original source of citation: Levine, S.V. 1978. *The Psychological and Social Effects of Youth Unemployment*. Department of Psychiatry. University of Toronto. Toronto. pp. 14-15.

Youth unemployment is not about a lack of skills. The reality is that there is a growing number of skilled, educated and talented Canadians who simply cannot find work. According to a recent *Globe and Mail* article, the heady promises of jobs for graduates skilled in technology and business have not been realized:

"The job market for young adults, especially those with no work experience, has cooled dramatically in a few short years. The most recent graduates find themselves vying with MBAs and experienced workers for fewer available spots. Some are willing to work for next to nothing just to record the experience on their resumes. But thousands of graduates are finding they cannot even buy themselves a break – the number of those willing to serve as low-paid interns greatly exceeds the number of opportunities."¹⁰³⁷

The article cited a study by the Canadian Council on Social Development, which reported that only half those who graduated in the mid-1990s and who found work were working in occupations related to their field of study. The Council described this as a "stunning waste of talent."¹⁰³⁸

For those without a university degree the prospects of finding work are even worse. In Nova Scotia, according to Nova Knowledge's 2002 *Knowledge Economy Report Card*, the labour market went through a "rapid and – for some – cruel transformation."¹⁰³⁹ Between 1992 and 2001, 25,000 jobs for workers with a high school education or less were lost.

Even though we do not presently have the means to calculate accurately the costs associated with the loss of human capital due to unemployment, it would be grossly inaccurate to assume such costs to be zero. Based on the available evidence on human capital losses associated with unemployment, this study recognizes that the economic costs of these losses are likely to be substantial.

9.2.4 Crime

"The prison boom is the shadow of the new social order that has been emerging during the last generation. The hallmarks of this order so far have been a general depreciation of the state's capacity to organize or improve society, an increasing polarization in the distribution of wealth, persistent high unemployment, and the liberation of capital from local loyalties and constraints."

– David Cayley¹⁰⁴⁰

The economic and social roots of crime have long been recognized and documented. In a seminal book on the crisis in crime and punishment in Canada titled *The Expanding Prison*, David Cayley writes that "the emergence of an economy that grows by shedding labour has heightened

¹⁰³⁷ Harding, Katherine and Virginia Galt. "Job Market Prospects Chill Young Adults." *The Globe and Mail*. December 14, 2002. Toronto. p. B1.

¹⁰³⁸ Idem.

¹⁰³⁹ NovaKnowledge. 2002. *Knowledge Economy Report Card 2002*. Halifax. p. 4.

¹⁰⁴⁰ Cayley, David. 1998. *The Expanding Prison. The Crisis of Crime and Punishment and the Search for Alternatives*. Anansi Press. Toronto. p. 7.

anxiety about jobs and increased the number of people who find themselves without prospects and without a stake in the current order of society."¹⁰⁴¹

As previously noted, unemployment, especially unemployment of long duration, can lead to exclusion from society, which in turn can lead to alienation and crime. Cayley points out that many of Canada's inmates come from backgrounds of poverty and poor education:

*"Many were mistreated as children; many have crippling drug or alcohol dependencies; and an increasing number are mentally ill. Most were offended against before they became offenders, and their mores reflect the models that were available to them."*¹⁰⁴²

Numerous studies show a positive correlation between unemployment and crime, especially in regard to property offences. According to Kirsh, inequitable distribution of incomes is a greater motivation to commit an offence than absolute deprivation or poverty. She emphasizes, however, that unemployment in itself does not *cause* people to steal, but "it is a contributing factor if other negative conditions are also present."¹⁰⁴³ Put another way:

*"Unemployment is an important determinant of the social conditions in which crime becomes more prevalent."*¹⁰⁴⁴

Indeed, the evidence indicates that the relationship between work, unemployment and crime is a complex one and varies according to the type of crime and criminal. In her testimony before the Joint Economic Committee of the U.S. Congress in 1979, Ann Dryden Witte argued that there are essentially four kinds of criminals:¹⁰⁴⁵

- 1) White collar criminals: the employee thief or embezzler. These types of criminals have to be employed to commit their crimes and therefore, increased employment might increase this type of crime.¹⁰⁴⁶
- 2) Moonlighting in criminal activity: This type of criminal combines crime and work by using his or her place of work as a front for illegal activity.
- 3) Juvenile offenders: Witte argues that the relationship between unemployment and crime is strongest in this group.

¹⁰⁴¹ Ibid. p. 6.

¹⁰⁴² Ibid. p. 11.

¹⁰⁴³ Kirsh, 1983, op. cit., p. 37. Discussion about the relationship between crime and unemployment is also found in Sykes, et al., op. cit., pp. 64-65; Ashton, David and Malcolm MaGuire. 1991. "Patterns and Experiences of Unemployment." In *Poor Work: Disadvantage and the Division of Labour*. Phillip Brown and Richard Scase (eds). Open University Press. Philadelphia. pp. 40-55.

¹⁰⁴⁴ Crow, Iain, Paul Richardson, Carol Riddington, and Frances Simon. 1989. *Unemployment, Crime and Offenders*. Routledge. New York. p. 10.

¹⁰⁴⁵ Joint Economic Committee. 1980. *The Social Costs of Unemployment*. Hearing before the Joint Economic Committee. Congress of the United States. October 31, 1979. U.S. Government Printing Office. Washington. pp. 25-44. At the time, Ann Dryden Witte was Professor of Economics at the University of North Carolina. She appeared at the same Congressional hearing as Harvey Brenner.

¹⁰⁴⁶ Harvey Brenner's findings are cited in Bedard, 1996, op. cit., p. 20.

4) Career criminals whose "job" is crime: There is no apparent relationship between this kind of criminal and unemployment. In 1979, career criminals accounted for 5% to 10% of all property offences. "[These criminals] are not going to switch to legitimate employment with any reasonable type of job availability."¹⁰⁴⁷

In addition to shedding light on the complexity of the work/crime relationship, Witte points out that for those crimes that are linked to unemployment, *more* jobs alone are not necessarily the answer. "Good jobs," she says, are the answer:

*"[The] General Electrics and General Motors – that produce the best jobs, the best jobs both in terms of high wages and the best jobs in terms of job satisfaction, are very reluctant to hire permanent employees because they are afraid of the fall in demand that will occur shortly after cyclical peaks. Instead these companies hire secondary employees – temporary workers, and send work out to small vendors in time of high demand. Primary jobs that individual data tells us would be particularly effective in reducing crime rates are not being provided at the rate they would be if we had a more stable level of economic activity."*¹⁰⁴⁸

In his opening statement at this 1979 Congressional Hearing, committee member Representative Parren J. Mitchell cited a report which, at the time, estimated that it cost New York city US\$71.87 a day or approximately US\$26,000 a year (in current dollars) to keep a prisoner locked up. In 1999, the year for which the most recent data are available, the U.S. spent roughly US\$50 billion on corrections alone, an increase of 442% since 1982. In 2002 a total of 2 million prisoners were held in Federal and State prisons in the United States. Assuming the expenditures in 1999 were comparable to those in 2002, it cost US\$25,000 per year or nearly US\$70 a day to keep a prisoner in jail in the United States.¹⁰⁴⁹

Harvey Brenner of Johns Hopkins University, who also testified before the Congressional Joint Committee, has carefully documented changes in the U.S. prison population in relation to unemployment rates. Brenner found that the increase in U.S. unemployment from 1989 to 1990 was responsible for 8,000 additional incarcerations, or 16% of the total increase in imprisonment during that period. He predicted that if the higher 1990 rate of unemployment persisted, there would be 40,000 additional prisoners over a five-year period. He also predicted that the rise in the unemployment rate would result in 732,000 more arrests between 1990 and 1995 than would have occurred had the unemployment rate stayed the same.¹⁰⁵⁰

Bedard summarized Brenner's findings in his 1996 report prepared for HRDC:

- A 10% increase in the U.S. unemployment rate is followed by a 4% rise in the rate of arrests for crimes of all categories.

¹⁰⁴⁷ Witte testimony from Joint Economic Committee, 1980, op. cit., pp. 25-44.

¹⁰⁴⁸ Ibid. p. 26.

¹⁰⁴⁹ When police, corrections, and judicial costs are added together, nearly US\$150 billion was spent in 1999. U.S. Bureau of Justice Statistics. *Prison Statistics*. Available from <http://www.ojp.usdoj.gov/bjs/prisons/htm>. Accessed November 25, 2003; U.S. Bureau of Justice Statistics. *Direct Expenditure by Criminal Justice Function, 1982-1999*. Available from <http://www.ojp.usdoj.gov/bjs/glance/expty.htm>. Accessed November 25, 2003.

¹⁰⁵⁰ Brenner cited in Yates, 1994, op. cit., pp. 67-69.

- A 10% increase in unemployment leads to a 0.8% increase in violent crime, based on the number of assaults.
- A 10% increase in the unemployment rate results in 3.4% increase in white-collar crime.¹⁰⁵¹

Here in Nova Scotia there is also evidence that a positive correlation exists between unemployment and crime. As Table 39 indicates, in 2001-02, 57% of Nova Scotia adults committed to sentenced custody were unemployed at the time of sentencing, nearly six times the unemployment rate in the general population at that time.¹⁰⁵² Table 40 shows that there is also a positive correlation between unemployment among youth and juvenile crime. In 2001-02, nearly 63% of young offenders were jobless.

Crime rates have declined since the early 1990s, the peak of the recession. But viewed with a wider lens over the last four decades, crime rates have increased, roughly parallel to increases in average unemployment rates. According to official police-reported crime statistics, the chance of being a crime victim in Nova Scotia was about four times greater in 1997 than it was in 1962. Even adjusting for higher reporting rates in some categories like domestic violence, Nova Scotians are still three times more likely to be victims of crimes than 40 years ago. The chance of being unemployed in the 1990s was also about three times greater than in the 1960s.¹⁰⁵³

Table 39. Employment Status at Time of Adult Admission to Sentenced Custody, Nova Scotia, 1995-1996 to 2001-2002

Employment Status	1995-96 %	1996-97 %	1997-98 %	2001-02 %
Full time	23.6	23.6	21.6	22.8
Other	1.3	2	2.2	1.5
Part-time	1.5	1.8	1.6	1.9
Seasonal	1.3	1.5	1.5	3.3
Student	1.9	1.3	1.4	1.6
Unemployed	57.4	58.4	58.8	56.7
Unknown	12.8	11.5	12.9	12.3
Total Admissions	2,622	2,134	1,914	1,507

Note: The table includes all sentenced *admissions* to federal and provincial custody terms in Nova Scotia, rather than persons. A person may be admitted more than once in a given time period.

Sources: **1995-1998:** Dodds, Colin and Ronald Colman. 1999. *The Cost of Crime in Nova Scotia*. GPI Atlantic. Halifax. p. 98. Original reference: The Policy, Planning and Research Division of the Nova Scotia Justice Department supplied the data to Dodds and Colman in personal correspondence, January 1999. **2001-02:** Smith, Paul K. Policy, Planning and Research Division. N.S. Department of Justice. Personal communication. May 1, 2003.

¹⁰⁵¹ Bedard, 1996, op. cit., p. 20.

¹⁰⁵² Data provided by Smith, Paul K. Policy, Planning and Research Division. N.S. Department of Justice. Personal communication. May 1, 2003.

¹⁰⁵³ Dodds, Colin and Ronald Colman. 1999. *The Cost of Crime in Nova Scotia*. GPI Atlantic. Halifax. p. 97. Available from www.gpiatlantic.org.

Table 40. Employment Status of Young Offender Admissions to Sentenced Custody, aged 18 and under, Nova Scotia, 2001-2002.

Employment Status	2001-02 %
Full-time	2.5
Part-time	4.7
Seasonal	1.9
Student	18.3
Unemployed	62.5
Unknown	10.1
Total Admissions	317

Source: Smith, Paul K. Policy, Planning and Research Division. N.S. Department of Justice. Personal communication. May 1, 2003.

Crime rates are highly correlated with the business cycle, which in turn affects employment rates. As well, crime may be linked to deeper economic insecurity that is influenced by whether or not the unemployed are receiving benefits. By that measure, economic insecurity has been rising among the unemployed, and especially among unemployed youth. According to the Canadian Labour Congress, only 11% of unemployed women in Canada aged 15 to 24 and 20% of unemployed men in that age range qualified for EI benefits in 2001.¹⁰⁵⁴ The study also found that overall in 2001 only 44% of affected men and 33% of affected women had access to EI benefits, compared with 45% and 39% in 1996 respectively.¹⁰⁵⁵ An earlier study found that in Nova Scotia, the percentage of unemployed youth receiving employment insurance fell by 70%, from 66% in 1989 to 21% in 1997. Among jobless adults in Nova Scotia, 48% received benefits in 1997, down from 93% in 1989 – a 48% drop.¹⁰⁵⁶

Studies of youth crime indicate that there are likely a number of factors, in addition to their socio-economic situation, which may bring youth into confrontation with the law. In his book *Blaming Children*, Bernard Schissel, a sociology professor at the University of Saskatchewan, argues that official, reported youth-crime rates are largely a function of the structure and nature of legal practice and not an accurate reflection of actual increases or decreases in crimes committed. Instead, he argues, new legal norms have changed the definition of youth crime, and produced higher rates of reporting and prosecution. He adds that presentations of youth crime in the media and in political debates are not based on reality but on "a constructed version that serves political and moral purposes."¹⁰⁵⁷

¹⁰⁵⁴ Canadian Labour Congress. 2003a. *Let's Make Unemployment Insurance Work for Everyone*. CLC. Ottawa. Available from <http://www.unemployed.ca/>. Accessed October 23, 2003.

¹⁰⁵⁵ Idem.

¹⁰⁵⁶ Figures cited in Dodds and Colman, 1999, op. cit., p. 98. Original reference: Canadian Labour Congress. 1998. *Left out in the Cold: The End of UI for Canadian Workers*; McCarthy Shawn. "Just 36% of Jobless get UI: Tight Rules Blamed as Labour Study finds Number of Recipients at Record Low." *The Globe and Mail*. January 27, 1999. Toronto. p. A1 & A4.

¹⁰⁵⁷ Schissel, Bernard. 1997. *Blaming Children. Youth Crime, Moral Panics and the Politics of Hate*. Fernwood Publishing. Halifax. pp. 10-11.

In his book, Schissel debunks the myth of skyrocketing youth crime and analyzes what he says the media ignore – the personal and social circumstances that result in crime. According to Schissel, the Young Offenders Act is partially responsible for the increase in violent crime rates among youth, he says. People are more likely now than in the past to report acts of youth aggression. A schoolyard fight, for instance, once the domain of the teacher and principal, now fall under 'zero tolerance' rules and get formally processed through the courts. "The Young Offenders Act precipitated a more aggressive, punitive approach to youth crimes, especially crimes that do not directly threaten public welfare...possibly in response to public demands for protection from violent youths," says Schissel. Not only is reporting up, but so too are the number of reports that end in arrest and the number of arrests that end in a formal charge.¹⁰⁵⁸

Data from Statistics Canada show that youth crime increased sharply between 1987 and 1991, peaked in 1991, and has declined since then. Official police-reported statistics indicate that the violent crime rate for youth has doubled since 1987. However, Statistics Canada also raises the question about whether this represents a real increase, or is simply the result of increased reporting: "Some experts question whether these figures indicate a real rise in violent crime or simply changing attitudes, resulting in an increase in the reporting of crime, particularly common assault."¹⁰⁵⁹

While the media focus attention on violent crime perpetrated by youth, approximately 80% of all custodial sentences for youth are actually for non-violent offences. In fact, almost half of all cases that result in custodial sentencing fall into four categories of less serious offence: theft under \$5,000 (including shoplifting); possession of stolen property; failure to appear; and failure to comply with a disposition (i.e. breach of conditions of probation). Only 18% of cases involve violent offences like assault and robbery.¹⁰⁶⁰ Despite this, Canada incarcerates more youth per capita than any other Western country, including the U.S. The youth incarceration rate is higher than the adult incarceration rate in Canada and, for eight of the nine most common offences in youth court, youth receive, on average, longer periods of custody than adults for the same offence.¹⁰⁶¹

While increased reporting may account for much of the apparent increase in youth crime, it is still necessary to recognize youth crime as a symptom of a larger societal ailment, says Schissel: "The problems of dispossessed or marginalized kids are economic and not moral."¹⁰⁶² Youth do not commit crimes because the laws are lenient or because youth are morally deficient, argues Schissel. Youth generally commit crimes, he writes, because of social, economic and personal

¹⁰⁵⁸ Idem.

¹⁰⁵⁹ Common assault is the least serious form of assault – it includes pushing, slapping, punching and face-to-face verbal threats. From Stevenson, Kathryn, Jennifer Tufts, Dianne Hendrick, and Melanie Kowalski. 1999. "Youth and Crime." *Canadian Social Trends*. Statistics Canada. Catalogue no. 11-008. Ottawa. pp. 17-18.

¹⁰⁶⁰ Department of Justice Canada. 2002. *Youth Sentences*. Available from <http://www.canada.justice.gc.ca/en/ps/yj/repository/2overvw/2010001g.html>. Accessed October 10, 2002.

¹⁰⁶¹ Idem. Nova Scotia incarcerates roughly 10 youth per 1,000 youth aged 12-17 – just under the Canadian average. Saskatchewan, Manitoba, Newfoundland, Alberta, and Ontario all have youth incarceration rates that are higher than the Canadian average. Original reference: Statistics Canada. 2000. *Youth Court Statistics 1998-1999*. Canadian Centre for Justice Statistics. Ottawa.

¹⁰⁶² Schissel, 1997, op. cit., p. 49.

difficulties, including the absence of opportunity and an existence on the margins of a consumer and materialistic society.

Low income, dropping out of school, and unemployment are all factors that have been linked to youth crime. According to a Statistics Canada analysis: "Economic disadvantage, coupled with difficult family circumstances, is a common explanation for delinquency."¹⁰⁶³ In fact, many of the determinants of youth crime are linked. Thus, high school dropouts (called "school leavers" by Statistics Canada) also experience much higher rates of unemployment than do high school graduates. In 1997, high school dropouts were twice as likely to be unemployed than high school graduates and three times more likely than those with university degrees.¹⁰⁶⁴ According to the Statistics Canada analysis:

*"Unemployment may lead to criminal activity when youths have no legitimate means of earning money. Being unemployed also reduces formal involvement in community life and can lead to an abundance of unstructured time, which in turn increases the risk of becoming involved in deviant or criminal activity."*¹⁰⁶⁵

It is not possible to make an absolute correlation between unemployment status and the propensity to commit crime. Newfoundland, for example, has the highest unemployment rates and the lowest crime rates in the country. However, as Figure 56 and Table 41 below demonstrate, the correlation between unemployment and crime is strongest in relative terms, when trends over time within a particular jurisdiction are tracked. For instance, Figure 56 illustrates how crime rates peaked at the height of both of the last two major recessions in Canada and in Nova Scotia. Figure 56 indicates that the robbery rate increased during the early 1980s recession and peaked again during the 1990s recession as unemployment rates rose. It then declined in the mid-1980s and mid-1990s as unemployment rates dropped. Each decade also saw higher average robbery rates, matching the higher average unemployment rates, as indicated in Table 41.

Table 41 shows that each decade since the 1960s has recorded higher average unemployment rates and higher average robbery rates than the previous decade, with robbery rising in almost direct proportion to the increase in unemployment. Robbery is used here as a proxy for all crime, because it is less subject to fluctuations in reporting rates than crimes like assault. While these statistics do not in themselves prove that unemployment causes crime, the statistical correlation bears further investigation.

In addition to the evidence presented, many other studies have found that crime fluctuates or is correlated with levels of unemployment. The first four references below, for example, are cited in a 1989 book by Iain Crow and others, titled *Unemployment, Crime and Offenders*:

¹⁰⁶³ Stevenson et al., 1999, op. cit., p. 20.

¹⁰⁶⁴ Idem.

¹⁰⁶⁵ Ibid. p. 21.

- Beeson (1965) and McLintock (1976) found a strong correlation between parental unemployment, juvenile crime, and delinquency.¹⁰⁶⁶
- Gormally et al. (1981) found that work "slowed down the rate of offending" and that unemployment leads to more crime. This Northern Ireland study interviewed 16 to 18-year-old offenders and found they were twice as likely to commit offences when they were not engaged in work, education, or training.¹⁰⁶⁷
- Mannheim (1940) found that in Britain there was a correlation between the number of prison inmates and unemployment rates. In his study, he quotes a 1922 British Prison Commission Report which reported that "unemployment is one of the chief contributing factors to the prison population today."¹⁰⁶⁸

Donnison (1998) concludes from the evidence that incarceration is no way of making society safer. He argues that the only way to prevent crime is to ensure that everyone can find legitimate ways of making an honest and decent living. Offenders should be allowed a "way back" in to society and "law-abiding lives" by having opportunities for good work.¹⁰⁶⁹

Table 41. Robbery Rates and Unemployment Rates, Canada and Nova Scotia, 1962 – 1997 (Average Rates by Decade).

	Canada		Nova Scotia	
	Robbery Rate (per 100,000)	Unemployment Rate	Robbery Rate (per 100,000)	Unemployment Rate
1962-69	33.6	4.0%*	16.0	4.9%*
1970-79	68.1	6.7%	32.8	8.1%
1980-89	93.3	9.3%	38.3	11.8%
1992-97	105.7	10.0%	41.6	12.5%

* Note: Unemployment rates are averaged for the years 1966-69, the earliest available on Statistics Canada's *ESTAT* and *CANSIM* databases.

Sources: Dodds and Colman, 1999, op. cit., p. 82. Original reference: Statistics Canada, *ESTAT* and *CANSIM* databases.

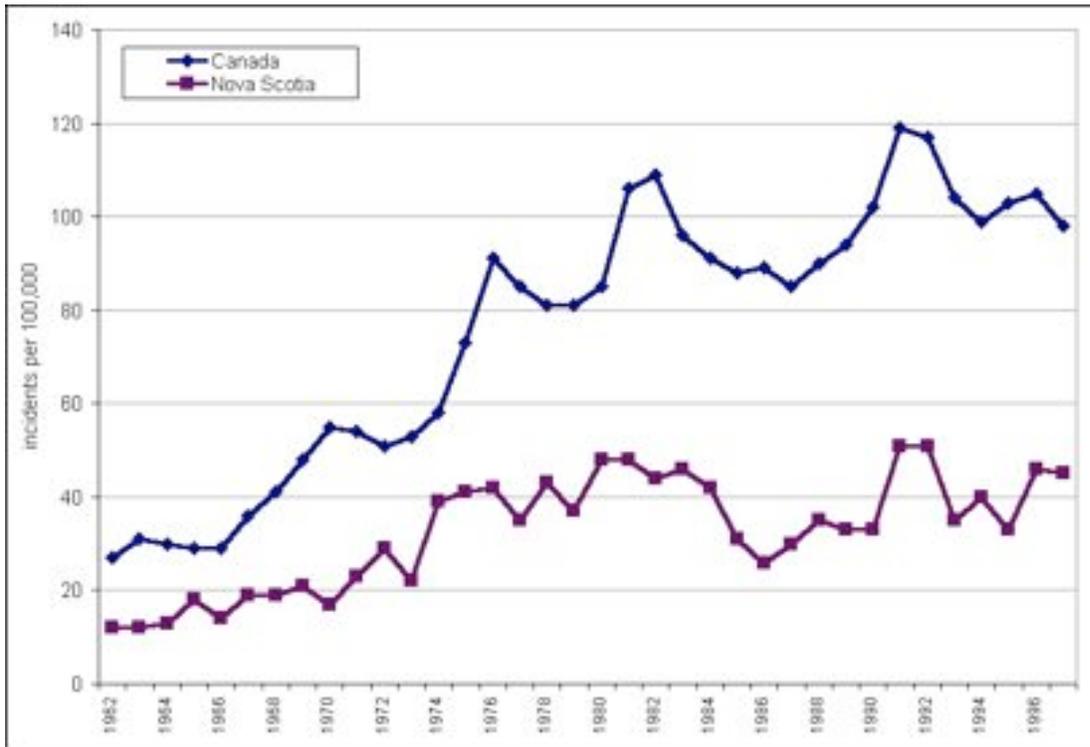
¹⁰⁶⁶ Cited in Crow, Iain, Paul Richardson, Carol Riddington, and Frances Simon. 1989. *Unemployment, Crime, and Offenders*. Routledge. London. p. 8. Original references: Beeson, M. 1965. *Juvenile Delinquency, Unemployment and the Probation Officer*. Ph.D Thesis. University of Durham; McLintock, F.H. 1976. "The Beeson Report: Delinquency and Unemployment in the North-East of England." In *Economic Crises and Crime*. UNSDRI. Rome.

¹⁰⁶⁷ Cited in Crow et al., 1989, op. cit., p. 9. Original references: Gormally, B., O. Lyner, G. Mulligan, and M. Warden. 1981. *Unemployment and Young Offenders in Northern Ireland*. NAICRO. Belfast.

¹⁰⁶⁸ Cited in Crow et al., 1989, op. cit., p. 16. Original reference: Mannheim, H. 1940. "Crime and Unemployment." In *Social Aspects of Crime in England between the Wars*. Allen and Unwin. London.

¹⁰⁶⁹ Donnison, David. 1998. "Creating a Safer Society." In *Crime and Social Exclusion*. Catherine Jones Finer and Mike Nellis (eds). Blackwell Publishers. Oxford. pp. 3-21.

Figure 56. Increase in Robberies, Canada and Nova Scotia, 1962 – 1997 (Rate per 100,000 population).



Source: Dodds and Colman, 1999, op. cit., p. 81.

9.2.4.1 Calculating costs of Crime associated with Unemployment

GPI Atlantic's 1999 *Cost of Crime in Nova Scotia* report found that the corrections system as a whole cost Nova Scotians \$75 million/year or \$78 per person per year.¹⁰⁷⁰ This was lower than the Canadian average of \$92 per person per year. In contrast, the U.S. spends \$50 billion a year on corrections, the equivalent of Cdn\$280 per person per year. This disparity reflects the fact that in the U.S. one out of every 150 people is behind bars. In Canada one out of every 900 is in jail and in Nova Scotia one out of every 1,600 is in jail.¹⁰⁷¹

In 1997 it cost \$121 per day to incarcerate someone in Nova Scotia. This is equal to approximately \$44,000/year (\$1997).¹⁰⁷² If we could determine the proportion of those in prisons, whose incarceration is directly attributable to unemployment, then we could calculate a cost for this study using these figures. However, because we have not been able in this study to demonstrate a causal relationship, it would be incorrect to calculate costs in this way. That is, just because someone was unemployed at the time they committed a crime does not mean they committed the crime *because* they were unemployed.

¹⁰⁷⁰ Dodds and Colman, 1999, op. cit., p. 143. This includes provincial and federal corrections expenses in Nova Scotia, including parole, probation, community supervision, and youth corrections costs, and indirect costs due to inmate production losses.

¹⁰⁷¹ Ibid. pp. 143-144.

¹⁰⁷² Ibid. p. 132.

Nevertheless, regression analysis has been used to control for confounding variables and to assess odds ratios for the unemployed committing crimes compared to the employed. Time and resources did not permit a full assessment of the costs of crime attributable to unemployment in Nova Scotia, according to the relative risk (RR) of an unemployed person committing a crime compared to an employed person. Nor did time and resources permit a subsequent determination of the population attributable fraction (PAF) of crime that can be attributed to unemployment. Future updates of this report should apply the same methods used to assess the costs of illness attributable to unemployment to determine the costs of crime attributable to unemployment.

In 1963 Fleisher found that labour market conditions affected both juvenile delinquency and adult crime. He found that a 50% reduction in the unemployment rate in areas where 10% of the labour force is unemployed could reduce delinquency and property crime by 10%. In 1963 he calculated that such a 50% reduction in unemployment in areas of high unemployment could save the U.S. economy \$100 million/year.¹⁰⁷³ Converted to 2001 constant dollars, this would today amount to a saving of more than US\$600 million a year.

In order to calculate a rough estimate of the crime costs associated with unemployment we have applied Fleisher's estimates to Nova Scotia, where in 2001 the unemployment rate was just under 10%. According to the GPI Atlantic study, *The Cost of Crime in Nova Scotia*, the full costs of crime in Nova Scotia in 1997 ranged from a conservative \$553.6 million (\$1997) to a comprehensive \$1,178.8 million (\$1997). Converted to \$2001, the range of costs is from \$603 million to \$1,284 million. The conservative estimates include direct costs associated with victim losses in reported crimes; public expenditures on prisons, police, and courts; and private defensive expenditures (alarms, security guards, theft insurance premiums minus claims). The comprehensive estimates also include costs associated with unpaid work losses; unreported crimes; business "shrinkage" due to shoplifting and employee theft; insurance fraud; and the suffering of victims of crime (based on court awards for "shattered lives" due to serious violent crimes).¹⁰⁷⁴

Both the "conservative" and "comprehensive" GPI crime cost estimates for Nova Scotia may actually be viewed as conservative, as they did not include deaths, injuries and property damage due to impaired driving; health, lost production and other costs associated with drug offences; prostitution and other crimes not classified as property or violent crimes; most white collar crimes; non-hospital medical costs, drugs and counselling due to violent crime; non-retail business and government defensive expenditures including alarms, electronic surveillance etc; private spending on criminal lawyers; civil justice costs, including courts, legal aid, and litigation costs; indirect and induced crime costs such as property value losses, foregone economic activity due to fear of crime, etc.¹⁰⁷⁵

If we apply Fleisher's estimate to all crime and assume that a 50% reduction in unemployment will cut crime rates by 10%, then Nova Scotia would save between \$60 million and \$130 million /year (\$2001) in avoided crime costs by cutting the jobless rate to less than 5%. In other words,

¹⁰⁷³ Cited in Crow et al., 1989, op. cit., pp. 7-8. Original reference: Fleisher, B.M 1963. "The Effect of Unemployment on Juvenile Delinquency." *Journal of Political Economy*. 71:543-555.

¹⁰⁷⁴ Dodds and Colman, 1999, op. cit., p. 34.

¹⁰⁷⁵ Idem.

each percentage point of unemployment costs the Nova Scotia economy between \$12 million and \$26 million annually in crime costs.

9.2.5 Summary of Social Costs

Table 42 below summarizes some of the social costs of unemployment in Nova Scotia, as estimated above. According to these estimates, unemployment may cost the province about \$400 million a year in excess disease, crime, and divorce costs. That \$400 million estimate represents a rough mid-range estimate that includes costs attributable to a *portion* of discouraged and underemployed workers who are excluded from the official unemployment figures.

However this aggregation of social costs is provided for illustrative purposes only. It excludes the costs of human capital losses that we have not been able to monetize here. In addition, as the discussion above indicates, the dollar estimates were derived using different methodologies and based on different assumptions, so the numbers are not strictly comparable. For example, the crime cost estimates are extrapolated from a U.S. study that estimated a 10% drop in crime due to a 50% decline in unemployment, and are therefore based on a projected 4.85% unemployment rate (half of the 9.7% rate recorded in 2001). In other words, the crime costs listed in Table 42 represent the costs associated with crimes committed by only half of those officially unemployed. By contrast, the other two dollar estimates are for *all* the unemployed. Future updates of this report should attempt to estimate crime costs using the same methodology, based on relative risks (RR) ratios and population attributable fractions (PAF), that was used above in estimating health and divorce costs.

Table 42. Summary of Social Costs associated with Unemployment in Nova Scotia (\$2001).

Social Cost Category	Low End Estimate (9.7% Rate)	Higher End Estimate (14% Rate)
Disease	\$182 million	\$256 million
Family breakdown	\$10 million	\$14 million
Crime**	\$60 million	\$130 million
Human capital losses	Not estimated	Not estimated
TOTAL	\$252 million	\$400 million

** Low end and high end crime-cost estimates were derived from the "conservative" (direct cost) and "comprehensive" cost estimates provided in Dodds and Colman (1999), op. cit., as explained above. In this case, therefore, an unemployment rate of 9.7% was used to derive both the \$60 million and \$130 million estimates.

Notes:

- Numbers have been rounded.
- While no monetary value has been assigned to the costs associated with the loss of human capital due to unemployment, it should be emphasized that these costs are likely to be very significant. Therefore the total cost estimates in Table 42 should be considered underestimates of the true or full social costs of joblessness.
- Due to the use of different sources, 2001 joblessness rates were used in conjunction with 1997 crime data, 1998 divorce data, and 1998 health data. Please see the health, family breakdown, and crime cost sections above for a detailed explanation of data sources used to calculate costs.

Chapter 10. Environmental Costs

"Humankind is now the dominant consumer species in all the world's major ecosystems and the economic demand for non-renewable energy and material commodities is rising apace. Unfortunately, the laws of mass balance and conservation dictate that the entire energy and matter flux through the human economy must return as pollution and waste to the ecosphere. Thus, as a consequence of sheer volume, human induced flows are now capable of seriously disrupting essential global life support functions at both ends of the material stream....Ecological economics has greater potential both to place society on a sustainable development path and to create whole new industries and employment opportunities than does the prevailing model."

– William E. Rees¹⁰⁷⁶

"No hungry man who is also sober can be persuaded to use his last dollar for anything but food. But a well-fed, well-clad, well-sheltered and otherwise well tended person can be persuaded as between an electric razor and an electric toothbrush."

– John Kenneth Galbraith¹⁰⁷⁷

"If the earth must lose that great portion of its pleasantness which it owes to things that the unlimited increase in wealth and population would extirpate from it...I sincerely hope, for the sake of posterity, that they will be content to be stationary, long before necessity compels them to it."

– John Stuart Mill¹⁰⁷⁸

According to researchers at the University of British Columbia, every person on the planet today requires an *average* of 2.8 hectares of land to provide the necessary resources and waste absorption capacity to meet consumption and waste production needs. That is the average "ecological footprint" of every human being on earth today. But if we set aside 12% of the world's land mass to protect biodiversity, according to international commitments made by world leaders, then that only leaves us with only 1.8 hectares of available bio-productive capacity per person.¹⁰⁷⁹

But this *average* ecological footprint is misleading, as all footprints are not the same size. For instance, a person living in North America has a footprint of 11.8 hectares while a person living in Africa has a footprint of 1.3 hectares. The richest one-fifth of the world's population consumes 45% of all meat and fish, 58% of all energy, and 84% of all paper, and it owns 87% of all cars. The poorest one-fifth consumes just 5% of meat and fish, less than 4% of energy, 1.1% of paper, and less than 1% of all cars.¹⁰⁸⁰

¹⁰⁷⁶ Rees, William E. 1995. "More Jobs, Less Damage. A Framework for Sustainability, Growth and Employment." *Alternatives Magazine*. Vol. 21, no. 4. Waterloo. pp. 24-30.

¹⁰⁷⁷ Galbraith, John K. 1967. *The New Industrial State*. Signet Books. Toronto. p. 17.

¹⁰⁷⁸ Cited in Hayden, 1999, op. cit., pp. 46-47.

¹⁰⁷⁹ Wilson, Jeff, et al. 2001. *The Nova Scotia Ecological Footprint*. Genuine Progress Index Atlantic. Halifax. p. 2.

¹⁰⁸⁰ *Ibid.* p. 3.

GPI Atlantic's *Nova Scotia Ecological Footprint* report found that Nova Scotia's average ecological footprint is 8.1 hectares per person, far in excess of the 1.8 hectares per person globally available.

"If all the world's people were to consume at Nova Scotian levels, we would need four additional planets earth to provide the necessary resources and waste assimilation capacity."¹⁰⁸¹

Even within Nova Scotia, not all ecological footprints are the same size. The richest 20% of Nova Scotians have a footprint of 10.7 hectares per person compared to 6.2 hectares for the poorest 20%. This is because the rich consume more resources and produce more waste than the poor.¹⁰⁸²

In other words, we are living well beyond our means both at the expense of future generations and at the expense of others in the world whose footprints remain well below the 1.8 hectares per person that is globally available. How is it possible to live beyond our means in this way? Instead of protecting and conserving valuable natural capital, we are drawing it down and depleting it at a rate faster than it can be replaced. Forests, for instance, once degraded, are no longer able to provide essential goods and services such as soil formation, habitat, watershed protection, flood control, climate regulation, carbon storage, high quality timber and other services. The forest, in this case, is "natural capital," a stock of natural assets that provide a flow of goods and services. The depletion and degradation of this stock is invisible in our conventional economic growth statistics which count the depletion of natural wealth as income and therefore as economic gain. Thus, the more fish we catch and the more trees we cut down, the more the economy grows. But this depletion actually represents a decline in natural wealth, and an economic cost that will affect current and future generations. If our ecological footprints are too big, then we are essentially living in debt, gradually accumulating an ecological deficit.

These excess consumption and waste production levels, on a global and local scale, have serious consequences. They lead to problems such as global warming, the loss of biodiversity, the collapse of fish stocks, species extinction, the loss of old growth forests, and ultimately the inability of the earth to sustain us.

In his book *Sharing the Work, Sparing the Planet*, Anders Hayden points out that over-consumption has produced an impending crisis that is being ignored due to the pursuit of a "shallow" and unrealistic doctrine of "sustainable growth" that assumes "we can eat our development cake and have the environment too."¹⁰⁸³ Instead of asking ourselves fundamental questions about how we can change society's values and structures, and how we might live and work, produce and consume, in genuinely sustainable ways, Hayden argues that we have instead continued along a path of reckless and often malignant growth, in keeping with the dominant capitalistic economy. Hayden finds one of the roots of this dilemma in our current employment

¹⁰⁸¹ Ibid. p. 3.

¹⁰⁸² Idem.

¹⁰⁸³ Hayden, Anders. 1999. *Sharing the Work, Sparing the Planet. Work time, Consumption and Ecology*. Between the Lines. Toronto. p. 17.

patterns, and one of the most promising solutions in alternative patterns of work that have already been tested and found successful in Europe (see Part Three of this report).

10.1 Consumerism and the 'Work-and-spend' Cycle

As previously noted in Part 1, Chapters 1 and 2, of this report, people in medieval times enjoyed much more leisure time than we do today. "In the race between wanting and having, they have kept their wanting low," writes Juliet Schor in her book *The Overworked American*.¹⁰⁸⁴ While turning back the clock to medieval times is neither desirable nor possible, there are important lessons to be learned from an historical analysis. Schor points out, for example, that the length of holidays in medieval Europe kept average annual work hours relatively short. This is partially due to the fact that people in medieval times consumed very much less than we do today. By contrast, Schor finds the roots of today's long work hours in what she calls "the work and spend cycle" that now predominates in the modern, industrialized world. In this cycle, says Schor, high levels of consumption have kept us moving on a "treadmill," requiring long hours of work to provide us with more money so we can buy more goods and services.

"Once a purely utilitarian chore, shopping has been elevated to the status of national passion," writes Schor. The average American is now consuming more than twice what he or she consumed 40 years ago.¹⁰⁸⁵ According to Schor, between 1983 and 1987 alone, Americans purchased 51 million microwaves, 44 million washers and dryers, 85 million colour televisions, 36 million refrigerators and freezers, 48 million VCRs, and 23 million cordless phones – all for an adult population of 180 million.¹⁰⁸⁶

The growth in consumption is illustrated by the fact that our houses today are larger than they were 50 years ago, even as families have become smaller. In the 1950s the average size house was 750 square feet. By 1963 houses were twice as large, and by the end of the 1980s the average living space was 2,000 square feet. Yet the decline in family size means that these large houses are occupied by fewer people than ever before.¹⁰⁸⁷

Schor writes:

"As people became accustomed to the material rewards of prosperity, desires for leisure time were eroded. They increasingly looked to consumption to give satisfaction, even meaning, to their lives.... Consumerism traps us as we become habituated to the good life, emulate our neighbours, or just get caught up in the social pressures created by everyone else's choices. Work-and-spend has become a mutually reinforcing and powerful syndrome – a seamless web we somehow keep choosing, without even meaning to."¹⁰⁸⁸

¹⁰⁸⁴ Schor, Juliet B. 1991. *The Overworked American: The Unexpected Decline of Leisure*. Harper Collins. New York. p. 10.

¹⁰⁸⁵ Ibid. p. 108.

¹⁰⁸⁶ Idem.

¹⁰⁸⁷ Schor, 1991, op. cit., pp. 109-110.

¹⁰⁸⁸ Ibid. p. 112.

Citing Herman Daly and John Cobb, Hayden points out that the consumption taking place in rich countries more often amounts to the "satisfaction of relatively trivial wants while simultaneously creating ever more powerful externalities that destroy ever more important environmental amenities." He writes:

"At a certain point we find ourselves clearcutting forests to produce disposable chopsticks, or destabilizing global climate for the sake of electric toothbrushes, butt busters, or bread machines that end up buried in some cupboard or closet."¹⁰⁸⁹

Schor points out, however, that the work-and-spend "affliction" is not everyone's disease. The affluent – middle-class and upper-class – are the ones with enough disposable income to be on the treadmill in the first place. The rest of society is just trying to get by on meagre, and often insufficient, incomes. The reality is that many people in the lower income quintiles could not work more hours even if they wanted to, says Schor. Their jobs are often part-time, intermittent, temporary, and insecure. They are working to subsist and to pay their bills. But this does not mean that low-income groups do not feel the pressure to consume:

"Even those with low incomes, however, are not free from pressures to consume. Television, advertising, peer competition, and the ubiquitous example of the economically more fortunate provide continual testaments to the value of high living. The poor are not so much adherents to an alternate (antimaterialist) set of values, as they are unsuccessful at the same game everyone else is playing. Middle-class culture has insinuated itself throughout the society. If they're not trapped in work-and-spend, it's more because they can't than they won't."¹⁰⁹⁰

The work-and-spend cycle is driven by productivity growth, says Schor. As productivity increases, a portion of the increased wealth may be distributed among workers either in the form of increased pay or as increased time off from work.¹⁰⁹¹ More often than not in the last four decades, it is pay that has gone up. Schor argues that this increased income "sets off consumption cycles," and that the additional income generally gets spent. "The individual then becomes habituated to this spending and incorporates it into his/her usual standard of living."¹⁰⁹² When real wages stagnate or decline as they did for most Canadians in the 1990s, and living standards need to be maintained, this means working longer hours to make the same amount of money. Schor notes that this cycle is a hard one to break because the alternative would require being happy with a lower material standard of living.

According to Bluestone and Rose, contrary to popular belief, all the extra hours worked by the average working family in the U.S. have "yielded only a very modest improvement in the amount of goods and services they can buy... most Americans are not working harder so they can afford a fancier minivan; they're just trying to make payments on their old car or cover the

¹⁰⁸⁹ Hayden, 1999, op. cit., p. 51, citing Daly, Herman E. and John B. Cobb Jr. 1989. *For the Common Good: Redirecting the Economy Toward Community, the Environment, and a Sustainable Future*. Beacon Press. Boston.

¹⁰⁹⁰ Ibid. p. 114.

¹⁰⁹¹ In Part 3 of this report, we shall examine the argument that increases in productivity may result from decreases in hours of work.

¹⁰⁹² Schor, 1991, op. cit., pp. 126-128.

rent." They found that not including those families headed by someone with a college degree, the "enormous" increase in work effort since the 1970s "has allowed families to maintain their old standard of living – but almost nothing more." For those families headed by high school dropouts, the situation is "dismal," because they worked 12% more hours in 1988 than in 1973 but made 8% less income.¹⁰⁹³

Bluestone and Rose agree with Schor that a segment of society – those families headed by college graduates (less than one-third of all American dual-income families) – has benefitted materially by increasing its work effort. For these highly educated Americans, working harder has meant a higher material standard of living. Everyone else, they say, is "running faster and faster just to stay in the same place."¹⁰⁹⁴

According to Hayden the notion of "wealth" itself needs to be redefined so that the "atrocious consequences of consumerism" are exposed and people are persuaded to "revise their priorities and follow a less materially intensive path."¹⁰⁹⁵ One of the ways of doing this, "work time reduction" (WTR), is explored in greater detail later in this report.

10.2 Environmental Costs

It is very difficult to estimate the environmental costs of unlimited growth in monetary terms. It is an even more daunting task to estimate the environmental costs of growth associated with over-consumption, let alone to estimate the costs of growth associated with long work hours.

In 1997, however, a team of international scientists headed by Robert Costanza of the Maryland Institute of Ecological Economics conservatively estimated the average annual value of all global ecosystem services to be about US\$33 trillion – almost twice the total annual GDP for all the countries on Earth. In all, 17 ecosystem services, ranging from atmospheric gas regulation to cultural value, were summed for 16 types of ecosystems, ranging from open oceans to urban centres. Replacement valuations and contingent valuations were both used in the monetary assessments.¹⁰⁹⁶

As previously noted, the goods and services provided by natural capital are invisible in our current system of accounting. In fact, when they are degraded (i.e. when fish stocks are overfished and forests are clearcut) this resource depletion and degradation actually make the GDP grow. If, instead, we were to view the earth's ecosystems as a source of natural wealth, then their depletion or degradation would be seen as a cost.

Using the GPI lens, the ecological costs of living beyond our means should register in our accounting mechanisms. When we view over-consumption in this way, then policy decisions can

¹⁰⁹³ Bluestone and Rose, 1997, op. cit., p. 11.

¹⁰⁹⁴ Ibid. p. 12.

¹⁰⁹⁵ Hayden, 1999, op. cit., p. 52.

¹⁰⁹⁶ Costanza, R., d'Arge, R., de Groot, R., Farber, S., Grasso, M., Hannon, B., Limburg, K., Naeem, S., O'Neill, R.V., Paruelo, J., Raskin, R.G., Sutton, P., and van den Belt, M. 1997. "The Value of the World's Ecosystem Services and Natural Capital." *Nature*. 387: pp. 253-259.

be made that encourage conservation rather than over-consumption. For example material and energy over-consumption can be discouraged through Ecological Tax Reform (ETR) and by massively increasing energy and material efficiency. Ultimately, however, a fundamental shift in thinking and attitude may be required to overcome the work-and-spend cycle that Schor describes.¹⁰⁹⁷ Anders Hayden sums up this imperative as "working less, consuming less, and living more." He calls this shift in thinking the "ecological promise of work-time reduction." Some of these ideas will be discussed further in Part 3 of this report.

10.2.1 Costs of Commuting

Commuting to work produces environmental costs in the form of air pollution and greenhouse gas emissions. Thus a shift to a four-day workweek could reduce such costs by 20%.

According to Statistics Canada's General Social Survey (1998) the most common reason for weekday travel was commuting to and from work. Forty-seven per cent of the adult population commuted to work in 1998, and the average amount of time spent on the road was 62 minutes a day (up in all cities since 1986). Most of this travel is concentrated in the rush hours, in the early morning and late afternoon. The average travel time going to and from work in the Halifax area is 49 minutes. In addition, 77% of drivers in Canada on their way to work were alone in their vehicles, up from 69% in 1986.¹⁰⁹⁸ According to the latest census data, 37.8% of commuters in Canada commute less than 5 km, 23.1% commute between 5 and 9.9 km, 13.2% commute between 10 and 14.9 km, 8.1% between 15 and 19.9 km, and 17.8% commute 20 km or more. The median commuting distance in Canada in 2001 was 7.2 km and in Nova Scotia it was 7.8 km.¹⁰⁹⁹

In their landmark 1994 book, *Our Ecological Footprint, Reducing Human Impact on the Earth*, Mathis Wackernagel and William Rees estimated the footprint (or environmental impact) of commuting. A person living 5 km from work requires an extra 122 square metres of ecologically productive land for bicycling, 301 square metres for busing, and 1,442 square metres for driving alone in a car. The land for the cyclist is needed to grow extra food, while most of the land needed to support bus passengers and car drivers is used for absorbing the CO₂ produced by fossil fuel combustion.¹¹⁰⁰

¹⁰⁹⁷ Ecological tax reform (ETR) would impose taxes and charges on energy/carbon, primary materials, water, polluting emissions, pesticides, landfill disposal, road use, disposable products, non-returnable containers etc. rather than on labour, as at present. ETR also involves the removal of subsidies to ecologically destructive industries. According to proponents of ecological tax reform, instead of taxing "goods" and labour – that is, the things we need, and our productive energy – we should be taxing "bads," such as waste and pollution. See Hayden, 1999, op. cit., p. 19. It should be added that since the burden of such new taxes would fall partly on those at the bottom of the income scale, income taxes would have to be correspondingly reduced for low-income groups. It has been argued that a corresponding reduction in income taxes, particularly for low-income groups, and an increase in income supports for the poor, are essential accompaniments of any ecological tax reform, not only to ensure that ETR does not increase social inequities, but also to ensure that the new measures are "revenue-neutral." See Rees, 1995, op. cit., p. 30.

¹⁰⁹⁸ Clark, Warren. 2000. "Traffic Report: Weekday Commuting Patterns." *Canadian Social Trends*. Spring. Catalogue no. 11-008. Statistics Canada. Minister of Industry. Ottawa.

¹⁰⁹⁹ Statistics Canada. 2003d. *Commuting Distance, 2001 Census*. Available from <http://www12.statcan.ca/english/census01/products/>. Accessed November 25, 2003.

¹¹⁰⁰ Wackernagel and Rees (1994), cited in Wilson et al., 2001, op. cit., p. 48.

Commuting alone in a car contributes 12 times more than cycling and over four times more than taking a bus to the ecological footprint of commuting. According to GPI Atlantic's report on *Nova Scotia's Ecological Footprint*, the province's current commuting footprint can be reduced substantially by an increase in car-pooling, mass transit use, and investments in bicycle lanes. For instance, car-pooling once a week with one other person results in a 10% reduction in a worker's commuting footprint. On the other hand, cycling to work and back every day instead of driving produces a 92% reduction in the impact of commuting habits on the environment.¹¹⁰¹

One notable initiative is an Alberta pilot project that gives companies tradable greenhouse gas credits for allowing their employees to work from home. These credits can then be sold to firms that need more time to cut their emissions. In this experiment, which resembles similar projects being undertaken in five U.S. states, workers log in the number of trips they save by working at home or the time they save by driving in at off-peak hours. This information, plus the make/model/year of the vehicle, allows special software to calculate the emissions saved. For instance, a worker who commutes 40 km could save 8.4 kg of carbon dioxide emissions by avoiding one trip to work.¹¹⁰²

Vancouver's experiment with a four-day workweek demonstrated that working from home or avoiding commuting to work part of the week can produce substantial savings to the environment. Vancouver City's engineering department estimated that its four-day week saved 700 extra vehicle trips and 17,500 km of auto travel per day, reducing air pollutants by 1,240 tonnes annually.¹¹⁰³

A 1998 study found that telecommuting in Canada cost 21% of commuting costs when both internal and external costs are considered. The study found that the full costs of commuting, using a small car, in Canada was \$7,000 in 1998. This included internal costs such as vehicle ownership and operation, commuting time, user-paid parking costs, and non-reimbursed accident costs, which amounted to 60% of the total cost. The remainder were external costs such as greenhouse gas emissions and land-use impacts.¹¹⁰⁴ The report also found that while telecommuting offered a savings of 80% of costs on those days when there was no commute, it was not cost-free. Land use impacts from telecommuting are assessed as equal to those from automobile use, since telecommuting is as likely to encourage urban sprawl as automobile dependency.¹¹⁰⁵

¹¹⁰¹ Wilson et al., 2001, op. cit., pp. 48-49.

¹¹⁰² Gillis, Charlie. "Work-at-home Plan Targets Gas Emissions." *The National Post*. October 28, 2002. Toronto. p. A6.

¹¹⁰³ Colman, Ronald. 1999b. *Work Time Reduction in the Nova Scotia Civil Service. Recommendations to the N.S. Government and Public Sector Unions based on Successful Work Time Reduction Experiments in Europe and North America*. GPI Atlantic. Halifax. p. 6.

¹¹⁰⁴ Colman, Ronald. 1998a. *Costs of Commuting and Telecommuting in Nova Scotia*. Prepared for the N.S. Department of Transportation. GPI Atlantic. Halifax. Number of commuting km are based on N.S. averages. From Statistics Canada. *Households and the Environment, 1994*. Catalogue no. 11-526. Operating and ownership costs based on Canadian averages. From Canadian Automobile Association. 1998. *Driving Costs*. Externalities from Litman, Todd. 1997. *Transportation Cost Analysis*. Victoria Transport Policy Institute.

¹¹⁰⁵ Idem.

Due to time and resource limitations, an up-to-date full-cost accounting analysis of commuter costs and the savings that could be achieved with flexible work schedules and telecommuting in Nova Scotia cannot be undertaken for this report.¹¹⁰⁶ Future updates of this report should include such costs, as they will then be available from GPI Atlantic's forthcoming *Transportation Accounts*.

¹¹⁰⁶ With flexible work schedules people could travel to and from work at times other than rush hour, thus subtracting time from their commute. One type of flexible work schedule is called "time-shifting," where workers can check their emails from home, for example, and then travel to work in off-peak periods.

PART THREE

THE FUTURE OF WORK

Chapter 11. Introduction

"If labour productivity continued to rise at a normal rate, and the resulting gains went exclusively towards increased free time rather than increased incomes, it would take only a few short decades to cut the work hours of the 'consumer class' of the North in half."

– Anders Hayden¹¹⁰⁷

"We tend to emphasize economic output above all else in performing cost-benefit analyses and making policy decisions, but output measured by GDP is an abysmal quality-of-life indicator. We need to take the value of free time into better account in calculating economic costs and benefits. These include not only the inherent value of free time, but the spin-off benefits arising from healthier communities."

– Mark Hudson¹¹⁰⁸

Part 1 of this report examined some of the trends in work hours in Nova Scotia, particularly the increased polarization of hours and the rise in contingent work, which have both led to greater inequality and a growing gap between rich and poor. Part 2 discussed some of the economic, social, and environmental costs associated with these trends. The good news is that there are alternative work arrangements that have been tried and tested, which can help reduce the income gap, avoid many of the costs described, increase labour productivity and free time, and improve work-life balance and the overall quality of life.

If past trends persist, the ramifications do not bode well for society as a whole. The likely result will be an ever-increasing number of marginalized workers, high rates of poverty, longer stints of unemployment, and a further increase in the direct and indirect costs associated with illness, stress, absenteeism, low productivity, crime, family breakdown, and premature death. While larger numbers of Canadians cannot get the hours they need to make ends meet, the numbers of people working long hours may also continue to increase, and their families, health, and communities will suffer. Free time will continue to shrink, and we will become increasingly habituated to high rates of time stress, struggling ever more intensely to juggle domestic and work schedules, and to balance work, family, and life responsibilities. Heightened insecurity and time pressure will result in health problems and a reduced sense of wellbeing, and it will impair our overall quality of life. The growing gap between skilled and unskilled, and between those working long hours and the unemployed and underemployed, will cause social inequities to grow and correspondingly threaten social cohesion.

At the same time, the GDP will continue to grow, and economists will tell us that we are better off because more money is being spent on goods and services.

¹¹⁰⁷ Hayden, Anders. 1999. *Sharing the Work, Sparing the Planet: Work time, Consumption and Ecology*. Between the Lines. Toronto. p. 42.

¹¹⁰⁸ The Atkinson Letter. 1999. *Are Canadians Working Too Many Hours? Part 1*. Atkinson Charitable Foundation. Toronto. p. 3. Mark Hudson was Campaign and Outreach Coordinator for 32 HOURS: Action for Full Employment, a Toronto-based non-profit organization.

From the GPI perspective, we can no longer afford to ignore *why* and *on what* that money is being spent, nor to continue counting long work hours, and spending on illness, family breakdown, and environmental degradation as economic gain. The previous section of this report identifies and counts these expenditures as costs not gains to the economy, since they reflect a decline in wellbeing, quality of life, community strength, and environmental quality. Part 3 of this report explores potential new ways forward that can reduce these costs, maximize benefits, and achieve genuine progress.

In the Genuine Progress Index, there are five key indicators of "Genuine Progress" as it relates to work:

- 1) A decline in work hours for those currently working long hours will give many people more freedom and free time. In the GPI, an increase in free time resulting from shorter work hours makes the GPI go up; a loss of free time resulting from longer work hours makes it go down. At the same time, adequate work hours and reasonable livelihood security for those currently unemployed and underemployed is equally essential.
- 2) Polarization between short and long hours has been recognized by Statistics Canada as one of the major causes of growing inequality in Canada. Therefore, a decline in the polarization of hours makes the GPI go up; while trends towards increased polarization make the GPI go down. This approach suggests policy options that redistribute work hours from those with too many hours to those with too few hours. Such options can reduce unemployment, underemployment, and inequality.
- 3) The third indicator of genuine progress is qualitative, since it relates to the quality of work itself. In *Person Planet*, Theodore Roszak champions the view that people should be able to develop their natural and innate gifts, or what he refers to as "a calling." He writes: "If only we were given the chance to be in our work with the full force of our personality, mind and body, heart and soul... what a power would be released into the world! A force more richly transformative than all the might of industrial technology."¹¹⁰⁹ Therefore, the contribution of work to positive human development, as measured by proxy indicators like work satisfaction and a close match between work and skills, make the GPI go up.
- 4) The fourth indicator is also qualitative. As Hayden points out, "a lot of work is being done that would be better left undone." He is referring to work that is damaging to the environment and to communities:

"An ecological approach [to job creation] demands both that we refuse to create jobs artificially at the expense of nature and society, and that we begin the phase-out of unnecessary and destructive forms of production from land mines to lawn chemicals."¹¹¹⁰

¹¹⁰⁹ Roszak, Theodore. 1979. *Person Planet: The Creative Disintegration of Industrial Society*. Anchor Press. New York. p. 212.

¹¹¹⁰ Hayden, 1999, op. cit., p. 38.

Hayden quotes Paul Wachtel, who noted: "There are literally millions of people...whose daily work detracts from rather than adds to the common good."

This indicator is in line with the observations of Nobel Prize Winner Simon Kuznets, one of the primary architects of national income accounting, who warned more than 40 years ago that the economic growth statistics cannot and should not be used as measures of progress and wellbeing:

"The welfare of a nation can scarcely be inferred from a measurement of national income.... Distinctions must be kept in mind between quantity and quality of growth, between its costs and return, and between the short and the long run.... Goals for 'more' growth should specify more growth of what and for what."¹¹¹¹

It is essential to distinguish between work and production that contributes to social wellbeing and that which may diminish wellbeing. An increase in the former and a decline in the latter make the GPI go up. This distinction requires subjective judgments. However, there are also broad consensus values that allow far wider social choices than are currently exercised regarding the kinds of production to encourage and discourage.

5) The fifth indicator relates to the changing nature of work. Over the last three decades there has been an increase in "non-standard" work characterized by low pay, insecurity, lack of benefits, and lack of worker autonomy. "Just-in-time" production schedules encourage many firms to favour the hiring and layoff of casual labourers over the maintenance of a large, permanent work force, in order to respond more quickly and cost-effectively to fluctuations in demand. But this casualization of labour has sharply reduced job and livelihood security for many workers. Therefore, a decline in the casualization of labour makes the GPI go up; and trends towards increased casualization of the workforce make the GPI go down. In other words, an increase in "good" jobs makes the GPI go up, while an increase in "bad" jobs makes it go down.

Part 3 of this report explores ways in which these five objectives can be achieved, using the indicators mentioned above. We explore tried and tested work arrangements and methods that have succeeded in shortening work hours and reducing hours polarization – thus contributing to the GPI. This section also identifies various policy options that have the potential to improve the quality and nature of work.

According to Hinrichs and his colleagues, the international recessions of the mid to late 1970s, accompanied by growing international competitiveness, "accelerated the pace of change and widened the scope of working-time innovations."¹¹¹² Hinrichs and his colleagues argue that pressure for more flexible work schedules has come from both employers and employees. However, the goals of flexibility as seen by employers and employees are not necessarily compatible. Many employers want flexible work arrangements because they want employees to work weekends in order to expand capital utilization, and to be on call and available at short notice to meet increases in product/service demand. At the same time, the increased labour costs

¹¹¹¹ Kuznets cited in Cobb, Clifford, Ted Halstead, and Jonathan Rowe. 1995. "If the GDP is Up, Why is America Down?" *The Atlantic Monthly*. October. p. 67.

¹¹¹² Hinrichs, Karl, William Roche, and Carmen Sirianni (eds). 1991. *Working Time in Transition: The Political Economy of Working Hours in Industrial Nations*. Temple University Press. Philadelphia. pp. 3-4.

that may be associated with reduced work hours have led many firms to oppose any changes to work hours that might negatively affect their bottom line.

Employee concerns and objectives in promoting flexibility are quite different. Many employees question "rigid regimes that tie them to fixed starting and finishing times, specified holidays and linear working lives," and look to flexible schedules as a way of alleviating work-family conflict.¹¹¹³ Unions have their own particular reasons for supporting or opposing reductions in work hours. Chapter 12 will therefore explore the attitudes of employers, employees, and unions with respect to proposals to reduce and redistribute work hours, and will therefore identify obstacles that stand in the way of implementing such changes.

In the last 30 years, many reports, books, and studies have made recommendations on how to tackle problems such as unemployment and underemployment (shortage of adequate work hours) on the one hand and overwork (too many hours) on the other. In the early 1970s, renowned M.I.T economist, Paul Samuelson, called proposals for a 4-day workweek a "momentous social invention."¹¹¹⁴ In addition to the 4-day week, however, there have been many other recommendations and experiments in varying work schedules with an eye to reducing or redistributing work hours. These alternatives will be discussed and evaluated in detail in Chapter 13.

In considering the options most appropriate to Nova Scotia conditions and circumstances, it is helpful to begin with an examination of the copious research and experimentation that has already been done. Europe, particularly, provides countless examples of new work arrangements that have been initiated by governments, business, and unions. Some of these experiments have been successful. Others have not. Rather than repeat past errors, Nova Scotia can benefit by identifying the most successful and appropriate past interventions that hold the greatest promise for reducing unemployment and overwork and their associated costs, and improving the conditions of work and life in this province.

Here in North America there are also numerous corporate, government, and union models of work-time reduction and of efforts to redistribute work hours. Some of these options will also be explored in Chapter 13.

In 1994, economist Arthur Donner chaired a Federal government Advisory Group which looked specifically at *Working Time and the Redistribution of Work in Canada*.¹¹¹⁵ Based on the research and results of this commission, Donner argued that a portion of future productivity gains should be distributed to employees in the form of increased leisure (time off) rather than increased wages:

"If the policies were phased in gradually and in the right circumstances, a reduction in average hours of work would trigger smaller government deficits, reduced welfare

¹¹¹³ Ibid. p. 4.

¹¹¹⁴ Paul A. Samuelson is cited in Wheeler, R, Richard Gurman, and Dale Tarnowieski. 1972. *The Four-day Week*. American Management Association Inc. New York. p. 1.

¹¹¹⁵ Advisory Group on Working Time and Distribution of Work. 1994. *Report of the Advisory Group on Working Time and the Distribution of Work*. Human Resources Development Canada. Hull.

*spending, lower unemployment and, of course, a substantial redistribution of work in the direction of the unemployed and underemployed."*¹¹¹⁶

Donner notes that work-sharing can be at least a partial solution to overwork, underemployment, and unemployment – which he refers to as a "ticking time bomb." Donner concedes that policies related to working time and the redistribution of work are not "the complete solution to Canada's labour market and social problems," but he argues that they "can contribute to a better-balanced labour market and to reduced stress on workers and their families."¹¹¹⁷

After examining a wide range of models, options, and "best practices" in Chapter 13, Chapter 14 of this report then explores the job creation potential of work-time reduction for Nova Scotia.

Finally, based on all the evidence presented in this report, Chapter 15 will explore specific policy recommendations appropriate to Nova Scotia, which can facilitate the reduction and/or redistribution of work hours, and promote genuine progress in the world of work with reference to the five indicator sets mentioned above.

¹¹¹⁶ Donner, Arthur. 1996. "Why it's Important to Promote Work-sharing." *The Globe and Mail*. May 6, 1996. Toronto.

¹¹¹⁷ Idem.

Chapter 12. Attitudes Toward Work Hours

12.1 The Employee

12.1.1 Survey Results

Statistics Canada has conducted two surveys on work time preferences, both of which found that Canadian workers prefer either to increase or maintain their current work hours rather than to reduce their hours. A 1985 Statistics Canada survey on attitudes toward work reduction, conducted for the Conference Board of Canada, found that 30.7% of respondents were interested in reducing their hours of work. A 1995 Statistics Canada survey, conducted as part of the Survey of Work Arrangements, found that only 6% of Canadian workers were interested in working less.¹¹¹⁸

What these and other surveys reveal is that it is very important how survey questions are framed, and that the nature of the question can determine the result. For instance, in a recent survey published in *The Globe and Mail*, Canadians were asked whether they preferred to earn more money, even if that meant working more hours each week, or having more time for themselves and family, even if that meant earning less money. More than 75% said they'd take the time over the money.¹¹¹⁹

In 1998, a Quebec poll found that 42% of workers would be willing to accept less pay in order to create jobs for young people. Sixty-five per cent would participate in work-sharing, and 67% said they would give up overtime hours to create new jobs.¹¹²⁰

Across the Atlantic, a recent survey revealed that more than half of British full-time workers are so tired they would prefer to sleep than have more sex, and would happily swap a pay raise for a shorter workweek.¹¹²¹

In sum, these survey results from *The Globe and Mail*, from Quebec, and from the U.K. appear to contradict sharply Statistics Canada's 1995 survey results. If we were to take the 1995 Canadian survey at face value, the conclusion may seem straightforward. Generally speaking, far fewer workers preferred to work shorter hours in 1995 than a decade earlier. But when these surveys are analyzed more closely, particularly at the way the questions were posed, it becomes clear that a number of different factors influenced workers' choices.

¹¹¹⁸ Drolet, Marie and Rene Morissette. 1997. "Working More? Less? What do Workers Prefer?" *Perspectives*. Statistics Canada. Catalogue no. 75-001-XPE. Ottawa. p. 33. Also: Benimadhu, Prem. 1987. *Hours of Work: Trends and Attitudes in Canada*. Conference Board of Canada. Ottawa. p. 9.

¹¹¹⁹ *The Globe and Mail*. "The Altered State." *The Globe and Mail*. June 7, 2003. Toronto. p. F7.

¹¹²⁰ Poll cited in Reid, Frank and Morley Gunderson. [Forthcoming]. *Worksharing and Working Time Issues in Canada*. Institute for Research in Public Policy. Montreal. p. 34.

¹¹²¹ Survey of 1,113 U.K. adults who work full-time was conducted by ICM Research for *The Observer*, and reported in *The Observer*. "Too Tired for Fun or Sex." June 29, 2003. Available from http://observer.guardian.co.uk/uk_news/story/0,6903,987105,00.html. Accessed June 30, 2003.

It should be noted that Statistics Canada advises against comparing the results of its own two surveys, mainly because the 1985 Survey of Work Reduction provided considerable background information to help respondents understand the concept and implications of work reduction and the context of the survey. The 1985 Survey was also conducted at a time when unemployment was high, and reducing hours was seen as a way of either creating jobs or at least averting layoffs. In 1995, no background was provided for respondents, and the survey questions on work reduction were simply inserted into a larger survey on work arrangements.¹¹²²

Furthermore, there are a number of other factors that might account for what appears to be a significant drop in interest in work reduction between the 1985 and 1995 surveys.

- Certain assumptions were embedded in the 1995 survey questions that were not in the 1985 survey. In the 1995 survey, workers were asked the following question: "At this job, given the choice, would [you], at [your] current wage rate, prefer to work: 1) fewer hours for less pay? 2) more hours for more pay? 3) the same hours for the same pay?" Unlike the 1985 survey, which both spelled out the financial implications of work-time reduction and provided a number of options for how such reductions could be taken (e.g. a four-day week, longer vacations, etc.), respondents in 1995 received no background information on the implications of work-time reduction. This may be due in part to the fact that the 1995 survey was administered by telephone, which limits explanation, while the 1985 survey was administered by mail, and contained a detailed introduction providing considerable background and information on the subject.

The 1995 questions also did not include any information that reducing long work hours could create jobs and avoid layoffs, as the aforementioned Quebec survey did, nor did it state that shorter work hours could increase leisure time with family, as *The Globe and Mail* survey did.¹¹²³ The addition of an altruistic motive – the creation of more jobs for young people or for the unemployed through reducing one's own work hours – can clearly make a substantial difference in the proportion of respondents willing to reduce their hours, as the Quebec survey demonstrated.

Given the phrasing of the 1995 survey question noted above, respondents almost certainly assumed that a reduced workweek would require an equivalent reduction in pay. For example, a 20% reduction in hours likely implied to respondents a corresponding 20% cut in pay, a scenario that few Canadians could envision without serious adjustments to lifestyle and standard of living. Respondents were not informed about the productivity increases that have been demonstrated to result from shorter work hours and that therefore allow for less than a proportional cut in pay, nor were they told that a lower tax bracket would reduce and soften the net impact of a reduction in income.

Statistics Canada has never asked workers if they would be willing to work 20% less for a 10% reduction in pay. But such a question would more accurately reflect the evidence of the effect of shorter hours on productivity gains than a question that assumed a proportional cut in pay. Belgian civil servants, for example, were offered a 20% reduction

¹¹²² Drolet and Morrisette, 1997, op. cit., p. 32.

¹¹²³ Idem.

in work hours (equivalent to a four-day week) in exchange for a 10% cut in pay before taxes. When this 10% lower pay is taxed by comparison with previous earnings, the actual disposable income loss for a 20% cut in hours is more like 8%. Such a scenario would certainly make the option of shorter hours far more attractive to many Canadians than the implicit scenario of an equivalent and proportional cut in pay as indicated in the 1995 survey question. See Chapter 13 for more details about productivity gains and income tax effects.

While Statistics Canada's 1985 Survey on Work Reduction did not mention productivity gains or the possibility of less than proportional pay cuts, it did include an extensive introduction, which clearly explained the trade-offs involved in reducing hours. For instance, a table was provided which converted a week of unpaid vacation into dollars per year at various incomes. This information, none of which was provided in the 1995 survey, helped respondents contemplate the trade-offs, and to consider concretely how they might manage a reduction in hours and income.¹¹²⁴

While few workers are willing to reduce their *current* pay and therefore to reduce the standard of living to which they have become accustomed – as implied by the 1995 Statistics Canada survey – the 1985 Statistics Canada survey and the British survey, by contrast, asked workers whether they would be willing to trade a future pay *raise* for a shorter workweek. Not surprisingly, a far higher proportion of Canadian respondents in 1985, and more than half of British full-time workers, wanted to reduce their hours – far more than in the 1995 Statistics Canada survey. This is undoubtedly due to the fact that no adjustment to *current* income, consumption, or standard of living is necessary when workers are asked about trading off a future pay increase.

- One of the two questions in the 1985 survey – whether workers would be willing to take a pay cut in exchange for time off – closely resembles the question asked in the 1995 survey. The other question, for which there was no equivalent in the 1995 survey, asked whether respondents would trade all or some of a pay increase in the next two years for more time off. While 30.7% of respondents answered yes to one or both of the questions in 1985, only 17% were willing to take a pay cut in exchange for time off – considerably closer to the 6% who wanted to reduce their hours in exchange for a pay cut in 1995.¹¹²⁵
- Another limitation of the 1995 Statistics Canada survey was that it did not provide any information about the "magnitude" of worker's desires for reduced worktime. The 1985 survey provided a list of work reduction alternatives, and gave respondents options as to *how much* they would like to reduce their work hours.
- During recessions, the proportion of the workforce who are involuntary part-timers increases, and there are therefore larger numbers of workers working fewer hours than they would like during such economic downturns. The likelihood that this group would opt for even fewer hours is therefore small. Both in 1985 and 1995, unemployment rates

¹¹²⁴ Reid, Frank, and Morley Gunderson. [Forthcoming]. *Worksharing and Working Time Issues in Canada*. Institute for Research in Public Policy. Montreal. p. 31.

¹¹²⁵ Idem.

in Canada were still relatively high and employment rates had not yet recovered to pre-recession levels, creating conditions of insecurity not conducive to consideration of work and pay reduction. Had the two Statistics Canada surveys been conducted four or five years later, say in 1989 and 1999 or 2000, when unemployment rates were less than 8% and involuntary part-time work had also declined, a higher proportion of respondents would likely have contemplated work-time reduction¹¹²⁶

- During unstable times, fewer respondents would also opt to reduce their hours of work if they thought this might threaten job security. While the 1995 questions, asked by telephone, did not state otherwise the 1985 survey, administered by mail, instructed respondents to assume that their choices would not affect their job security. This disparity in survey instructions may also help to explain the sharp difference between the 1985 and 1995 survey results.¹¹²⁷
- During the same 10-year period, the percentage of employees in U.S. surveys who indicated a preference for reduced work hours *increased* from 8% in 1985 to 14% in 1995 – the opposite trend to that indicated in Statistics Canada's 1985 and 1995 surveys. According to Reid and Gunderson, the disparity between the U.S. and Canadian trend lines suggests that the apparent decline in interest in work time reduction in Canada indicated by the Statistics Canada surveys is likely due to factors "other than an actual decline in preferences for work time reduction."¹¹²⁸

While the 1995 survey provides the most recent available Statistics Canada results on preferences for work time reduction in Canada, it is severely limited in ways that the 1985 survey was not. In some of his own case studies, Frank Reid of the University of Toronto has found that the evidence "corresponded more broadly" to data in the 1985 Survey on Work Reduction (SWR) than to the work-reduction results of the 1995 Survey on Work Arrangements (SWA).¹¹²⁹ For all the reasons given above, the 1985 survey results will be used in this GPI analysis of employee attitudes below. The factors cited above indicate that the 1995 SWA results are likely to have biased the results quite seriously, and to have produced a substantial underestimate of the potential interest in work-time reduction in Canada. The time is clearly ripe for a new survey of Canadians on work-time reduction, this time providing sufficient, accurate information to respondents. Such a survey should properly explain the context and implications of the questions – including financial implications. It should also offer sufficient alternatives to provide nuanced results and information on the magnitude of reduction preferred by respondents.

In the 1985 Survey on Work Reduction (SWR), the questions relating to reduced work time were: a) In the next two years would you take a cut in pay if you received more time off in return? b) Would you trade all or some of your pay increase in the next two years for more time off? Of 9.6 million working Canadians represented by the survey, about 3 million or 31% would have answered yes to either or both of these questions. In the 1985 survey, respondents were asked to assume that their job situation would stay the same; job security and seniority would not be

¹¹²⁶ Drolet and Morissette, 1997, op. cit., p.38.

¹¹²⁷ Idem; Reid and Gunderson, 1999, op. cit., p. 32.

¹¹²⁸ Reid and Gunderson, 1999, op. cit., p. 30.

¹¹²⁹ Ibid. p. 33.

affected by the choice to reduce hours; chances for promotion or pay raises would not be jeopardized; pension and other benefits would not be affected.¹¹³⁰ These assurances are very important to communicate clearly to respondents, since part-time work generally fetches lower hourly pay, is less likely to carry benefits, and produces fewer opportunities for career advancement than full-time work. Such employees are also likely to be the first laid off in an economic downturn. In other words, reducing work hours may well be associated in the minds of respondents with a substantial reduction in job security. As noted above, these assurances were not given to respondents in the 1995 survey.

Table 43 below shows that approximately 37% of respondents were happy with their current work hours, about 32% were interested in increased hours with a proportionate increase in pay, while 30.7% opted for reduced work time and were willing to pay for it either by a proportionate reduction in pay or by foregoing future wage hikes. In other words, roughly two out of every three workers were interested in changing their work time arrangements; with roughly half preferring longer hours and half preferring shorter hours. Women were slightly more interested in reduced hours than were men.

Table 43. Work time Preferences, Canada, 1985 (% of all respondents).

Worktime Preference	Men	Women	Both Sexes
No Change or Not Stated	36.1	38.8	37.2
Increased Work time for Proportionate Increase in Pay	34.1	29.3	32.1
Reduced Work time for Proportionate Reduction in Pay or Trade Future Pay Increase for Time Off	29.8	31.9	30.7
Total	100.0	100.0	100.0

Note: The "no change or not stated" category was calculated as the residual difference between 100% and the proportion who preferred an increase in work time plus the proportion who preferred a decrease in work time. Of the 32.1% who expressed an interest in increased work time, about one-sixth also expressed an interest in reduced work time. Of the 30.7% who expressed an interest in reduced work time, about one-sixth also expressed an interest in increased work time.

Source: Benimadhu, Prem. 1987. *Hours of Work: Trends and Attitudes in Canada*. Conference Board of Canada. Ottawa. The original data source was the Statistics Canada Survey of Work Reduction conducted as a supplement to the June 1985 Labour Force Survey. The survey questions relating to reduced worktime were: a) In the next two years would you take a cut in pay if you received more time off in return? b) Would you trade all or some of your pay increase in the next two years for more time off? 30.7% of respondents would have answered yes to either or both of these questions. The total number of working Canadians represented by the survey was 9.6 million.

At the time of the 1985 survey, Canada was at a "juncture" where there was "pressure for a reduction in working time," according to Statistics Canada's own analysis of the survey results. High jobless rates combined with changes in the work force provided "strong impetus to reconsider the traditional working hours."¹¹³¹ Within the group that expressed interest in

¹¹³⁰ Benimadhu, 1987, op. cit., pp. 7-20.

¹¹³¹ Benimadhu, 1987, op. cit., p. vii.

reducing its work hours, the highest proportion was women between the ages of 25 and 34 with household income exceeding \$60,000/year. Sixty-four per cent of Canadian women in this category said they would give up income or a future pay raise for more time off. By contrast, those who wanted to work longer hours tended to be men with lower education levels and lower incomes.¹¹³²

Table 44 indicates that interest in shorter work time was highest in British Columbia and Quebec, at 37%, followed by Alberta at 30%. In 1985, one in four Nova Scotians would have given up income for more leisure. Overall, higher income, higher educational attainment, unionization, and presence of young children were strongly correlated with a preference for reduced work time. For instance, 40% of women with young children expressed interest in reducing their hours.

Table 45 shows that when industry and occupation were examined, utility, communications, and public administration employees were the most interested in work-time reduction, while there was less interest expressed by service industry workers. According to Benimadhu, this is likely because hours in the service industries already tend to be shorter.¹¹³³

Table 44. Interest in Reduced Worktime by Various Characteristics, 1985 (% of those who were interested in worktime reduction).

Usual hours/wk	%	Union status	%	Age of children	%
1-30	19	Union	34	Under 5 years	33
31-40	33	Non-union	29	6-11 years	31
Over 40	29			12-14 years	29
				none under 15 at home	32
Household income	%	Age	%	Province	%
Under \$20,000	21	18-19	18	Newfoundland	23
\$20,000 - \$29,000	26	20-24	26	Prince Edward Island	24
\$30,000 - \$39,000	33	25-34	35	Nova Scotia	25
\$40,000 - \$49,000	37	35-44	34	New Brunswick	23
\$50,000 - \$59,000	44	45-54	26	Quebec	37
\$60,000 - \$69,000	45	55-64	26	Ontario	27
\$70,000 and over	45	65 and over	26	Manitoba	25
Not stated	17			Saskatchewan	25
				Alberta	30

Note: numbers have been rounded

Source: Benimadhu, 1987, op. cit., p. 10.

¹¹³² Idem.

¹¹³³ Benimadhu, 1987, op. cit., pp. 10-13.

Table 45. Preference for Worktime Reduction by Industry and Occupation, Canada, 1985.

Characteristic	%	Characteristic	%
<i>Industry</i>		<i>Occupation</i>	
Agriculture	21	Managerial, admin.	37
Other primary	29	Natural science	46
Manufacturing	30	Social science and religion	40
Construction	26	Teaching	33
Transportation	30	Medicine	36
Communication	40	Artistic	45
Utilities	46	Clerical	32
Trade	25	Sales	24
Finance	33	Service	23
Community service	34	Farming	23
Business and personal service	29	Other primary	22
Miscellaneous service	27	Processing	24
Public administration	36	Machining	29
		Fabricating	28
		Construction	27
		Transportation	22
		Materials handling	32
		Other crafts	33

Note: numbers have been rounded.

Source: Benimadhu, 1987, op. cit., p. 12.

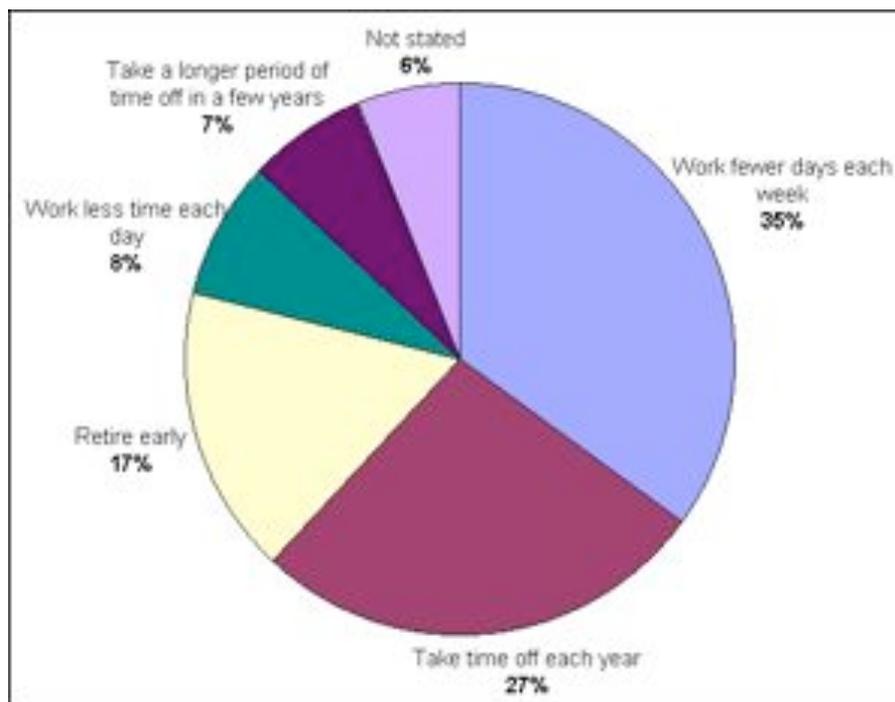
Those who opted not to trade income for time off did so for the following reasons:¹¹³⁴

- They couldn't afford it.
- They liked their current hours.
- They felt it was not possible to reduce hours in their line of work.
- Other

Those who opted to trade income for time off were asked in the survey to choose from a provided list of "preferred work patterns." The results are presented in Figure 57 below. Most Canadians would prefer to take their work time reduction in the form of a shorter workweek (35%), followed by taking more time off each year, such as longer vacations (27%). The least preferred methods of work time reduction were a shorter work day (8%) or taking a longer period off in a few years, like a sabbatical (7%).

¹¹³⁴ Ibid. p. 8.

Figure 57. Preferred Forms of Worktime Reduction, 1985 (expressed as a % of those who were interested in work time reduction).



Note: Of those surveyed, 30.7% were interested in reduced work time. For those who expressed interest, the work-time reduction options which respondents were given to choose from were: shorter workweek – 1 day; shorter work year – 1 or 2 weeks; shorter work day – 1 to 1.5 hours; longer time off in a few years – up to 2 months.

Source: Benimadhu, Prem. 1987. *Hours of Work: Trends and Attitudes in Canada*. Conference Board of Canada. Ottawa. p. 14.

The survey also listed 23 possible reasons for wanting to work less. Respondents were asked to cite their reasons and rate the degree of importance of each reason given. They were also able to choose the *most* important reason for wanting time off. Overall, a desire for more leisure (education, sports, travel, and hobbies) ranked first for 44% of respondents. In second place, at 30%, were "other responsibilities" including family care and chores. Dissatisfaction with work was listed as most pressing by only 8% of respondents, while 18% listed "other reason."

In the 1995 survey, the characteristics of those wanting to work less were similar: Well-educated professionals already working long hours, with high incomes, and jobs with tenure and security, longed for more leisure. In the 1995 survey, 12% of married women with young children also wanted shorter hours. But this time only 6% of all respondents (in contrast to nearly 31% in 1985) stated a preference for shorter work time.¹¹³⁵ As noted above, this disparity is likely an artefact of the survey questions, methodology, background information provided, and context.

In the 1995 survey, 27% of respondents wanted more hours and 67% preferred the status quo. Those who wanted more hours in 1995 tended to be single mothers (40%), who have high levels

¹¹³⁵ Drolet and Morissette, 1997, op. cit., p. 33.

of low income, and others experiencing financial difficulties. Those with little seniority, working in sales or services, and in part-time or temporary jobs without benefits, generally wanted more hours in the 1995 survey.¹¹³⁶

The 1995 Statistics Canada survey not only produced sharply different results from the earlier 1985 survey. The results were also vastly different from survey findings in other countries. A 1997 U.S. study, for example, found that 66% of American workers wanted to reduce their work hours, up from 47% in 1992.¹¹³⁷

A recent Australian survey found that three out of four employees and their managers believe productivity would stay the same or improve if the workweek were reduced to 35 hours. The survey results showed increased support for a 35-hour week when compared with a similar 2001 survey. One in three employees reported having trouble balancing work and family life. Those respondents who were willing to reduce their hours of work in exchange for a pay cut said they would give up an average of 13% of their wages if it meant more free time and better work-life balance.¹¹³⁸

12.1.1.1 Community GPI Employment Survey

Since the launch of the Nova Scotia Genuine Progress Index in early 1997, the strongest interest in the project has been expressed by local communities who are urgently looking for ways to assess their wellbeing accurately, and to measure their progress genuinely. It is at the local level, after all, where quality of life is experienced. Reassuring national and provincial averages for indicators such as water and air quality; livelihood security; or safety and crime, for example, may not be very meaningful for Walkerton, Toronto, Cape Breton, or other areas with poor water or air quality, high unemployment, or high crime rates. For this reason, communities are particularly interested in their own indicators of wellbeing.

Communities may know viscerally if they are getting safer or not, if job security is growing or not, if people in need are being cared for, if the quality of their air and water is improving or getting worse. But they do not generally have the numbers to back up or disprove their hunches, or to use as the basis for community planning and development. They *do* know that the economic growth measures conventionally used to assess wellbeing do not tell the whole story, but they do not have local data on broader indicators of community health and wellbeing.

For these reasons, Nova Scotia Citizens for Community Development Society, a non-profit group, approached GPI Atlantic in 1998 to assist in developing community-level genuine progress indicators. As a result, a Community GPI project was launched in Kings County, Nova Scotia, as a pilot for other communities, and later another project was launched in Glace Bay, a

¹¹³⁶ Ibid. pp. 36-37.

¹¹³⁷ U.S. study by the Families and Work Institute cited in Reid and Gunderson, Forthcoming, op. cit., p. 35. The study was reported in *The Globe and Mail*, April 6, 1998 and in *The Toronto Star*, April 27, 1998.

¹¹³⁸ The Australian study, commissioned by Leadership Management Australia, surveyed more than 2,250 employees and managers. From Nixon, Sherrill. "Desire for Shorter Hours Surges." *Sydney Morning Herald*. July 21, 2003. Sydney.

former Cape Breton coal mining town with very high levels of unemployment. More recently, a similar project was launched in Halifax's north end.

In Kings County, representatives of more than 40 community organizations met for more than a year, under the auspices of Kings Community Economic Development Agency, to identify appropriate indicators of progress, and to develop a questionnaire to gather the data needed for the index.¹¹³⁹ That survey includes many questions on employment, unemployment, underemployment, job characteristics and work schedules, as well as questions on voluntary work and caregiving, population health, peace and security, and impacts on the environment.

In particular, there is a section of the survey dedicated to work reduction, which is directly relevant to the issues discussed in this chapter. Unlike the 1995 Statistics Canada survey discussed earlier, the Community GPI respondents are provided with one page of background information about reduced worktime options and information on what a 10% reduction in worktime would mean. For instance, the questionnaire provides the following background information:

"If you worked less hours, your extra time off could be in the form of a shorter work day, 3-day weekends, longer annual vacations, banking the time and taking several months off every few years, or phasing in to retirement. As an example, for full-time workers who now put in a 40-hour week, a 10% work reduction would mean:

- a) a 48 minute shorter work day (based on an 8 hour day), OR
- b) a half day less per week, OR
- c) a three day weekend every other week, OR
- d) 5 *extra* weeks of vacation per year, OR
- e) 6 months off every five years.

If you worked 20% less hours, you'd work a 6.5 hour day, OR have a three-day weekend each week, OR have 10 extra weeks of vacation a year, OR you'd get a one-year sabbatical every five years."¹¹⁴⁰

In addition, there are eight questions about work reduction in the GPI questionnaire to assess respondent attitudes to different options and different financial scenarios, in contrast to Statistics Canada's two questions in 1995. As well, the GPI results can be correlated with other sections of the questionnaire, including respondents' current work schedules, their current overtime hours, a wide range of job characteristics, educational levels, and other factors. In addition, the very different socio-economic profiles of the two communities will provide important information on the circumstances that make shorter work hours more or less attractive to workers.

The questionnaires have now been administered to 3,700 respondents in the two communities, a sample size large enough to assess the characteristics of those who do and do not wish to reduce

¹¹³⁹ Funding from the project has come from the Canadian Population Health Initiative, the National Crime Prevention Centre, the Canadian Rural Partnership, HRDC, and the Kings County Council.

¹¹⁴⁰ GPI Atlantic. Employment/Underemployment section of Community GPI Questionnaire for Glace Bay and Kings County. GPI Atlantic. Halifax. p. 26; available on the GPI Atlantic web site at www.gpiatlantic.org.

their hours according to a wide range of socio-demographic factors, without compromising the statistical validity of the results. The data have now been entered into a unique new database designed by Dalhousie University's Population Health Research Unit and Saint Mary's University's Time Use Research Program. The survey results are now ready for analysis. In the coming months, depending on funding and resources, results will be analyzed by researchers at Acadia University and the University College of Cape Breton, and then reported back to both communities.

Unfortunately, this analysis and the corresponding results were not yet available at the time this report was being written. However, any future updates of this report should include these data on work hours for Glace Bay and Kings County, as they provide the most detailed community-level data on the subject available in Canada. The broader employment data for the two communities will also provide key information on the determinants of health not previously available at the community level, and will undoubtedly spawn some major research projects that will have value nationwide.

12.1.2 Benefits of Shorter Working Time (SWT) for Employees

The following potential benefits of shorter work time for employees have been well documented in the literature:

- **Improved health:** The health of workers who currently put in long hours may benefit from shorter work hours. Excessive working hours have been linked to: increased risks of heart disease, sleep difficulties, increased tiredness, sexual disorders, gastric disturbances, headaches/migraine, backaches, dizziness, unhealthy weight loss or weight gain, increased risk of accidents, apathy, depression, irritability, intolerance, boredom, cynicism, and burnout. There is also a well-established link between "work overload," which includes intensity of work pressures as well as long hours, and heart disease.¹¹⁴¹

However, unless carefully implemented and managed, and unless combined with new job creation, shortening work hours might also lead to an intensification of work and therefore to more stress and/or fatigue. In other words, if the same numbers of employees are expected to maintain or increase output in fewer hours, then shortening hours may be counter-productive from a health perspective. Therefore, if a key goal of reducing work hours is to improve the health of workers, and thus to invest in human capital, then it must be considered within the context of work or job design.¹¹⁴²

If shortening the work hours of those employees currently putting in very long hours is combined with new job creation, then reducing and redistributing work hours may lower

¹¹⁴¹ McLean, 1979, op. cit., p. 81, citing Russek, H.I., and B.L. Zohman. 1958. "Relative Significance of Heredity, Diet and Occupational Stress on CHD of Young Adults." *American Journal of Medical Sciences*. 23: 266-275.

¹¹⁴² White, Michael. 1987. *Working Hours. Assessing the Potential for Reduction*. International Labour Organization. Geneva. pp. 24-29.

unemployment, which is itself an important determinant of poor health.¹¹⁴³ In this way, shortening work hours may reduce the stress, depression, and numerous other mental and physical health problems that have been linked to joblessness.

Please see Chapter 15 for a discussion of the *intensification* problem, and of potential solutions to this problem.

- **Increased leisure:** Workers may share the benefits of productivity increases in the form of time off, instead of wage increases.¹¹⁴⁴
- **Reduced time pressure:** Shorter work hours would enable dual-earner families to reduce work-life conflict and diminish the sense of "time squeeze."¹¹⁴⁵
- **Strengthening family:** Shorter work hours would enable men and women to accommodate child-care and other family responsibilities more effectively. Studies have shown that women's working time preferences, in particular, are highly influenced by school schedules and the availability of child-care. In Scandinavia, for example, a "comprehensive network" of day nurseries generally makes it easier for women with young children to have paid work than in North America. In Germany, schools are only open until lunchtime, so many women only work in the mornings. Because family responsibilities are often cited by women as a key reason for preferring shorter working time or more flexible work schedules, reducing work hours may particularly benefit women, children, and families. It may also help create a more equitable gender division of labour in the household, if shorter work hours for men enabled them to take on more family responsibilities.¹¹⁴⁶
- **Reduced polarization of hours:** High rates of joblessness and underemployment coupled with an increase in the proportion of workers putting in long hours has meant, paradoxically, that there are too few and too many work hours at the same time. While some workers have been excluded from paid work or marginalized, others have been over-employed. Reducing and redistributing work hours can help to improve the lives of both the overworked and those who are underemployed and unemployed.¹¹⁴⁷
- **Avoided layoffs:** Workers may be able to avoid layoffs at times of economic downturn if a work-sharing scheme is implemented and if E.I benefits are used to offset lost wages. Federal regulations currently enable employers to exercise this option under particular circumstances. Workers who would otherwise have been laid off may avoid: a) the loss of income, b) the loss of self-esteem, and c) the high levels of stress and related health

¹¹⁴³ According to *The Atkinson Letter* (1999), the National Forum on Health labelled unemployment as the most important determinant of health in Canada. p. 2.

¹¹⁴⁴ Cuvillier, Rolande. 1984. *The Reduction of Working Time*. International Labour Organization. Geneva. p. 18.

¹¹⁴⁵ Hayden, 1999, op. cit., p. 42.

¹¹⁴⁶ OECD. 1995. *Flexible Working Time. Collective Bargaining and Government Intervention*. OECD. Paris. pp. 22-23.

¹¹⁴⁷ Hayden, 1999, op. cit., p. 31.

problems caused by unemployment and by the diminished social status of the unemployed.¹¹⁴⁸

- **Improved quality of life:** With more leisure time, workers may be able to get more mental and physical rest, and participate more fully in family life, recreation, education, and community and cultural activities.¹¹⁴⁹ By reducing time stress and restoring better work-life balance, workers may quite simply enjoy their lives more.
- **Increased solidarity:** Feelings of solidarity among workers may develop, if those who work-share or reduce their work hours thereby help to avoid layoffs among their fellow workers, and reduce unemployment.
- **Improved wellbeing for future generations:** Workers are concerned not only for their own wellbeing, but for that of their children. By substituting more free time for more money, shorter work hours can help decrease the unprecedented rates of consumption that are currently depleting the world's resources and generating more waste products than the earth and atmosphere can absorb. According to Anders Hayden: "Shorter work hours can form the core of a new non-material vision of progress by providing a green way to benefit from economic and technological advances," which can ultimately produce a higher quality of life.^{1150 1151}
- **Reduced inequality:** The redistribution of work hours can help create a more equitable, and therefore a more cohesive, society.¹¹⁵² As noted earlier, Statistics Canada identified the polarization of work hours as a key cause of the growth in income equality in Canada in the 1990s. Conversely, a redistribution of work hours will reduce earnings inequality.

12.1.3 Obstacles to Shorter Working time (SWT)

Workers may be unwilling to support SWT or work-sharing initiatives because:

- They may be penalized under work-sharing schemes by reduced fringe benefit provisions that are linked to hours worked.
- They may feel that reducing their work hours "threatens their social position" and their identity, which may have become dependent on demonstrating a commitment to their employer through putting in long work hours.¹¹⁵³
- They may be unwilling to take any reduction in pay.

¹¹⁴⁸ Meltz, Noah M., Frank Reid, and Gerald S. Swartz. 1981. *Sharing the Work. An Analysis of the Issues in Worksharing and Jobsharing*. University of Toronto Press. Toronto. pp. 67-70.

¹¹⁴⁹ Cuvillier, Rolande. 1984. *The Reduction of Working Time*. International Labour Organization. Geneva. p. 17.

¹¹⁵⁰ Hayden, 1999, op. cit., p. 32.

¹¹⁵¹ Andrew Harvey notes that shorter hours can also "increase consumption but change its composition toward leisure goods." Harvey, Andrew S. Professor of Economics and Director of Time Use Research Program, Saint Mary's University, Halifax. Reviewer comments. August 20, 2003.

¹¹⁵² *The Atkinson Letter*, 1999, (Part 1), op. cit., p. 2.

¹¹⁵³ Meltz, Noah M., Frank Reid, and Gerald S. Swartz. 1981. *Sharing the Work. An Analysis of the Issues in Worksharing and Jobsharing*. University of Toronto Press. Toronto. pp. 40-41.

- They may fear loss of job security or seniority.
- They may have really interesting jobs and enjoy all the hours they work.
- They may have grown accustomed to working overtime and have become dependent on overtime pay and the higher consumption levels and material standards of living that come with it.¹¹⁵⁴

12.2 The Employer

Overall, the evidence demonstrates that, if implemented well, voluntary worktime reductions can produce substantial cost savings for government and taxpayers, save jobs, improve productivity, and benefit employees and employers.

Despite this, with some notable exceptions, the business sector has historically opposed shorter worktime and continues to do so. In general, it has resisted such initiatives, primarily because of the increased costs that they associate with hours reduction.

At the same time, there is one variant of worktime flexibility that the business sector has been more willing to embrace because it can reduce labour costs. Globalization and various new production methods, like "lean production" and maintenance of reduced "just-in-time" inventories, have forced many businesses to adopt more flexible work hours that can respond quickly to fluctuations in demand.¹¹⁵⁵ The dismantling of many trade barriers has also forced businesses to compete with cheaper labour abroad, and thus seek to reduce labour costs. A byproduct of these new realities and new production methods has been an increase in temporary or contingent work, characterized by insecurity, low pay, and lack of benefits.¹¹⁵⁶

Indeed, market pressures have in many cases driven firms to implement changes that are not in the interests of workers. For instance, in an effort to cut costs, employers have sometimes replaced full-time workers with part-time or casual workers, thereby cutting wages and avoiding benefit bills. According to the OECD: "In many cases, new time arrangements have nothing to do with the introduction of interesting and innovative working-time models, but are merely attempts to reduce wage costs."¹¹⁵⁷ According to the OECD, this type of working time flexibility is especially prevalent in the service sector.

In short, worktime flexibility may not necessarily be beneficial either to workers or to society at large. On the contrary, as indicated in Part 2 of this report, non-standard and contingent work

¹¹⁵⁴ Arthur Donner in the *The Atkinson Letter*. 1999. "Are Canadians Working Too Many Hours? Part 1. The Benefits of Reduced Work Time." The Atkinson Charitable Foundation. Toronto. p. 1.

¹¹⁵⁵ Lean production means keeping only the bare minimum of a workforce necessary to maintain output at defined levels. An upturn in demand will then result in hiring temporary employees to meet the new demand. Just-in-time production maintains a minimum inventory and thus reduces the potential costs of overproduction. In the conventional sense, both strategies keep the costs of doing business down.

¹¹⁵⁶ OECD. 1995. *Flexible Working Time. Collective Bargaining and Government Intervention*. OECD. Paris. p. 18. Also see Chapter 4 for more detail on the trends in contingent work.

¹¹⁵⁷ *Ibid.* p. 22.

may appear cheaper for employers in the short term, but they may come at a very high cost to society in terms of health, family breakdown, and inequality.

As noted in the previous section, at least one-third of workers in Canada are interested in reduced worktime (in various forms), based on the more comprehensive 1985 Statistics Canada Survey of Work Reduction.¹¹⁵⁸ What is less often analyzed and recognized is that shorter work hours for employees can also produce major benefits for employers.

12.2.1 Benefits Associated with Reduced Worktime for Employers

The following benefits for employers of shorter employee work hours have been documented in the literature:

- **Productivity increases:** Productivity increases are one of the main economic benefits of reduced worktime for employers. Research has clearly shown that about half of any worktime reduction will be made up by productivity gains. In other words, a 20% reduction in the workweek (from five days to four days) can be expected to generate a productivity increase of 10% in output per hour.¹¹⁵⁹ Less absenteeism and tardiness, higher worker morale, less fatigue and burnout, fewer errors, reduced employee turnover, greater concentration and focused effort – all the result of reduced work hours – contribute to higher productivity.¹¹⁶⁰ At a very practical level, workers moving to shorter hours are more likely to schedule doctor and dentist visits, as well as errands that can only be accomplished during work hours, during their extra time off rather than during their scheduled work time.
- **Motivational opportunity:** Rather than feeling burdened and stressed by work, employees may improve their motivations, commitment, and attitude towards work when they reduce their hours. These motivational gains from worktime reduction can be harnessed by employers to improve the quality of employee output and thereby to increase competitiveness. In other words, rather than resisting work time reduction, employers could instead initiate steps to change and improve working practices in order to secure and make use of these gains.¹¹⁶¹
- **Improved capital efficiency:** Many employers have found that reducing employee hours of work may allow machines to be used for longer periods through new scheduling arrangements, such as instituting three work shifts instead of two.^{1162 1163}

¹¹⁵⁸ As noted, the 1985 survey was sponsored by the Conference Board of Canada. Benimadhu, P. (1987).

¹¹⁵⁹ Advisory Group on Working Time and Distribution of Work. 1994. *Report of the Advisory Group on Working Time and the Distribution of Work*. Human Resources Development Canada. Hull. p. 52; Cuvillier, Rolande. 1984. *The Reduction of Working Time*. ILO. Geneva. pp. 78-79.

¹¹⁶⁰ Cuvillier, 1984, op. cit., p. 24; Also *The Atkinson Letter*, 1999 (Part 1), op. cit., p. 3.

¹¹⁶¹ White, Michael. 1987. *Working Hours. Assessing the Potential for Reduction*. International Labour Organization. Geneva. p. 48.

¹¹⁶² *The Atkinson Letter*, 1999 (Part 1), op. cit., p. 3; THIS Magazine. 1998. "The New Work Order." *THIS Magazine*. July/August. Toronto. p. 21.

- **Retention of valued employees and skills:** Using worktime reduction and a redistribution of work hours as a means of avoiding layoffs can retain valued employees and improve morale.¹¹⁶⁴ According to one analyst: "If you want to attract high quality, skilled, and committed people to an organization, you have to recognize and accommodate their need for a multidimensional life."¹¹⁶⁵

12.2.2 Obstacles to Reduced worktime

Before discussing the obstacles faced by employers in reducing employee work hours, it is important to outline the types of costs that are associated with running an enterprise. *Variable* costs are those that are affected by the level of output, such as wages and raw materials. *Fixed* costs are those not affected by output, such as overhead costs on the plant such as rent. *Quasi-fixed* costs are entirely or partially related to the number of employees rather than to output or the number of work hours. These quasi-fixed costs include hiring and training costs, payroll taxes such as employer contributions to employment insurance (EI), Canada Pension Plan (CPP), and Workers' Compensation (WCB), and fringe benefits like private, employer-paid supplemental health or drug plans.^{1166 1167}

Quasi-fixed costs are those of most concern here as a potential disincentive to shorter work hours. The reason why these costs are called quasi-fixed is because they may be *either* fixed *or* variable. For instance, if a firm increases the number of workers in order to increase output it would have to pay more in EI, CPP, WCB, and health insurance payments, and these would be regarded as *variable* costs because they vary according to the number of employees. But if the firm increased the hours and overtime of existing full-time employees rather than hire new workers, costs from EI, CPP, WCB and health insurance would likely stay the same, and therefore be *fixed* costs for employers. This is partly because payments to EI, CPP, and WCB are assessed on a per employee basis, and have legislated and fixed ceilings beyond which employers do not pay extra when existing employees work longer or earn more.

A firm's decision to increase hours rather than employees comes with some disadvantages to the firm including a) possible payment of overtime premiums, b) potential increased fatigue and lower productivity, and c) difficulty attracting employees who want to work long hours.

Worktime reductions may not be supported by employers because:

¹¹⁶³ There is considerable debate about whether such efficiency benefits employees, as it may increase the incidence of "unsocial hours," in which employee work schedules clash with other family, community, and social roles. This is discussed elsewhere in this report.

¹¹⁶⁴ Colman, Ronald. 1999a. *If the Economy is Up, Why are Canadians Down? Impact of Job Casualization on Canadian Workers*. GPI Atlantic. Halifax. p. 6.

¹¹⁶⁵ *The Atkinson Letter* (Part 1), 1999, op. cit., p. 3.

¹¹⁶⁶ Meltz, Noah M., Frank Reid, and Gerald S. Swartz. 1981. *Sharing the Work. An Analysis of the Issues in Worksharing and Jobsharing*. University of Toronto Press. Toronto. pp. 8-10.

¹¹⁶⁷ According to Arthur Donner, the issue of fixed vs. variable costs "has not received the prominence that it deserves in public discourse" as it relates to work time issues. Donner, Arthur. Economic consultant, who chaired both the federal Advisory Group on Working Time and Distribution of Work, and the Ontario Government's Task Force on Hours of Work and Overtime. Reviewer comments. August 19, 2003 and August 21, 2003.

- Worktime reductions without reductions in pay would increase the unit cost of labour and undermine competitiveness.¹¹⁶⁸
- Worktime reductions with proportionate reductions in pay would not increase wage rates, but there would still be employer costs for the additional workers who are hired to make up for the reduced hours of those employees who are working less. These include per employee payroll taxes, as well as hiring/recruiting and training costs for the new employees.^{1169 1170}
- Hiring new employees may be difficult in areas where skill shortages exist.¹¹⁷¹ If no new workers are hired, then the reduced hours of some employees would have to be made up with overtime by others, likely paid at premium rates.¹¹⁷²
- Some employers argue that the productivity increases associated with shorter work hours would be short-lived and would diminish as the worker became accustomed to the new schedule.¹¹⁷³
- Use of overtime to meet demand may be more cost effective for firms than hiring new people, because it avoids the hiring/training costs and additional payroll taxes that would have to be paid for new employees. By contrast, if existing employees already have the maximum EI, CPP, and WCB payments deducted from their pay cheques, then these payments will not increase as a result of overtime hours.
- In some cases, facilities and equipment may be "indivisible." That is, a factory using machine tools that are each operated by one person may find it difficult to introduce additional workers unless more space, tools, or machines are made available.¹¹⁷⁴
- In very small businesses, dividing tasks and reorganizing production in order to hire more workers can be challenging, especially if some workers are already multi-tasking.¹¹⁷⁵
- Reorganization of schedules can be time-consuming and costly. Industrial disputes may arise if changes are made in the existing division of labour or pace of work, or if collective agreements have to be altered.¹¹⁷⁶

¹¹⁶⁸ Benimadhu, 1987, op. cit., pp. 23-24. This concern was also expressed to the author in a personal communication by Leanne Hatchey, Policy Advisor for the Canadian Federation of Independent Business in Halifax, May 30, 2003.

¹¹⁶⁹ White, Michael. 1987. *Working Hours. Assessing the Potential for Reduction*. International Labour Organization. Geneva. pp. 31-33.

¹¹⁷⁰ Hiring and training costs include advertising for the position, holding interviews, training and orienting new employees, and initial lower productivity due to inexperience. From Meltz, et al. 1981, op. cit., pp. 21-22.

¹¹⁷¹ Hatchey, Leanne. Policy Analyst. Canadian Federation of Independent Business. Halifax. Personal communication. May 30, 2003.

¹¹⁷² White, 1987, op. cit., p. 31.

¹¹⁷³ Benimadhu, 1987, op. cit., pp. 23-24; and White, 1987, op. cit., p. 47.

¹¹⁷⁴ White, 1987, op. cit., p. 33.

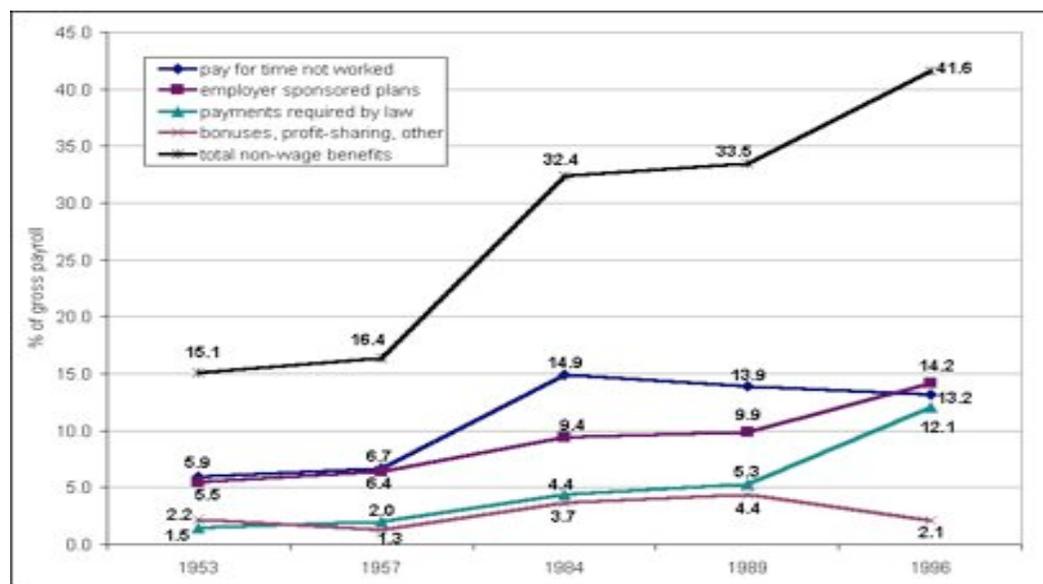
¹¹⁷⁵ Hayden, 1999, op. cit., pp. 81-82; Hatchey, Leanne, personal communication, 2003. Hayden points out that, while particular challenges do exist for smaller businesses, a variety of policies have been introduced in countries such as France to help firms reduce work time and reorganize production. Some of these incentives and successful models will be discussed further in Chapters 13 through 15.

12.2.2.1 Growth of Non-wage Benefits

In both Canada and the U.S., non-wage benefits as a percentage of wages and salaries – which include fringe benefits and mandatory payroll taxes – have mushroomed since the 1950s. In the U.S., non-wage benefits amounted to 17% of wages and salaries in 1955. By 1987 they constituted 36% of wages and salaries.¹¹⁷⁷ It should be noted that fringe benefits and payroll taxes are not the same. Fringe benefits include benefits such as employer-paid dental and drug benefits that are specific to a particular job. Payroll taxes are required tax payments for government-mandated programs, such as employment insurance (EI), Canada Pension Plan (CPP), and workers' compensation (WCB).

Figure 58 illustrates the high growth rate of non-wage benefits in Canada between 1953 and 1996. Overall, between 1953 and 1996 non-wage benefits in large firms as a percentage of direct labour costs in Canada increased from 15.1% to 41.6%. The two fastest growing components have been employer-sponsored plans and payments required by law (WCB, EI, and CPP).¹¹⁷⁸ Between 1957 and 1984 "pay for time not worked" also increased sharply from roughly 7% to 15% of gross payroll, contributing to the overall growth of non-wage benefits.

Figure 58. Growth of non-wage benefits in large firms, as percentage of gross payroll, Canada, 1953-1996.



Notes: Payments required by law include EI, CPP, and WCB. "Pay for time not worked" includes vacations, statutory holidays, bereavement, and jury duty. "Employer sponsored plans include pension plans, group life, survivor benefits, hospital and health care, dental care, and short-and long-term disability.

Source: Benjamin, Dwayne, Morley Gunderson, W. Craig Riddell. 1998. *Labour Market Economics Theory, Evidence, and Policy in Canada*. McGraw-Hill Ryerson. Toronto. p. 199.

¹¹⁷⁶ Hayden, 1999, op. cit., p. 81.

¹¹⁷⁷ Schor, Juliet B. 1991. *The Overworked American: The Unexpected Decline of Leisure*. Harper Collins. New York. p. 67.

¹¹⁷⁸ Benjamin, Dwayne, Morley Gunderson, W. Craig Riddell. 1998. *Labour Market Economics Theory, Evidence, and Policy in Canada*. McGraw-Hill Ryerson. Toronto. p. 199.

However, despite having one of the highest growth rates among OECD countries, Canada's mandatory payroll tax burden – EI, CPP, and WCB payments included in the "payments required by law" category in Figure 58 above – is still one of the lowest among the OECD countries.¹¹⁷⁹ Countries such as France and the Netherlands have had consistently higher payroll taxes. In 1996 Canada's payroll tax share was also lower than the OECD and G7 averages.¹¹⁸⁰

How do fringe benefits in Canada compare with Europe or the U.S.? Due to time and funding constraints it was not possible to pursue this question here. Future updates of this report should explore this important indicator.

12.2.2.2 Payroll Taxes and Long Hours of Work

Current legislation generally makes it more profitable for a firm to hire a small number of employees and work them long hours than to spread those hours among more workers because payroll taxes are paid per worker, not per hour, and have income ceilings attached. This means that once those ceilings are reached, employers have no further payroll tax obligation, whereas full payroll taxes must be paid on each new employee.

Labour economists generally agree that changes need to be made to the payroll tax structure to encourage new hiring by employers. The way the system currently works, there are fixed ceilings on the annual earnings that are subject to contribution. In other words, employer and employee contributions to EI, CPP, and WCB are proportional to earnings up to those ceilings, but once the specified maximum ceilings or caps are reached, the contributions remain the same. Therefore, no additional payroll taxes would be paid if a worker already earning more than the specified ceiling were to work longer hours. However, if a new person were hired, the payroll taxes would have to be paid up to the ceiling.¹¹⁸¹

According to Reid and Gunderson this "creates a potential incentive for employers to work their existing workforce long hours if they are beyond the ceiling, rather than to hire new workers and to pay the payroll tax.... The ceilings on payroll taxes also create a regressive form of taxation...[because] payroll taxes apply a lower marginal tax rate (zero) on earnings above the ceiling level."¹¹⁸² In fact, the current system creates a particular bias against reducing and redistributing work hours, as short-hours workers are more likely to have their entire earnings subjected to proportional payroll tax contributions than full-time workers, whose earnings are more likely to exceed the specified ceilings.

This bias can be removed by removing the ceiling on payroll taxes, and reducing the existing ratio of payroll taxes to dollars earned so that the total taxes collected by government remains the same. This would ensure that the removal of ceilings is "revenue neutral" as it would not result in a "tax grab" by government, or higher labour costs for employers. The bias could also be

¹¹⁷⁹ In 1996 Canada ranked the ninth lowest in payroll tax burden, higher only than those of New Zealand, Denmark, Australia, Korea, Mexico, Iceland, Turkey and Ireland. Lin, Zhengxi. 2000. "Payroll Taxes – Recent Trends." *Perspectives*. Catalogue no. 75-001-XPE. Statistics Canada. Minister of Industry. Ottawa. p. 27.

¹¹⁸⁰ *Ibid.* p. 30.

¹¹⁸¹ Meltz et al. 1981, *op. cit.*, pp. 14-16; Also Reid and Gunderson, *Forthcoming, op. cit.*, p. 114 .

¹¹⁸² Reid and Gunderson, *Forthcoming, op. cit.*, p. 114.

removed by pro-rating the payroll tax ceilings on the basis of hours worked. For instance, the existing ceiling could remain for full-time (40 hour) workers, while those working half time would have a ceiling that is half that amount, those working 30 hours would have a ceiling 3/4 that amount, and so on. According to Reid and Gunderson any of these solutions would effectively eliminate the incentive to work the existing workforce long hours and correspondingly reduce a major disincentive to new hiring.¹¹⁸³

Some argue that a reduction in payroll taxes could also lead to new hires. According to a survey of members of the Canadian Federation of Independent Business, over 50% of respondents would hire new workers if payroll taxes were reduced.¹¹⁸⁴ However, after conducting a literature review on the effect of payroll taxes on persistent unemployment, Industry Canada concluded in 1996 that increases in payroll taxes tend to have a negative short-term effect on employment, but that adverse effects do not persist in the long term.¹¹⁸⁵

Industry Canada found that, at least to 1996, there had not been any empirical work that actually tested the effects of decreased payroll taxes on employment creation. It cited one study that showed that payroll tax reductions were more likely to lead to increased wages than to increased hiring, and that any resultant job creation would be short-lived. Therefore, if job creation is the desired outcome, then any decrease in payroll taxes would likely have to be accompanied by such a stipulation, with payroll tax deductions contingent on new hiring. For instance, such incentives were used in Belgium between 1997 and 1998, where 10,000 new jobs were created in the non-profit care sector by a variety of means including reductions in employers' social security contributions. In an effort to create jobs, the Belgian government reduced social security contributions in exchange for new employment in certain sectors.¹¹⁸⁶

There are a number of potential variations and permutations to the solutions described here. For example, rather than the current perverse incentives that encourage long hours, make the taxation system more regressive, and discourage new hiring, a more progressive payroll tax structure could achieve the opposite results. Eliminating or reducing payroll tax contributions at the lower end of the income ladder or for part-time workers, and increasing them proportionally as hours and earnings increase, could actively discourage long hours and encourage new hiring. Again, such a system could be structured to remain revenue-neutral for government, and to ensure that the overall employer payroll tax burden did not increase.

12.3 The Union

Historically, and particularly in the early part of the 20th century, unions played a critical role in the struggle for shorter worktime. Indeed, as witnessed in Europe, the labour movement even today can play a pivotal role in initiating and successfully implementing reduced or redistributed

¹¹⁸³ Ibid. p. 115.

¹¹⁸⁴ Study cited in Industry Canada. 1996. *Payroll Taxation and Employment: A Literature Review*. Industry Canada. Ottawa. pp. 1-2.

¹¹⁸⁵ Idem.

¹¹⁸⁶ EIRO. 1999. *10,000 New Jobs Created in Non-profit Care Sector*. Available from <http://www.eiro.eurofound.ie/1999/feature/BE9804233F.html>. Accessed June 16, 2003.

work hours. With few exceptions however (such as the Communications, Energy and Paperworkers Union) the labour movement in North America has generally not made a reduction in work hours one of its key priorities in collective bargaining negotiations.

One of the key stumbling blocks for labour movements has been the question of who will pay for the shorter worktime (SWT) and who will benefit. Union members opposed to SWT schemes have often expressed concerns that SWT initiatives will threaten hard-won rights to seniority, job security, and overtime pay at premium rates.¹¹⁸⁷ However, this issue has raised serious questions about the mission and role of the labour movement itself, and whether it exists solely to "promote the narrow, short-term economic interests of [its] most powerful members" or to support a "broader agenda for building a better society."¹¹⁸⁸

Figure 59 indicates that union coverage in Canada and Nova Scotia has dropped slightly since 1997, the earliest year for which data were available. In 2001, 29% of Nova Scotian employees were covered by a union, compared with 32% nationally.¹¹⁸⁹

In 2001, Nova Scotia ranked as the third least unionized province in Canada, after Alberta (first) and Ontario. Newfoundland and Labrador was the most unionized province, with nearly 40% of workers covered by union contracts or collective agreements. Generally speaking, a worker is four times more likely to be a member of a union in the public sector – government, crown corporations, and publicly funded schools or hospitals – than in the private sector.¹¹⁹⁰

While Canadian unions have generally not embraced a redistribution of work hours as a key policy priority, there are some notable exceptions. A policy paper released by the Canadian Labour Congress in 1997, titled *The Future of Jobs – A Labour Perspective*, looked at the roots of the job crisis that plagued Canada in the 1990s, and proposed "an alternative economic agenda capable of generating both good jobs and rising incomes."¹¹⁹¹ Among the policies advocated by the CLC was the reduction and redistribution of working time. The report states:

¹¹⁸⁷ Hayden, 1999, op. cit., p. 90; Meltz et. al., 1981, op. cit., p. 43.

¹¹⁸⁸ Hayden, 1999, op. cit., p. 93; Gorz, Andre. 1988. *Critique of Economic Reason*. Verso. London. pp. 198-199.

Gorz argues that unions exist to serve workers and that mass trade unionism might become more difficult from an organizational point of view if work schedules became individualized and "desynchronized." But he notes that more diverse and flexible work schedules will require unions to change and meet the needs of the workers. Gorz writes: "Let the unions open up buildings in the towns and the local neighbourhoods which people will wish to frequent because they find things they need there, things that interest them, that meet their need for solidarity, for mutual consultation, exchange, personal fulfillment and cultural creation...[The trade unions] will have to get back to the traditions of the cooperatives and the associations and circles of working class culture from which they originally emerged and become a forum where citizens can debate and decide the self-organized activities, the co-operative services and the work projects of common interest which are carried out by and for themselves."

¹¹⁸⁹ "Union coverage" includes union members and employees who are not union members but are covered by a collective agreement or a union contract. From Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

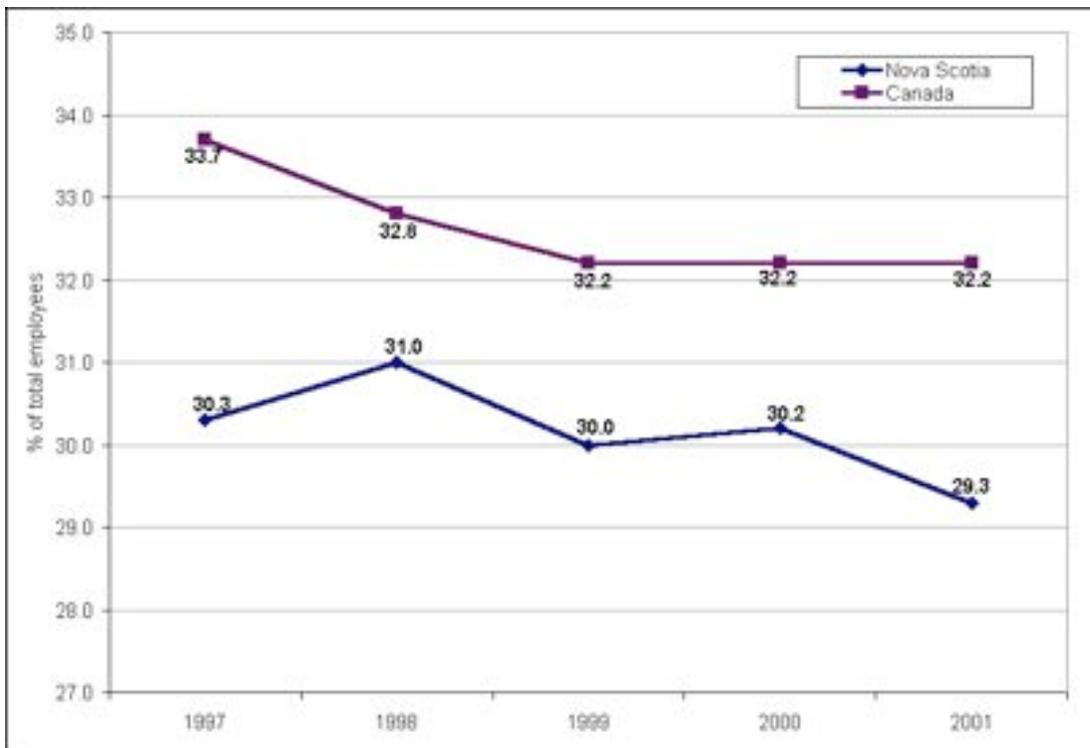
¹¹⁹⁰ Akyeampong, Ernest B. 2001. "Fact Sheet on Unionization." *Perspectives*. Statistics Canada. Catalogue no. 75-001-XPE. Ottawa. p. 47.

¹¹⁹¹ Canadian Labour Congress. 1997a. *The Future of Jobs – A Labour Perspective*. Available from <http://www.clc-ctc.ca/policy/jobs/futurejo.html>. Accessed May 17, 2002. p. 1.

"The reduction and redistribution of working time must also be a part of a comprehensive jobs strategy. If the gains from high and rising productivity are appropriated in part in the form of rising levels of consumption, and in part in the form of shorter working hours, then more workers can be employed at any given level of output with no reduction, and indeed further increases, in levels of consumption and material wellbeing. Reduced working hours can take the form not just of shorter regular hours (e.g. the 30 hour or 4-day week) but also longer vacations, opportunities to take extended leaves of absence from work for educational or parental leaves, early and phased in retirement, more time on the job for union activity and participation in economic decision-making, and so on.

In the short-term, a major focus of a job creating worktime agenda should be the reduction of very long hours and regular overtime, with the gains in terms of freed up hours of work being directed to the unemployed and those in part-time jobs who want longer hours. Over the medium to long term, if there is strong productivity growth, the amount of worktime necessary to sustain a high level of both private and public consumption could drastically fall, allowing for the creation of radically different ways of working and living."¹¹⁹²

Figure 59. Union Coverage in Canada and Nova Scotia, 1997-2001.



Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

¹¹⁹² Ibid. p. 11.

For the workers who constitute the membership of unions, the benefits of reduced hours (especially for those who work long hours) are indisputable. As noted earlier, these benefits include improved health, reduced work-family conflict, and more leisure time to participate in community activities, education, training, and recreation.¹¹⁹³ In addition to these gains, studies have shown that union workers tend to favour work-sharing or work reduction when:

- work-sharing is used as a means of reducing unemployment among union and non-union members in a bargaining unit.
- it increases flexibility for workers wanting to work less than full-time.
- it provides opportunities for non-union workers to acquire skills and join the union as skilled workers, thereby increasing union membership.¹¹⁹⁴

12.3.1 Obstacles to Reduced Worktime

Despite the benefits described, there are factors that continue to deter unions from accepting work reduction or work redistribution as legitimate options, even when work-sharing might prevent layoffs during economic slowdowns. These obstacles and union concerns include:

- Fear that worktime reduction will lead to a loss in wages.¹¹⁹⁵
- Fear that worktime reduction will reduce seniority rights or lead to diminished job security.¹¹⁹⁶
- When new jobs are created through worktime reduction, they benefit the unemployed or underemployed who tend not to be members of unions. The union members with jobs shoulder the burden or risks associated with the new worktime initiatives, including a potential reduction in income. Sadly, as Anders Hayden notes, "in times of economic slowdown and uncertainty, workers with security and seniority sometimes prefer to see others laid off over a reduction of their own hours and incomes." Hayden cites the example of a small group of senior Chrysler workers in Windsor, Ontario, who, in 1998, voiced a preference for laying off the third shift rather than losing eight hours of overtime themselves.¹¹⁹⁷
- Fear that worktime reduction will ease the pressure for wage increases, because new part-time workers may be less committed to their jobs or because workers who would have been laid off will be reluctant to push for wage increases.¹¹⁹⁸ By contrast, if union contracts stipulate that workers with the least seniority be laid off before those with

¹¹⁹³ See Chapter 12, Section 12.1.2 for more details on the benefits of worktime reduction for employees.

¹¹⁹⁴ Meltz et al., 1981, op. cit., p. 42.

¹¹⁹⁵ Idem; Also, Hayden, 1999, op. cit., pp. 91-92.

¹¹⁹⁶ Meltz et al., 1981, op. cit., p. 42.

¹¹⁹⁷ Hayden, 1999, op. cit., p. 91; Also, Meltz et al., 1981, op. cit., p. 43.

¹¹⁹⁸ Meltz et al., 1981, op. cit., p. 42.

seniority, then the latter have no disincentive to push for wage increases when contracts are renewed.

Some of the concerns noted here assume low levels of worker solidarity, with union membership and leadership dominated by full-time workers with some seniority, who are concerned to retain and increase their own wages, benefits, and job security. However, the reverse may also be true. As an example, Anders Hayden notes that following layoffs at one IG Metall plant in Germany, the remaining plant workers refused to work unnecessary overtime, and thereby avoided further layoffs and forced the company to recall their previously laid-off colleagues.¹¹⁹⁹

Worktime reduction and work-sharing have the potential to create new jobs for the unemployed and underemployed, and to avoid layoffs of those workers with the least job security – often temporary and contract workers – and those with the least seniority. The level of worker solidarity within a particular union, therefore, including concern for the welfare of other workers and for the unemployed, will strongly influence the outcome of work reduction and work-sharing proposals.¹²⁰⁰

¹¹⁹⁹ Hayden, 1999, op. cit., p. 92.

¹²⁰⁰ Idem.

Chapter 13. Redistributing Work Hours: Avoiding Costs at Both Ends

"The road to happiness and prosperity lies in an organized diminution of work."
– Bertrand Russell¹²⁰¹

"While most workers do not appear to be fundamentally alienated from work, the great majority is alienated from the way in which work is regulated in relation to time...the greatest potentiality for diminishing alienation lies in this area, in reducing working hours and working years and in rearranging work schedules."

– Irving Berstein¹²⁰²

Analysis of work hours in Nova Scotia reveals a paradoxical trend: While work hours are increasing for a segment of the working population, there is a growing number of people with too little work or no work at all. This "polarization" of hours, as it has been called, is costly to society in a number of ways that were detailed in Part 2 of this report.

In conventional economic accounting mechanisms, these costs are invisible in two key ways:

- Some costs of overwork, unemployment, and underemployment, such as health care expenditures, spending on prisons and justice costs, and spending related to divorce and family breakdown (such as legal fees and additional housing costs), are counted as direct contributions to the GDP, and therefore mistakenly interpreted as contributions to economic prosperity.
- Unemployment and underemployment represent potential lost production, but our current GDP and economic growth measures do not account for *potential* production, and therefore do not explicitly register these hidden losses.

In a Genuine Progress Index (GPI), by contrast, these costs are explicit. Conversely, the GPI recognizes shorter work hours as giving people more freedom and free time – which are explicit values in the GPI. Similarly, a reduction in the polarization between short and long hours, which has been identified by Statistics Canada as one of the major causes of growing income inequality, is also a key indicator of progress, because equity, like free time, is an explicit value in the GPI. In other words, shorter work hours and a reduced polarization of work hours make the GPI go up; trends towards longer hours and increased polarization make the GPI go down.

In addition to providing measures of progress, the GPI is distinguished from other quality of life indicator systems by adopting an expanded capital system of accounting that includes measures of human, social, and natural capital. The GPI therefore adds a system of economic valuation to

¹²⁰¹ Russell, Bertrand. 1935. *In Praise of Idleness*. George Allen and Unwin Ltd. London. p. 12.

¹²⁰² Irving Berstein, President, Industrial Relations Research Organization, cited in Silverstein, Pam and Jozetta H. Srb. 1979. *Flexitime: Where, When, and How?* New York State School of Industrial and Labour Relations. New York. p. 45.

its indicator system, and counts improvements in productivity, health, free time, and equity. From that perspective, reducing and redistributing work hours can avoid costs at both ends of the polarization spectrum. Those who are overworked or "over-employed" can reduce their hours and their work stress, and thereby increase their free time, and improve their health and work-life balance. At the same time, the underemployed can take on more hours, and jobs can be created for the jobless, thereby reducing the well-documented health, justice and family breakdown costs of unemployment and job insecurity.

A word of caution must be added here. There is no one simple solution to the labour market and social challenges that Canada and Nova Scotia currently face. GPI Atlantic recognizes that the solution to a complex problem is also complex, and the focus on work hours in this report does not imply that any single worktime reduction scheme or any single method of redistributing hours will be a panacea. However, a substantial body of evidence demonstrates that a combination of the work reduction models and policy options outlined in the following sections, if skillfully implemented in conjunction with other social policies, can contribute markedly to a more equitable society and to a better quality of life for its citizens.

13.1 New Work Schedules and Models

In many workplaces in Canada, employers and employees are already experimenting with new work arrangements and flexible schedules, although the vast majority of these work arrangements do not involve a reduction and redistribution of hours. In 1994, as Table 46 shows, nearly 43% of employers offered some form of alternative work schedule. Flexible work schedules were the most popular at 31.8%, followed by compressed workweeks at nearly 14%. Working from home and job-sharing were offered by fewer than 10% of employers.

Table 46. Worktime Practices of Canadian Employers, 1994.

Worktime Practice	% Employers Offering
Some alternative worktime schedule	43.0
Flexible working hours	31.8
Compressed workweek	13.6
Telecommuting	9.2
Job-sharing	7.1
Other	2.6

Note: Numbers do not add to 100 because some employers may be following more than one worktime practice.

Source: Reid and Gunderson, Forthcoming, op. cit., Table 14. Compiled from data reported in Betcherman, G., Leckie, N., Caron, C. 1994. *The Canadian Workplace in Transition*. IRC Press. Kingston.

Among the alternative work arrangements offered by Canadian employers in 1994 (Table 46 above), only job-sharing, offered by just 7% of Canadian employers, involves a reduction in employee work hours. However, there are many ways to reduce or redistribute worktime, some of which have proved more successful than others. In the following sections, various work

reduction systems will be described – including their demonstrated advantages and disadvantages. In addition, examples or models of new work schedules are presented from actual working case studies. It should be noted, however, that due to time and funding constraints, only a small sample of up-to-date examples is presented here. These are in no way representative of the wide range of working models that currently exists. In fact, the number and variety of new work schedules in place in various public and private sector workplaces in Canada and elsewhere is striking.

Future updates of this report should include a more in-depth review of the many models of new work schedules that exist, and a thorough examination of what makes them successful or unsuccessful, and of which international models may be most suited to Canadian and Nova Scotian circumstances and conditions.

13.1.1 Work sharing

Work sharing is often used at times of economic downturn as a short-term strategy to avoid layoffs in firms, by reducing the number of hours worked by each employee in a group and then paying each employee for part of the time not worked from Employment Insurance benefits.¹²⁰³ The rationale is that instead of laying off 20 out of 100 employees, all 100 employees work 20% fewer hours each week, with each receiving EI benefits pro-rated for the time they don't work. This way, the same EI benefits that would have gone to the 20 laid-off employees are simply divided up by the 100, with no net gain or loss to government or the taxpayer. This form of worktime reduction is seen as a temporary measure intended to prevent layoffs when there is a short-term reduction in the demand for labour.¹²⁰⁴

In Canada, a Work Share Program was first introduced in 1982. Under this scheme, there is usually no waiting period for EI benefits, and the shortage of work must be expected to last for at least six weeks to a maximum of 26 weeks.¹²⁰⁵

Typically, the manufacturing industry is disproportionately affected by business cycles and has participated more often in work sharing agreements than other industries. According to Statistics Canada, in the first quarter of 1991, roughly 72% of the work sharing agreements were in the manufacturing sector. In total, more than 5,300 firms participated in the program at that time, and nearly 33,000 layoffs were avoided as a result.¹²⁰⁶

¹²⁰³ The design of Canada's 1982 Work Share Program was based on the German model which has been using unemployment insurance benefits to pay workers on reduced schedules since 1927.

¹²⁰⁴ Meltz et al., 1981, op. cit., p. 3; Also, Beninmadhu, 1987, op. cit., p. 27.

¹²⁰⁵ Worksharing agreements do not affect worker's rights to receive EI benefits if they are laid off after the agreement ends. The maximum of 26 weeks may also be extended to 38 weeks in certain circumstances. From <http://www18.hrdc-drhc.gc.ca/programs/WorkSharing.how.asp>.

¹²⁰⁶ Singh, Surendar. 1991. "A Note on the Work Sharing Program." *Perspectives*. Statistics Canada. Minister of Industry. Ottawa. p. 56.

Even though employers continue to incur fringe benefit costs for all the employees (even though they are now working fewer hours), the benefits are thought to far outweigh the costs.¹²⁰⁷ These benefits include:

- Productivity increases due to reduced absenteeism, high worker morale, and increased commitment to the job.
- The retention of valued employees.
- Improved labour relations.
- Reduced costs when demand increases, since there will be no need to hire and train new workers, who would also be less productive due to inexperience. These hiring and training costs can be substantial. Re-hiring of previously laid off workers may also result in costs and productivity losses if the skills of these workers deteriorated during the lay-off period. Meltz et al. found that in 1981 the cost of replacing workers following the layoff period was 1.7% of the gross payroll during the layoff period, and that the cost advantage of work sharing over layoff was substantial.¹²⁰⁸

Meltz et al. concluded that the savings attributable to work sharing (instead of layoffs) would "more than offset the increased costs of employer contributions to fringe benefits."¹²⁰⁹

As an alternative to joblessness, workers facing potential layoffs usually welcome work sharing. The obvious benefit is that workers can avoid a substantial loss of income. Since work sharing produces a more equitable distribution of hours and income reduction, workers also avoid the loss of self-esteem, relative to their peers, that frequently accompanies layoffs.¹²¹⁰

In Part 2 of this report the costs associated with unemployment were discussed at length. Employment is a key determinant of health, and loss of work, conversely, is associated with adverse health outcomes. Therefore if work sharing can protect the jobs of workers, albeit only temporarily, it may also protect against illness, both for the workers and their spouses, and avoid the higher mortality associated with unemployment.

As noted in Part 2, unemployment is also associated with other social costs, so work sharing may also result in fewer divorces, less crime, and greater preservation of human capital and community cohesiveness than would be the case if workers were laid off from their jobs. Although more research is required on the social consequences of work sharing, the evidence on the social costs of unemployment strongly suggests that work sharing may produce substantial indirect social savings in addition to the savings accruing directly to workers and employers.

According to Blyton, one of the major criticisms of subsidized work sharing schemes is that they are temporary and in the cases where demand does not rebound, work sharing tends to "postpone, rather than avoid" layoffs.¹²¹¹

¹²⁰⁷ Meltz et al. found that worksharing increased the fringe benefit costs of firms (0.5% to 1.0% of gross payroll) only because there are ceilings on the annual earnings which are subject to contribution. For detailed cost calculations of EI, CPP, and WCB see Meltz et al., 1981, op. cit., pp. 13-20.

¹²⁰⁸ Meltz et al., 1981, op. cit., pp. 21-22; Benimadhu, 1987, op. cit., p. 28.; Blyton, 1985, op. cit., p. 89.

¹²⁰⁹ Meltz et al., 1981, op. cit., p. 25.

¹²¹⁰ Ibid. pp. 67-70.

¹²¹¹ Blyton, 1985, op. cit., pp. 90-91.

Box 1: Work sharing Deal Saves Jobs

Fisheries Products International (FPI), NFLD: In 2002 it was announced that 600 workers, or 45% of the existing workforce at the company's three groundfish operations in Marystown, Harbour Breton, and Fortune, Newfoundland, were going to be laid off from their jobs. This news came after FPI purchased the much smaller Clearwater Fine Foods of Nova Scotia in 2001 for a total of \$510 million, tripling FPI's own debt load.¹²¹² The deal effectively gave John Risley, President of Clearwater, nearly 60% controlling interest in FPI. This raised the hackles of government and labour leaders alike because, according to the FPI Act, no individual or company was allowed to control more than 15% of FPI.¹²¹³ In addition, the lay-off announcement represented a complete reversal of the company's earlier pledge to protect jobs.¹²¹⁴

As a result of these events, the government tightened the rules governing FPI by amending the legislation that was enacted in the 1980s. The new Act states the purpose of the Act is to "ensure maximum employment stability and productivity through employee participation in the company."¹²¹⁵

In March, 2003, a tentative agreement was reached by FPI and the Fish, Food and Allied Workers Union (FFAW) whereby all workers were guaranteed enough work to qualify for EI benefits. Under the "work sharing" plan, some workers would get 16 weeks of work while those with more seniority would get 22 weeks. Union representatives stated that their goal was to maintain the existing jobs, and that the work sharing arrangement helped to do that. According to a news release issued by the Newfoundland and Labrador government, FPI enjoyed "record profits" in 2002 "without laying off anyone."¹²¹⁶

Cavendish Farms, PEI: In 2002 the french fry giant had trouble getting sufficient potatoes to maintain existing production levels, and announced its intention of laying off workers. Instead, Cavendish Farms, the United Food and Commercial Workers Union, and HRDC negotiated a work share plan. While the hours of some workers were reduced, their incomes were supplemented by EI benefits.¹²¹⁷

¹²¹² \$210 million of the \$510 total sale price was existing debt held by Clearwater Fine Foods.

¹²¹³ Fisheries Product International was created in 1983 by a government-led amalgamation of a number of smaller, struggling fish processing companies in Newfoundland and Labrador as a way of recognizing the importance of the fishery in Newfoundland. To that end, the governments of Canada and Newfoundland and Labrador invested \$252 million to create FPI. In 1987, the company was privatized and sold for \$167 million. To ensure that it remain true to its original goals, the government created the FPI Ltd. Act which placed a number of conditions on the company to guarantee it would remain Newfoundland and Labrador-based. The restrictions include a requirement that a majority of board members are residents of Newfoundland and Labrador, and that no one shareholder can own more than 15% of voting shares. From: Newfoundland and Labrador Federation of Labour. 2002. "Submission to the All-Party Committee on the FPI Act." *Fortune*. pp. 1-8.

¹²¹⁴ Newfoundland and Labrador Federation of Labour, 2002, op. cit., pp. 1-8.

¹²¹⁵ Hann, Tom. Acting Director of Communications. Department of Fisheries and Aquaculture, Government of Newfoundland and Labrador. Personal communication. June 25, 2003.

¹²¹⁶ Hodder, Mary. 2003. *MHA Pleased with Tentative Agreement*. Press Release. March 3, 2003. Available from http://www.liberal.nf.net/NewsReleases/March3_2003_MaryHodder.htm. Accessed June 19, 2003.

¹²¹⁷ Human Resources Development Canada. Available from <http://www.pe.hrdc-drhc.gc.ca/common/lmr/jan02.shtml>.

Work sharing does produce some loss of income on the part of workers, but according to Meltz et al., when EI benefits and lower taxes are factored in, the actual dollar loss is quite minimal, and the additional time off can improve work-life balance and enhance quality of life. For instance, if an employee works four days at regular pay and on the fifth day (which is free) receives EI benefits (55% of wage to a maximum of \$413/week), then he/she is only losing about 9% of gross weekly earnings, even without accounting for reduced taxes. Viewed positively, the worker is still earning 91% of previous pay while working 20% less. Once changes in the tax rate are factored in, the reduction in actual take-home pay is likely to be even less.¹²¹⁸

In 2001, nearly 90,000 Canadians, 4,600 of them from Nova Scotia, were laid off temporarily and could have benefited from a work sharing program.¹²¹⁹ This means that in 2001, 7.7% of the officially unemployed in Canada and 10% of the unemployed in Nova Scotia had been temporarily laid off from their jobs. If work sharing had been implemented in all of these cases of temporary layoff (i.e. if no one had lost their jobs and if the laid off workers had instead worked fewer hours with an EI cushion) there would have been an approximate reduction of one percentage point in Nova Scotia's official unemployment rate and a 0.6 percentage point drop in Canada's unemployment rate.¹²²⁰

13.1.2 Job sharing

Job sharing occurs when two people voluntarily choose to share one full-time job. This variant of part-time work offers people the time to pursue other goals and responsibilities while staying in the workforce. In particular, parents of young children might choose to job share so they can spend more time with their children. Since the original job was full-time, it likely also came with fringe benefits. Therefore, unlike most part-time jobs, job shares often involve the sharing of a benefits package. Pension, salary, and leave are also shared.¹²²¹

About one-fifth of the large organizations in Canada offer some form of job sharing,¹²²² and approximately 2% of Canadian workers were in job sharing arrangements in 1995.¹²²³ The

¹²¹⁸ They essentially receive 4.5 days pay for 4 days work. Calculations are based on current EI rates provided by HRDC and available at <http://www18.hrdc-drhc.gc.ca/programs/WorkSharing/how.asp>. Template for income loss calculations is from Meltz et al., 1981, op. cit., p. 64.

¹²¹⁹ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa. In 1976 only 2,100 Nova Scotians and 67,200 Canadians were on temporary layoff. Permanent layoffs were higher. In Canada in 2001 there were 816,500 workers permanently laid off, compared to the 90,000 temporarily laid off, and in Nova Scotia there were 37,400 permanent layoffs, compared to the 4,600 temporarily laid off.

¹²²⁰ Calculations based on temporary layoffs expressed as a percentage of the labour force in 2001, in relation to the official unemployment rate in that year.

¹²²¹ Advisory Group on Working Time and the Distribution of Work, 1994, op. cit., p. 38; Curson, 1986, op. cit., p. 110.

¹²²² Conference Board of Canada figure, cited by Advisory Group on Working Time and the Distribution of Work, 1994, op. cit., p. 38.

¹²²³ Statistics Canada's 1995 Survey of Work Arrangements, cited by Canadian Labour and Business Centre. *National Seminar on the Changing Workplace*. Available from <http://www.clbc.ca>. Accessed December 9, 2002.

number of major collective agreements with job sharing provisions rose from 3% of all agreements in 1986 to 12% in 1993, and has remained stable ever since.¹²²⁴

In 1995, one in three employed women worked part-time, compared with one in 10 men. Of all women part-timers, about one in 10 shared a job, compared to one in 20 part-time male workers. Compared to regular part-timers, job sharers tend to be older, better educated, and more likely to be professionals. For instance, in 1995, more than half of all job sharers were 35 years or older, half were college or university graduates, and 40% worked as professionals. In addition, about half of all job sharers had small children at home.¹²²⁵

In contrast to regular part-time jobs, job-shared positions tend to be unionized and permanent, and tend to have good benefits and higher pay. According to Statistics Canada, a job-shared position is more likely to be a "good" part-time job.¹²²⁶

Advantages for Employees

- For workers, the ability to share a job often means that dual-earner couples can balance their work and family responsibilities more effectively, with less stress and more control over their lives.¹²²⁷
- Job sharing can also provide good part-time jobs for the under-employed or unemployed.
- Workers have more energy and less fatigue.¹²²⁸
- Workers are able to maintain their skills and often experience greater job satisfaction overall.¹²²⁹

Disadvantages for Employees

- Job sharing can sometimes reinforce traditional gender relations, especially if it is the woman who is spending more time at home than at work.¹²³⁰
- Job sharing can sometimes make it more difficult to advance in a career and to be recognized as a career person, as job sharing may be interpreted by an employer as diminished commitment to the job.¹²³¹

¹²²⁴ Marshall, Katherine. 1997. "Job Sharing." *Perspectives*. Statistics Canada. Catalogue no. 75-001-XPE. Ottawa. p. 6. Based on a 1982 Commission of Inquiry into Part-time Work, in which 104 job sharers and 37 employers of job sharers were surveyed.

¹²²⁵ Ibid. pp. 7-8.

¹²²⁶ Ibid. p. 9.

¹²²⁷ Curson, 1986, op. cit., pp. 109-112; Advisory Group on Working Time and the Distribution of Work, 1994, op. cit., p. 38; Meltz et al., 1981, op. cit., pp. 75-76; Marshall, 1997, op. cit., p. 7.

¹²²⁸ Marshall, 1997, op. cit., p. 7.

¹²²⁹ Idem.

¹²³⁰ Negrey, Cynthia. 1993. *Gender, Time, and Reduced Work*. State University of New York Press. New York. p. 96.

¹²³¹ Marshall, 1997, op. cit., p. 7.

- Some benefits may be lacking.¹²³²

Advantages for Employers

- Valuable employees, who prefer to work part-time, are retained.
- Job sharing may help to introduce new skills and experience to a larger segment of the workforce. Two people sharing one job are also likely to bring a more diverse range of skills to the job than one person alone possesses. Thus different aspects of a job may more productively be divided between the two job sharers according to their different skill sets. For example, in a sales job, one job sharer may have better organizational and marketing skills while another has better communications and people skills, so the work can be divided to take advantage of these different skill sets.
- Productivity per hour is generally higher.¹²³³
- Employees are more committed and enthusiastic about their jobs, both because they are less burdened by their job commitments and because the work arrangements enhance their personal and family lives.¹²³⁴
- There is less absenteeism.¹²³⁵

Disadvantages for Employers

- Compensation costs may increase if fringe benefits are not pro-rated according to hours worked.¹²³⁶
- Difficulties may arise from sharing work space or from interpersonal conflicts between the job sharers.¹²³⁷
- There is an increased need for good and open communication among job sharers and with administration.¹²³⁸ In order to improve communication, some job share situations ensure a half-day overlap between the two job sharers. For example, one may work Monday and Tuesday and the other on Thursday and Friday, and both may share Wednesday morning.

Box 2: Job sharing helps balance work and family

¹²³² Idem.

¹²³³ Idem. According to a 1981 German study cited in Curson, there can be productivity gains of 33% when job sharers replace full-time workers. Curson, 1986, op. cit., p. 112.

¹²³⁴ Marshall, 1997, op. cit., p. 7.

¹²³⁵ Idem.

¹²³⁶ Meltz et al., 1981, op. cit., pp. 75-76; Marshall, 1997, op. cit., p. 7. Compensation costs do not *have* to increase. Fringe benefits can be pro-rated where possible according to hours worked. Otherwise, workers can be offered benefits on a cost-sharing or waiver basis. For instance, in lieu of health premiums, a worker may be given the option of having additional vacation days. From Work in America Institute, 1981, op. cit., p. 67.

¹²³⁷ Marshall, 1997, op. cit., p. 7.

¹²³⁸ Idem.

Midwest Health District, Saskatchewan: Time pressure and the struggle to juggle job and family responsibilities were common among the predominantly female staff of Saskatchewan's rural Midwest Health District. The number of workers asking for leaves of absence because they could not handle full-time work along with looking after children or elderly relatives was on the rise. A job sharing arrangement was agreed upon by the management and unions, and was included in the collective agreement in 1998.

Under the plan, two workers are allowed to share one full-time job for at least six months, but for as long as two years. Benefits are pro-rated and all seniority rights are maintained. Approximately 10% of the staff of Saskatchewan's Midwest Health District have opted to job share, with 82% of job sharers reporting high satisfaction levels and 91% saying it allows them to balance work and family more successfully.¹²³⁹

The Netherlands:

"The Dutch are not aiming to maximize gross national product per capita. Rather we are seeking to attain a high quality of life, a just, participatory and sustainable society that is cohesive.... Thus, while the Dutch economy is very efficient per working hour, the number of working hours per citizen is rather limited... We like it that way. Needless to say, there is more room for all those important aspects of our lives that are not part of our jobs, for which we are not paid, and for which there is never enough time."

– Ruud Lubbers, Former Dutch Prime Minister¹²⁴⁰

In the early 1980s, the Netherlands had very high rates of unemployment (12%) and was considered "perhaps the most spectacular employment failure in the advanced capitalist world."¹²⁴¹ The incidence of part-time work in 1987 was 22%. But things turned around for the country in the late 1980s and 1990s in part through efforts to reduce and redistribute working hours. Instead of that country's employment record being called the "Dutch disease," it became known as the "Dutch miracle."¹²⁴² By some estimates, Dutch workers now have the shortest average annual hours of work in the industrial world – 1,633 in 2002.¹²⁴³ By 2001, more than 74% of the population between 15 and 64 years of age were employed. Only 2.1% of the male work force and 2.6% of the female work force were unemployed. Part-time jobs now make up approximately 33% of all employment, in contrast to the EU average of 14%. Fifty-eight per

¹²³⁹ Canadian Labour and Business Centre. 2000a. *Midwest Health District Job-sharing Initiative*. Available from <http://www.clbc.ca/engdocs/articles/saskatchewan-01.htm>. Accessed December 9, 2002.

¹²⁴⁰ Cited in Colman, Ronald and Anders Hayden. 1999. *Work Time Reduction in the Nova Scotia Civil Service. Recommendations to the NS Government and Public Sector Unions based on Successful Work Time Reduction Experiments in Europe and North America*. Genuine Progress Index Atlantic. Halifax. p. 10.

¹²⁴¹ Quote cited in Hayden, 1999, op. cit., p. 149.

¹²⁴² The factors that contributed to the economic turnaround in the Netherlands are numerous. Shorter work time arrangements contributed to the success of the Netherlands in reducing its unemployment rate but are by no means the only reason for the country's success. According to Hayden (p. 149), other factors include "low inflation, sound public finances, competitive firms, low inequality, and preservation of social protections." The discussion here is limited to shorter work time developments.

¹²⁴³ 2002 data from European Industrial Relations Observatory (EIRO). 2003. *Working Time Developments – 2002*. Available from <http://www.eiro.eurofound.ie/2003/03/Update/TN0303103U.html>. Accessed June 16, 2003. p. 15.

cent of employed women work part-time.¹²⁴⁴ This is based on the Netherlands definition of part-time work as anything less than 35 hours a week (by contrast to the Canadian definition, which defines part-time work as less than 30 hours a week). Applying the Netherlands definition, in 2001 the proportion of total employed in Canada working less than 35 hours a week was 25%, and the proportion of employed Canadian women working less than 35 hours was 37%.¹²⁴⁵

The increase in part-time work in the Netherlands (much of it a form of job sharing) has been a controversial development in that country. On the one hand, part-time jobs (defined in the Netherlands as anything less than 35 hours a week) are not "bad" jobs to have, because Dutch laws guarantee against discrimination in terms of wages, benefits, and opportunities for career advancement. In other words, part-timers get pro-rated benefits according to hours worked, opportunities for promotion, and wages similar to their full-time counterparts.¹²⁴⁶

However, part-timers in the Netherlands are predominantly women, who still play a bigger role in raising children than men. So it could be argued that the encouragement of part-time work in the Netherlands has actually reinforced traditional gender roles and stereotypes. There is still a societal expectation in the Netherlands that women will look after the children, although there have been attempts to encourage men to participate more in childcare. For instance, one job scenario that has become more common in the Netherlands is a "combination" arrangement where both parents work 75% of their normal hours, giving both more time to spend with family. Still, at the end of the 1990s, only one in five men worked part-time, compared with nearly six in 10 women.¹²⁴⁷

In the Netherlands, workers now have the legislated right to reduce their hours. The result is that most people who work part-time *want* to do so. A 1996 study showed that only 6% of Dutch part-timers were doing so involuntarily – one-fifth the rate of involuntary part-time work in Nova Scotia. By contrast to the Netherlands, involuntary part-time employment is growing much faster in Nova Scotia than the voluntary type, driving the overall upward trend in part-time work in this province until 1996/97, after which it declined somewhat. The proportion of part-timers doing so unwillingly, and who would rather work full-time if full-time work were available, more than tripled in Nova Scotia between 1976 and 1995 from 13.7% of all part-timers to a striking 43%. After Statistics Canada's Labour Force Survey was revised in 1997, and new questions were used to gauge involuntary part-time work, the figures declined to 29% in 1997 and then increased to 31% in 2001.

In sum, the Netherlands experience demonstrates that making part-time work "good" work with equal hourly pay, pro-rated benefits, and equal opportunity for career advancement, can increase the overall rate of part-time work while reducing the rate of involuntary part-time work. It can create jobs by redistributing work hours, and improve quality of life and work-life balance by expanding leisure time.

¹²⁴⁴ EIRO. 2003b. *2002 Annual Review for the Netherlands*. Available from

<http://www.eiro.eurofound.ie/2003/01/feature/NL0301105F.html>. Accessed June 16, 2003.

¹²⁴⁵ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

¹²⁴⁶ Hayden, 1999, op. cit., pp. 149-154.

¹²⁴⁷ Ibid. p. 153. The rate for Dutch men, while lower than that for Dutch women, is still high by international standards.

13.1.3 Compressed Workweek

When full-time work is accomplished in less than five days a week it is called a "compressed" workweek. A compressed workweek can exist in a number of variations, including a 4-day week (10 hours/day), a 3-day week (12 hours/day), or alternating 5-day and 4-day workweeks (9-hour days).¹²⁴⁸

Between 14% and 24% of Canadian organizations offer this type of work arrangement.¹²⁴⁹ Approximately one in 10 Canadians works a compressed workweek.¹²⁵⁰

This form of work arrangement has been controversial simply because it often results in very long working days, rather than shorter ones. The longer workday raises serious questions about worker fatigue, productivity, and the quality of the workplace. Also, long days can complicate family life and make it difficult to juggle family responsibilities, interfering, for example, with the ability to prepare and eat meals together. In most cases, overtime is not paid because the workweek remains in the normal range of 35-40 hours/week, even though hours exceed 8 per day. Compressed weeks are also not always voluntary.¹²⁵¹

Despite these drawbacks, compressed workweeks do provide workers with larger blocks of leisure time (i.e. three days or more). They also reduce commuting and shift some commutes to non-rush hour periods.¹²⁵²

Box 3: Four-day compressed school day

Scenic Valley School Division, Neudorf, Saskatchewan: Seven schools with ninety-four teachers and more than 1,000 students in the Scenic Valley School Division operate on an "alternate school year" where five school days are compressed into four. Of the total 197 days in the school year, 163 days are longer than normal, and 34 days (Fridays) are regular length days. The four longer days are reserved for classroom instruction. Fridays are reserved for school events such as track meets, field trips, concerts, or staff professional development.

Four days of the week are 5.4 hours long instead of five hours, or 24 minutes longer than the regular school day. Full-time teachers are only required to work 21 of the 34 Fridays in a normal school year in order to have worked the equivalent of other Saskatchewan teachers on a regular schedule.¹²⁵³ Compressed school weeks also offer the potential for some cost savings

¹²⁴⁸ Work in America Institute. 1981. *New Work Schedules for a Changing Society*. Work in America Institute, Inc. New York. pp. 25-27.

¹²⁴⁹ Advisory Group on Working Time and the Distribution of Work, 1994, op. cit., p. 39.

¹²⁵⁰ Statistics Canada. 1995. *Survey of Work Arrangements*. Cited in Canadian Labour and Business Centre. *National Seminar on the Changing Workplace*. Available from <http://www.clbc.ca>. Accessed December 9, 2002.

¹²⁵¹ Work in America Institute, 1981, op. cit., p. 39; Advisory Group on Working Time and the Distribution of Work, p. 39.

¹²⁵² Advisory Group on Working Time and the Distribution of Work, 1994, op. cit., p. 39.

¹²⁵³ The 163 days (from Mondays through Thursdays) that a teacher works at 5.4 hours per day are equivalent to 176 days on a regular 5-hour/day schedule. Therefore, to complete the 197 days in the normal school year, a teacher only

in areas such as energy use, transportation, and wear and tear on the building. Where the compressed week has resulted in cuts to bus drivers, janitors, or substitute teachers, it has come under fire.

Concerns raised regarding the compressed school week in general include:

- the need for employed parents to find childcare for the fifth day.
- the potential loss of up to 20% of income and benefits for support staff who may not be required to work longer days but would lose a day of work when the school might be closed. Bus drivers are an example of support-staff who would lose a day of work.
- the physical and emotional effects of longer school days on younger children.
- the use of a compressed schedule as a cost-saving measure, with student achievement as an afterthought.¹²⁵⁴

Though often implemented as a cost savings measure, the Washington County School District in the U.S. notes that "most schools that adopt a four-day week have serendipitously discovered numerous benefits they didn't expect" including:¹²⁵⁵

- a marked improvement in school morale
- more time for quality staff development
- a decline in student drop-out rates
- a decline in discipline problems
- a decline in student and teacher absenteeism
- no change in student achievement (positive or negative)
- more time for extracurricular activities¹²⁵⁶

13.1.4 The 4-day or Reduced Workweek

Reducing work hours from the standard 40-hour workweek or longer to 35 hours or 32 hours can be achieved in a number of ways, including working four 8-hour or 9-hour days instead of five. The biggest advantage to this work arrangement is the large block of leisure time available (three days or more per week), in addition to fewer working hours and less commuting time.

New work schedules that reduce commuting time, combined with initiatives that encourage the use of energy-efficient modes of transportation, can also reduce petroleum use and greenhouse gas emissions, producing significant environmental benefits. In fact, energy and greenhouse gas emissions are important components of GPI Atlantic's full-cost accounting framework, indicating that benefits realized in one component of the GPI can produce benefits in other sectors.

needs to make up 21 days out of the 34 Fridays in a normal school year. From Scenic Valley School Division. Available at <http://www.scenicvalley.com>. Accessed June 19, 2003.

¹²⁵⁴ Support staff are generally members of CUPE. These concerns are listed on the British Columbia Teacher's Federation Web site: www.bctf.bc.ca/info/research/fourdaySchoolWeek.html. Accessed June 19, 2003.

¹²⁵⁵ Washington County School District. *Four-Day Week*. Available from http://www.wash.k12.ut.us/policy/9000/9820_four-day_week.htm. Accessed December 19, 2000.

¹²⁵⁶ Idem.

As previously noted, the advantages and benefits of voluntarily working less have been well documented. In particular, better health and more time with family and friends can be by-products of having more leisure time. Shorter workweeks can improve the quality of life of workers already employed. Evidence has also shown that, with the appropriate incentives, a reduction in work hours can redistribute work and thereby reduce underemployment and joblessness.¹²⁵⁷

Shorter workweeks are clearly not an advantage for those who are already underemployed, and who would rather work more hours than less. However, a reduction in work hours among those currently working long hours or full-time standard workweeks can potentially make additional hours of work available to those presently unemployed or underemployed.

Box 4: The 4-day model

France: Since 2000, firms employing more than 20 people have been required by law to implement a 35-hour week. Three quarters of the way through 2002 the average working time in France was 35.7 hours, and 80% of *full-time* employees were clocking less than 36 hours per week. In addition, laws were introduced in 2002 which lowered the social security contributions of firms that hire young people. This law is an incentive for firms to use the reduction in hours to create new jobs for young workers trying to enter the job market.¹²⁵⁸

Workweeks in France were gradually reduced from 39 to 35 hours starting in 1997. In 1996 the Robien Law provided financial incentives for companies that reduced work hours and increased hires by 10%.¹²⁵⁹ A series of gradual measures since then has brought hours down for most workers. Essentially, firms that reduced hours and hired workers were rewarded with lower payroll taxes. The faster they reduced hours, the more hours they reduced, and the more new workers they hired, the more tax rebates and financial incentives firms received from the government in return. Workplaces were given the freedom to implement the reduced hours plan in the ways that best suited them. For instance, the 35 hours could be worked in 4 or 5 days, or it could be achieved by increasing vacation time (an average of 16 additional days off per year, and up to 23 additional days off for some workers).

Since 1997, an estimated 300,000 new jobs have been attributed to the reduction in hours. By 2001 53% of private sector employees (8.6 million workers) were in firms that had made the transition to the shorter workweek. However, one analysis concluded that "serious disparities existed depending on the size of the company and the industry in which it operated." As a result, the percentages of workers on shorter workweeks varied greatly by firm size and industry. For example, 90% of employees in firms with 200 employees or more were working

¹²⁵⁷ The Advisory Group on Working Time and the Distribution of Work, 1994, op. cit., pp. 40-42.

¹²⁵⁸ European Industrial Relations Observatory (EIRO). 2003c. *2002 Annual Review for France*. Available from <http://www.eiro.eurofound.ie/2003/01/Feature/FR0301108F.html>. Accessed June 16, 2003. p. 2.

¹²⁵⁹ Hayden, 1999, op. cit., p. 134.

the 35-hour schedule; 40% of those working in firms with 21-49 employees were on the shorter schedule; just under 10% of workers in companies with fewer than 20 employees had switched to shorter hours.¹²⁶⁰

The effect of shorter worktime in France on the lives of employees also varies, particularly by occupation and gender. For instance, those in managerial or middle management-type jobs are generally the most pleased with the changes – 73% of female managerial staff report an improvement in their jobs and lives since reducing their work hours. However, manual and unskilled workers do not report as much satisfaction with the changes. Only 40% of unskilled female workers report being satisfied compared to 57% of male unskilled workers and 65% of men in managerial positions. Among low-skilled workers, on the other hand, many more people are satisfied than unsatisfied.

Some analysts have noted that if work-hours reductions do not lead to new job creation, but are instead used to produce the same output in fewer hours, work stresses may increase. The European Industrial Relations Observatory (EIRO) reports that "the reduction of working time has generated wide-ranging organizational changes which have led to the intensification of work and a worsening in working conditions" in some job categories.¹²⁶¹ However, according to Hayden, even these workers, who have experienced an intensification of work, still generally say their overall lives have improved because they have received more time off.¹²⁶²

According to Anders Hayden, author of the book *Sharing the Work, Sparing the Planet*, the issue of work "intensification" has become more prominent in the last two years for many employees in France. He says, "in workplaces where few new workers were hired, and the workload hasn't changed, there can be a noticeable increase in the intensity of work. This has affected employees of all types, but it seems to be less of a problem for managers and other relatively privileged workers who have a lot of autonomy and control over their work schedules." This managerial group has expressed the most satisfaction with the shorter workweek while the unskilled, "who often get additional time off when it suits their employer" have been the least satisfied.¹²⁶³

Hayden says work intensification was not much of an issue prior to 2000 when the French government provided incentives to firms that reduced hours by 10% and hired at least 6% more workers. "The hiring requirement helped limit the degree to which employees could

¹²⁶⁰ EIRO. 2002. *Government Issues Assessment of 35-hour week Legislation*. Available from <http://www.eiro.eurofound.ie/2002/10/feature/FR0210106F.html>. Accessed June 16, 2003. pp. 1-4.

¹²⁶¹ Ibid. p. 3.

¹²⁶² Hayden, Anders. Author of *Sharing the Work, Sparing the Planet*. Reviewer comments. August 25, 2003.

¹²⁶³ Hayden, Anders. Author of *Sharing the Work, Sparing the Planet*. Personal communication. June 30, 2003.

¹²⁶⁴ Idem.

¹²⁶⁵ Hayden, Anders. *France's 35-Hour Week: Win-Win-Win Reform or a Betrayal of Disadvantaged Workers?* Forthcoming.

¹²⁶⁶ Hayden, Anders. Author of *Sharing the Work, Sparing the Planet*. Reviewer comments. August 25, 2003.

¹²⁶⁷ Idem.

¹²⁶⁸ Idem.

¹²⁶⁹ Henley, Jon. "Paris Dispatch. A Mixed Blessing." *The Guardian*. October 10, 2003. Available from www.guardian.co.uk/elsewhere/journalist/story/0,7792,1060305,00.html. Accessed October 25, 2003.

¹²⁷⁰ Hayden, Anders. Personal communication. October 25, 2003.

simply squeeze the same amount of work from people in less time." But in 2000 the requirements were "relaxed" and firms no longer had to hire new workers to receive the financial incentives. They only had to reduce hours. As a result "some firms tried to implement the shorter workweek without spreading the workload among more people."¹²⁶⁴

Recent surveys from France indicate that "The 35-hour week has had mixed results in terms of *quality of work*, but large majorities of 35-hour workers say it has improved their *quality of life* overall."¹²⁶⁵

Parents, particularly women with young children, have been among the biggest beneficiaries of the 35-hour week in France. Both men and women with a 35-hour week report they have been spending significantly more time with their children, illustrating the potential benefits of reduced work hours to family life. The 35-hour standard also makes it easier for many women, who do a disproportionate amount of the work in the household, to pursue and advance their careers by participating as full-time workers in the labour market.¹²⁶⁶

When asked how, on the whole, shorter work time has affected their daily lives both at work and outside of work, 59% of 35-hour workers said there had been an improvement, compared to only 13% who had experienced a deterioration.¹²⁶⁷

According to Hayden: "Despite some of the problems encountered in France, there is clearly no strong demand among employees (or employers, for that matter) to go back to the 39-hour standard. It has been a positive, albeit imperfect, step forward."¹²⁶⁸

As this report was going to press, France's government had ordered a full-scale study of the effects of the 35-hour week over the last four years on French business, the economy and government finances. It called for the legislation to be "renegotiated" in light of some of the criticisms regarding the law's mixed effects, many of them unforeseen by the previous government.¹²⁶⁹

Hayden says the current French government "seems to be using [the 35-hour week] as a convenient scapegoat for the fact that France's economy – like the rest of Europe and most of the rest of the world – is not doing well at the moment."¹²⁷⁰

La Presse, Montreal, Quebec: One thousand unionized employees at the Quebec newspaper, *La Presse*, work a shorter workweek, first put in place more than 30 years ago. In 1971 the paper went to a 32-hour week over five days. Six years later workers were working 32 hours in four days with the fifth day off. Some on the weekend shift were working 32 hours over 3 days.¹²⁷¹

¹²⁷¹ Hayden, 1999, op. cit., p. 122.

13.1.5 Overtime Reduction

In Nova Scotia in 2001, 72,200 employees (about 21% of the workforce) worked about 643,000 hours of overtime each week – an average of nine hours per employee, while 45,600 people were jobless. Evidence has shown that a reduction in overtime hours can be the basis for some worksharing and even job creation, especially when overtime hours are compensated by time off rather than by the pay premium.¹²⁷²

One way of reducing overtime hours at businesses that operate 24-hours per day is by adding shifts. See the section on shiftwork below for more details on this method of overtime reduction.

Chapter 14 also explores the job creation potential of reducing or restricting overtime hours in Nova Scotia in more detail.

Box 5: Less overtime, more jobs

British Columbia Pulp and Paper Industry: Since 1983 the amount of overtime worked every week per employee in the B.C pulp and paper industry has more than doubled from 1.6 hours to 3.8 hours, for a total of 1.8 million hours of overtime in 1998. At the same time the number of workers in the industry fell by nearly 20% to just over 9,000 in 1998.

If pulp and paper workers today put in the same hours of overtime as they did in 1983, the total reduction in overtime hours would be equivalent to saving or creating 500 full-time jobs.

According to a survey conducted by the Communications, Energy and Paperworkers (CEP) Union, 70% of CEP members would voluntarily give up overtime to save jobs. The two-year study also found that the main reason given for overtime was to cover co-workers' vacations, leaves, and absences. In addition, the study found that pulp and paper companies would save \$11 million if overtime were reduced by one-half and if the equivalent hours were instead worked by new workers (due largely to avoiding the premium rates paid for overtime).¹²⁷³ In sum, reducing overtime can be a win-win situation for both employers (saving money) and employees (saving jobs).

In 1997, 89 workers were laid off at Powell River's Pacifica Papers pulp and paper mill. CEP Local 76, which represents 800 maintenance and production workers, saved and restored these lost jobs by reducing the overtime hours of all its members at the plant. CEP Local 1, at the same mill, representing 150 paper makers who operate the machines at the plant, now refuses to have its members work overtime. The union argued that the only legitimate reason for overtime is a real emergency, but that overall the paper machines at the Powell River mill in fact operate according to regular hours. On average the shift workers at Powell River still put in 42-hour weeks – two hours more than their full-time work requirement, but they do not receive overtime pay for the extra two hours. Instead, about one-third of the workers opt to

¹²⁷² Curson, 1986, op. cit., p. 62.

¹²⁷³ Communications, Energy and Paperworkers Union. 1999. *Working Less for More Jobs. A Study of Hours of Work and Job Creation in the B.C Pulp and Paper Industry*. Ottawa. pp. 7-17.

¹²⁷⁴ Ibid. pp. 22-27.

bank the extra two hours and take four 12-hour shifts away from work every six months. The remaining workers take their time off in other ways, including longer vacations.¹²⁷⁴

Reducing hours of work or overtime has become more common among many union members especially when it is done to protect jobs.

13.1.6 Shiftwork

Shiftwork is used particularly by businesses that run continuous operations or services. Worktime reduction can still allow for intensive use of machinery, while at the same time reducing overtime and improving productivity and morale. For example, if hours are annualized it is possible to determine the size of the crew needed (on a reduced schedule) to keep the operation running at the same level of intensity.¹²⁷⁵ Switching from a four-crew to a five-crew system can reduce work hours and overtime, increase employment by 25%, and result in less worker fatigue and improved productivity (because rest periods can be longer). Workers' shifts can also overlap, adding to continuity. In a four-crew system, overtime is substantial and may amount to 15% of payroll costs. Switching to a five-crew system may therefore also save employers money by reducing the amount of premium overtime pay required.¹²⁷⁶

However, the use of work hours reductions to increase productivity may not necessarily improve wellbeing if they encourage the use of shiftwork. Shiftwork (night shifts in particular) has been associated with higher rates of illness, mostly due to the disruption of circadian rhythms, and with family conflict and breakdown.¹²⁷⁷

Hayden also notes that shiftwork that "makes machines sweat" so they can produce more goods also begs the question: 'produce more of what?'

"If it is a matter, for example, of extending the hours of public services so people have more access to libraries or health care at lower cost, that is a good thing. But if it is about pushing machinery to churn out more stuff for excess consumption the planet cannot afford, that is a different matter."¹²⁷⁸

¹²⁷⁵ Annualization of hours allows for a firm's real work needs over time to be assessed more accurately than on weekly schedules, because holidays and absenteeism are taken into account. For an operation to run 24 hours a day seven days a week, 8,736 person-hours of work per year are required for each position. To calculate how many workers are needed, an absence level of 10% per year is assumed in addition to the specified number of weeks of annual leave and public holidays, and the length of the intended working week is taken into account. If the working week were 39 hours, and if annual leave were five weeks with eight additional days of public holidays, the total annual working time per employee would be 1,590.6 hours. This annualization of hours allows a determination of the number of crew members needed by dividing the total required hours per year per position (8,736) by the available annual time per employee (1,590.6). In this case, a five-person crew system could be implemented to keep one person running a machine 24 hours a day seven days a week. Switching to a 35-hour week with the same annual vacation, paid holidays, and absenteeism rates would require a six-person crew and create an extra job. Adapted from Curson, 1986, op. cit., pp. 76-82.

¹²⁷⁶ Curson, 1986, op. cit., p.79.

¹²⁷⁷ See Section 8.4, for more detail on the health and other effects of shiftwork on workers.

¹²⁷⁸ Hayden, 1999, op. cit., p. 66.

Hayden refers to the use of shorter work hours primarily to stimulate growth and produce more goods as *productivism* rather than productivity. Hayden's concept of "productivism" will be discussed further in Chapter 14.

Box 6: Short hour Mavericks

"Kelloggs: The home of Battle Creek" – bumper sticker (1980s)

Kellogg Company, Battle Creek, Michigan: The start of the Great Depression marked a significant turning point at the cereal plant. In 1930 the company's owner, W.K Kellogg, replaced the existing three 8-hour shifts with four 6-hour shifts in the company's 24-hour production cycle. The extra shift provided work for 300 more people and thus avoided layoffs. Within five years of the new shift being added Kellogg found that:

a) overtime costs were reduced by 25%; b) labour unit costs were reduced by 10%; c) accidents were down; c) absenteeism declined; d) 40% more people were working at the Battle Creek plant in 1935 than in 1929.

In Kellogg's own words:

*"This isn't just a theory with us. We have found that, with the shorter working day, the efficiency and morale of our employees is so increased, the accident and insurance rates are so improved, and the unit cost of production is so lowered that we can afford to pay as much for six hours as we formerly paid for eight."*¹²⁷⁹

By 1950 the 6-hour day was particularly popular among the women workers, for whom work was only one among many important aspects of their lives. They valued the extra time the shorter days provided, especially in allowing them more time to be with family and children and to accomplish household tasks. But, for many of the men, the extra free time "raised fears about job status and gender struggles." Many of the men saw the extra leisure time as "something for silly women and sissy men." They began to challenge the 6-hour supporters.¹²⁸⁰

By the end of the 1970s, the Kellogg management began to claim it needed to "modernize" and make the operation more "efficient" because of "competitive pressures." It was losing market share, even while continuing to rake in record profits. More machines meant fewer workers. So, in 1984 the company threatened the unthinkable: to lay off 700 workers and relocate the plant out of Battle Creek if the 6-hour workers didn't vote for a return to the 8-hour shifts. The 6-hour supporters, by this time pressured from every angle (union, co-workers, and management) voted to abandon the shorter shift.

Ironically, a measure introduced to create jobs in the 1930s was abandoned to save them in the 1980s.

¹²⁷⁹ Hunnicutt, Benjamin Kline. 1996. *Kellogg's Six-Hour Day*. Temple University Press. Philadelphia. pp. 1-2 and p. 35.

¹²⁸⁰ Ibid. pp. 11-12.

Chrysler, Windsor, Ontario: In 1993 the Chrysler minivan plant in Windsor added a third shift in addition to reducing regular work hours from eight to 7.5 without cutting pay, and reducing overtime hours. Eight hundred new jobs were created, partly as a result of the successful shorter work hour negotiation between Chrysler and the Canadian Auto Workers Union (CAW), and partly due to increased demand for minivans. The move from two to three shifts was later emulated at a Chrysler plant in Brampton and at a GM truck plant in Oshawa.

While the addition of a third shift shortened hours for workers (without a reduction in pay), the change also proved beneficial for Chrysler, because it meant that Chrysler could keep the plant running for longer hours.¹²⁸¹

From a larger perspective that includes impacts on the environment, longer operating hours that increase production, benefit capital-intensive firms, and create more jobs, may have less desirable side-effects. Additional production that meets increased demand for large vehicles that consume more gas, produce more greenhouse gas emissions, and adversely affect air quality and climate change may not improve overall wellbeing when health and environmental effects are taken into account. See GPI Atlantic's forthcoming Transportation Accounts for a full-cost accounting of various modes of transportation. In sum, the full benefits and costs of the measures discussed in this study must be evaluated in the perspective and context of other components of the Genuine Progress Index.

13.1.7 Flexitime

Flexitime work arrangements exist when a worker is allowed to vary the beginning and end of the workday. Flexibility may exist within a working day, within a workweek or within a month. Typically, there are a certain number of "core" hours which must be worked, but flexibility exists regarding when they are worked, with limitations set by management.¹²⁸²

Variations in flexitime include:

- *Flexitour:* Workers choose a regular starting and quitting time but work "core" hours during the day (e.g. an 8-hour day).
- *Gliding time:* Workers can vary their starting and quitting times each day but still work "core" hours (e.g. an 8-hour day).
- *Variable day:* Workers vary the hours worked each day but at end of week or month hours add up to the required "core" hours. This is sometimes referred to as credit and debit hours. For instance, a worker may work six hours one day and 10 hours the next.
- *Flexiplace:* Worker can work from home all or some of the time.¹²⁸³

¹²⁸¹ Hayden, 1999, op. cit., p. 121.

¹²⁸² Silverstein, Pam and Jozetta H. Srb. 1979. *Flexitime: Where, When, and How?* New York State School of Industrial and Labour Relations. New York. pp. 1-3; Akyeampong, Ernest B. 1993. "Flexitime Work Arrangements." *Perspectives*. Statistics Canada. Catalogue no. 75-001E. Minister of Industry. Ottawa. p. 17.

¹²⁸³ Work in America Institute, 1981, op. cit., pp. 23-26.; Curson, 1986, op. cit., pp. 26-34.

Advantages of Flexitime for Employees

- Workers with flexible schedules are better able to balance work and family life.
- Workers can arrange to have larger blocks of leisure time.
- Workers are more satisfied with job, are absent less, and experience less work stress.
- Workers feel a sense of autonomy and control over their work situation in being able to choose work hours.
- Workers who commute to work are able to avoid rush-hour traffic by varying starting and quitting times.¹²⁸⁴

Advantages of Flexitime for Employers

- Increased morale and job satisfaction among workers may result in increased productivity.
- Less absenteeism since workers are able to attend to family responsibilities without taking time off work.
- Flexitime schedules may increase efficiency since work hours may be more closely linked to varying workloads. Thus, employees may vary their hours both in accord with their own needs and in accord with work demands, taking more time off when workload requirements are lighter and putting in extra hours when demands are greater.
- Less workplace stress.
- Flexible schedules are attractive to prospective employees, therefore recruiting skilled and experienced workers may be more successful.¹²⁸⁵

Disadvantages of Flexitime for Employers

- Flexitime may not be workable in certain occupations (i.e. teachers).
- Varying schedules may make it difficult to schedule meetings.
- More supervisors (or punch clocks) may be required to keep track of workers' hours.
- Overhead costs, such as heating, lighting and cooling, may also increase if the building stays open longer.
- Some workers might take advantage of the system and not put in their full complement of hours.¹²⁸⁶

¹²⁸⁴ Work in America Institute, 1981, op. cit., p. 38; Akyeampong, 1993, op. cit., p. 18; Silverstein and Srb, 1979, op. cit., p. 38.

¹²⁸⁵ Work in America Institute, 1981, op. cit., p. 38; Akyeampong, 1993, op. cit., p. 18; Silverstein and Srb, 1979, op. cit., pp.39-40.

Societal Benefits of Flexitime Schedules

- Improved quality of life for workers.
- Increased employment opportunities for workers, particularly working parents of young children.
- Less commute time (due to avoidance of rush-hour traffic or working from home) results in less greenhouse gas emissions and savings in gas consumption.¹²⁸⁷ Consumption of gasoline decreases both because time spent on the road decreases if rush-hour is avoided, and because steadier driving results in higher mileage per gallon. In smaller cities, such as Halifax, even slight shifts in scheduling can improve commuting time dramatically because peak periods are of shorter duration.

As Table 47 shows, in 1995 roughly 24% of paid workers enjoyed some form of flexible scheduling. Flexitime work arrangements were most prevalent among workers in some of the more professional service industries. In finance, insurance and real estate, about 36% of paid workers were on flexitime. In government services and business services, 37% and 36% respectively were on this form of schedule. By contrast, only 13% of accommodation and food service workers were on flexitime.

Workers in the goods sector were less likely to have a flexible schedule, with only 19-20% of manufacturing workers on flexitime. Dual-earner families with young children were the more likely to use flexitime arrangements (29%) than single-earner families (22%), and white-collar managerial and administrative workers (46%) were more than three times as likely as blue-collar workers to be on flexitime. Nearly one-third of employees of large firms (over 500 employees) were likely to have flexitime arrangements compared to 20-25% of workers in smaller firms (Table 47).

According to Statistics Canada, it is difficult to know whether the incidence of flexitime is increasing or not because no comparable historical data exists. However, two factors that point to future increases in this form of work arrangement in Canada are:

- U.S. data show that the incidence of flexitime among full-time workers is increasing.
- Flexitime has been more common among white-collar workers and those in the service sector – two areas that have expanded and are likely to continue expanding in the coming years.

The work-life conflict issue has and will likely continue to garner attention. Flexitime schedules are one way of alleviating some of these pressures.¹²⁸⁸

¹²⁸⁶ Work in America Institute, 1981, op cit., pp. 39-40; Akyeampong, 1993, op. cit., p. 18; Silverstein and Srb, 1979, op. cit., p. 40.

¹²⁸⁷ Silverstein and Srb, 1979, op. cit., pp. 40-41.

¹²⁸⁸ Akyeampong, 1993, op. cit., p. 21.

Table 47. Incidence of Flexitime, Canada, 1995 (% of paid workers reporting flexitime).

Characteristic	%	Characteristic	%
<i>All paid workers</i>	23.6	<i>All paid workers</i>	23.6
Sex		Industry	
Males	24.0	Primary	24.3
Females	23.0	Agriculture	30.6
Age		other primary	21.7
15-24	15.0	Manufacturing	19.5
25-44	25.2	durable	18.5
45-54	25.3	non-durable	20.5
55-69	25.3	Construction	21.7
Marital Status		Utilities	25.5
Married	25.6	Transportation and storage	18.8
Single	19.1	Communication	32.0
Separated/Widow/Divorce	24.8	Trade	19.7
Family Status		wholesale	27.4
Unattached individual	22.8	retail	16.7
Dual-earner families	26.6	Finance, insurance, real estate	35.7
Dual, children under 6	28.7	Business services	35.6
Single-earner families	22.1	Government services	37.3
Lone-parent families	14.1	Educational services	26.2
Other families	24.8	Health and social services	17.4
Union Status		Accommodation and food services	12.8
Union	18.0	Other services	27.4
Non-union	27.1	Sector	
Occupation		Public	26.6
Managerial/Administrative	46.4	Private	22.9
Professional	29.3	Workplace size	
Clerical	23.3	Under 20 employees	24.2
Sales	22.3	20-99 employees	20.1
Service	13.1	100-500 employees	23.7
Primary	19.3	over 500 employees	32.6
Processing, machining, and fabricating	10.3	Job Type	
Construction	15.6	Permanent	24.0
Transport equipment operating	14.7	Non-permanent	21.0
Material handling and other crafts	11.5	Full-time	25.0
		Part-time	19.0

Sources: Reid and Gunderson, Forthcoming, op. cit., Table 8. Original data from Statistics Canada. 1998. *Work Arrangements in the 1990s*. Catalogue no. 71-535, no. 8. Ottawa; Marital and family status figures from Lipsett, Brenda and Mark Reesor. 1997. *Flexible Work Arrangements: Evidence from the 1991 and 1995 Survey of Work Arrangements*. HRDC Applied Research Branch: Strategic Policy Research Papers. Ottawa; Job type figures from Akyeampong, Ernest. 1997. "Work Arrangements. 1995 Overview." *Perspectives on Labour and Income*. Catalogue no. 75-001. Ottawa.

Box 7: Flexibility is a Work Option

RBC Financial Group: In 1990 the Royal Bank of Canada began allowing staff to jobshare and to work flexible hours. By 1998, about 30% of its 39,000 workers used some variation of alternate work patterns offered by the firm, including 1,100 employees who share jobs.

Flexible work arrangements at RBC include the following options:

- reduced hours
- jobsharing
- flexitime
- modified workweek (including a compressed 4-day week)
- flexible workplace (working from home or some other site)
- phased retirement¹²⁸⁹

According to a survey conducted for the firm by Canadian Work/Family Directions in 1998, 63% of managers highly recommend flexible work arrangements. Only 1% would not recommend them. More than one-third of managers said employees on flexible schedules were more efficient, while the remainder found no change. The survey also showed that 94% of flex workers were very satisfied with their new work arrangements, nearly 80% of the users felt they hadn't compromised any advancement opportunities, and 70% reported less stress. Nearly four in 10 employees on flex schedules liked it so much they said they'd leave the company if flex-work were no longer available.¹²⁹⁰

13.1.8 Telecommuting

Telecommuting occurs when a worker works from home or some site other than the workplace. There are a number of benefits to telecommuting for the worker including a great deal of flexibility, more control over time, and less commuting. The drawbacks for the worker may include social isolation from co-workers, and a lack of regulation which some have argued could result in "sweatshop" labour.¹²⁹¹

People who work from home also tend to be more productive. U.S. studies have shown a 20% to 100% productivity increase in those who work from home, due to fewer interruptions and distractions.¹²⁹²

¹²⁸⁹ RBC Financial Group. 2003. *Diversity: Work Life Solutions*. Available from <http://www.rbc.com/uniquecareers/diversity/solutions.html>. Accessed June 20, 2003.

¹²⁹⁰ Gibb-Clark, Margot. 1998. "Royal Bank Scores with Flexible Work Programs." *Globe and Mail*. May 15, 1998. Toronto; Also, 32 HOURS. 1998. "Study Finds Flex-work helps with Struggle to Juggle." *Better Times*. Issue no. 7. June. Toronto. p. 6.

¹²⁹¹ Higgins, Christopher, Linda Duxbury, and Catherine Lee. 1992. *Balancing Work and Family: A Study of Canadian Private Sector Employees*. Carleton University. Ottawa. pp. 75-79.

¹²⁹² Curson, 1986, op. cit., p. 129.

In addition to higher productivity, employers also save money on office accommodation, utilities, and overhead costs.¹²⁹³

From the employer's perspective, supervising the work of those at home may be challenging. From a union's perspective, telecommuters may be more difficult to organize.

Box 8: Work from Home and Get Credit

Alberta: One notable initiative is an Alberta pilot project that gives companies tradable greenhouse gas credits for allowing their employees to work from home. These credits could then be sold to firms who need more time to cut their emissions. In this project, which resembles similar projects being run in five U.S. states, workers log in the number of trips they save by working at home or the time they save by driving in at off-peak hours. This information, in addition to the make/model/year of the vehicle, allows special software to calculate the greenhouse gas emissions avoided. For instance, a worker who commutes 40 km could save 8.4 kg of carbon dioxide emissions by avoiding one trip to work. The project also indirectly encourages firms to give employees the option to work from home.¹²⁹⁴

13.1.9 Early or Phased-in Retirement

Retirement does not have to be a "cold wind that blows across the landscape," as Stephen Leacock described it.¹²⁹⁵ For many, the loss of the social interaction that workplaces provide, in addition to loss of status and income that may accompany retirement, can be extremely difficult. Gradual retirement, as opposed to sudden retirement, has proven to be beneficial for both workers and employers and, as an added benefit, can result in jobs and training opportunities for new recruits.

Figure 60 shows that since 1976 the average age of retirement in Canada has gradually gone down. In 2000 men, on average, retired at 62 years of age, compared with 65 years in 1976. Women retired at 61 years of age in 2000, compared with 64 years in 1976.

In Nova Scotia it is mandatory to retire at age 65. However, seniors' advocacy groups are asking the province to do away with this law, because there are many people being forced to retire who have highly valued skills and many good, productive years of potential work ahead of them.¹²⁹⁶ This argument is more politically palatable at times of low unemployment and skills shortages. During periods of high youth unemployment, it can be argued that the abolition of mandatory retirement may close workforce entry opportunities to young people.

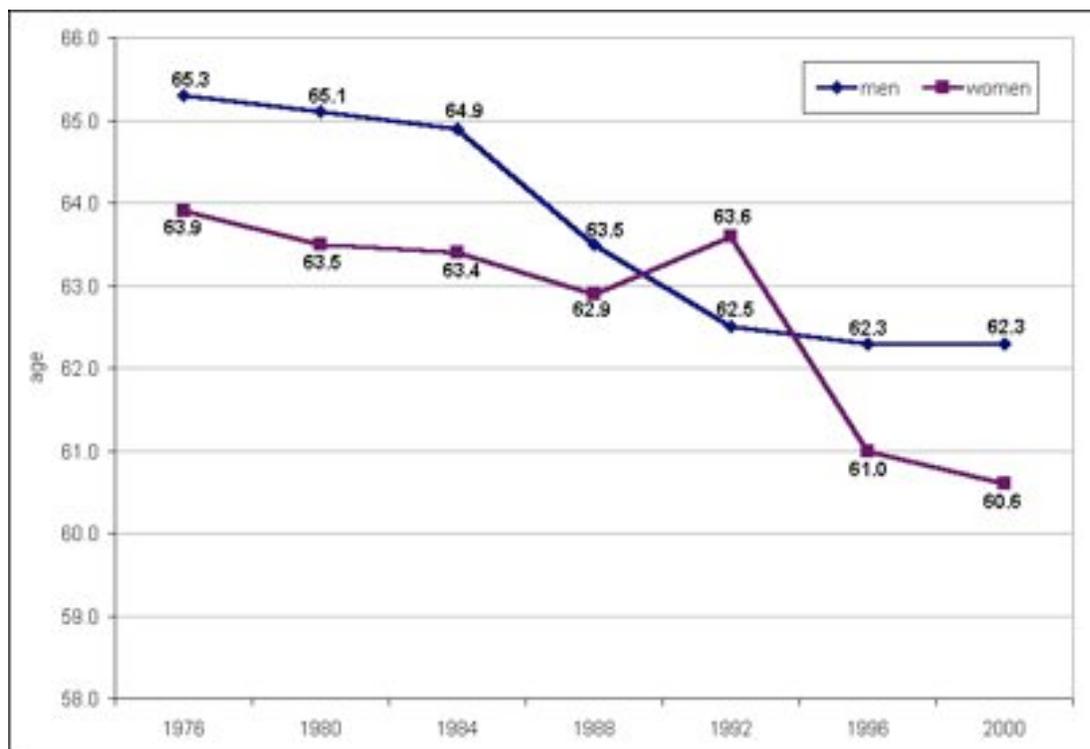
¹²⁹³ Idem.

¹²⁹⁴ Gillis, Charlie. "Work-at-home Plan Targets Gas Emissions." *The National Post*. Monday October 28, 2002. Torontom. p. A6.

¹²⁹⁵ Leacock cited in *The Advisory Group on Working Time and the Distribution of Work*, 1994, op. cit., p. 43.

¹²⁹⁶ Lucas, Chad. "Seniors push for end to mandatory retirement." *The Chronicle-Herald*. July 12, 2003. Halifax. p. A7.

Figure 60. Average Retirement Age by Sex, Canada. 1976-2000.



Note: Statistics Canada's Labour Force Survey (LFS) asks people who are not working and who have left their jobs within the last year prior to being surveyed, why they left this job. As a result, retirement data for 2000 are the most recent available. No comparable data are available for the provinces.

Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

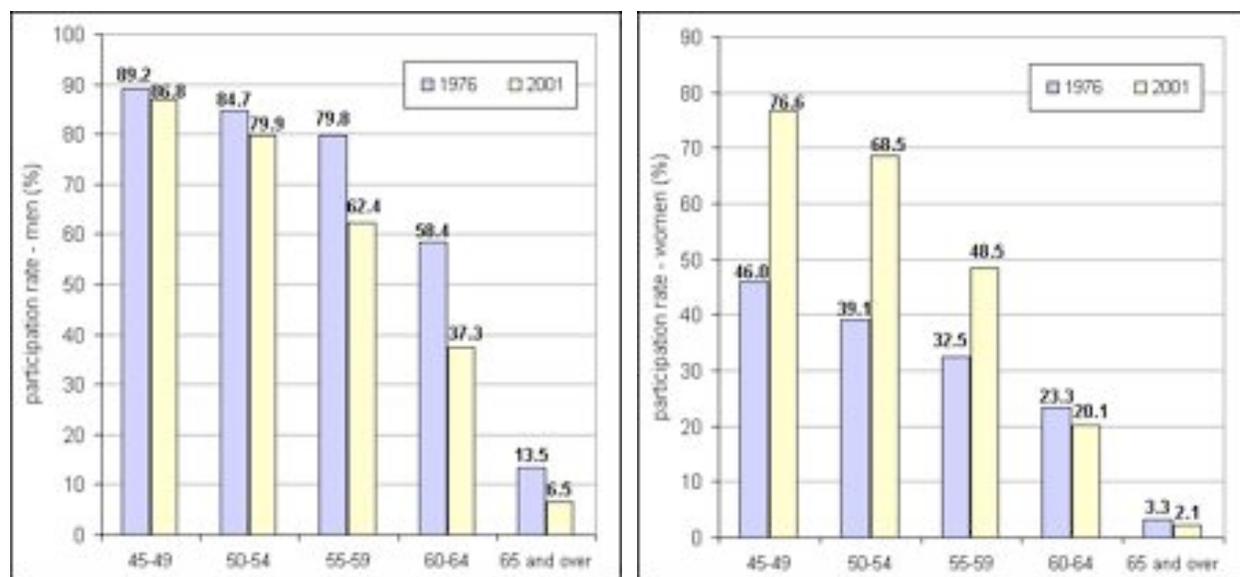
A compromise between the two arguments is phased retirement, which is much more common in the Scandinavian countries than in North America, and is described below. Because most U.S. and Canadian pension schemes are structured to base retirement income on earned income in the most recent years of work, a structural disincentive to phased retirement exists. Restructuring pension schemes to base retirement income on income earned prior to phased retirement, and allowing early partial pension payments in proportion to time not worked would create a strong incentive for this option.

In a phased or gradual retirement scheme, older employees may opt to decrease their hours gradually over a number of years. For example, the partial retiree could work three days a week alongside a junior staff person, with the junior employee acting as a replacement for two days a week. After a year or two, the older worker might switch to a 2-day workweek before phasing in to full retirement, with the junior employee gradually replacing the older one for three days a week and then on a full-time basis as his or her job skills and experience increased. This work arrangement is often far more beneficial to the older employee than the sudden transition from full-time work to enforced leisure, and allows a gradual habituation to the increased leisure time.

Employers also benefit because it allows for a gradual transfer of the retiree's experience and expertise, rather than creating a sudden void of skills as well as an expensive and steep learning curve for the replacement. Graduated or phased retirement, when viewed as an opportunity for the retiree to mentor new staff, can therefore be a positive experience for both older and younger employees as well as for employers. Pension schemes would have to be adjusted to ensure there is no loss of benefits as a result of phased retirement.¹²⁹⁷

Phased retirement options may be increasingly attractive to older women, whose labour force participation rates have grown sharply in the last quarter century. Figure 61 shows that since the 1970s more Nova Scotian women aged 45 and over have entered and stayed in the labour force. For men the situation is reversed. The labour force participation rates for men older than 45 years in Nova Scotia have fallen, while for women they have grown dramatically. For example, in 1976, 46% of women between the ages of 45 and 49 participated in the labour force. By 2001 that figure had skyrocketed to nearly 77%. For both men and women, after age 55, participation rates fall dramatically. But among women aged 55-59, labour force participation rates are still much higher than they were 25 years ago. These same trends are evident in Canada as a whole.

Figure 61. Labour Force Participation Rates by Sex and Age, Nova Scotia, 1976-2001.



Note: The labour force participation rate is the number of labour force participants expressed as a per cent of the population 15 years and over. The participation rate for a particular age group is the number of labour force participants in that group expressed as a per cent of the population for that group.

Source: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

Phased retirement options may also help ameliorate the growing gap between the earnings of younger and older workers. It is estimated that by the year 2020, 18% of Canada's population, or

¹²⁹⁷ Mark Hudson cited in *The Atkinson Letter* (Part 1), 1999, op. cit., p. 3.

approximately six million people, will be 65 years and older.¹²⁹⁸ According to the Advisory Group on Working Time and Distribution of Work, since the 1980s "the relative improvement in real earnings of those approaching and following retirement seems to be at the expense of the real earnings of young people entering the labour force." Full-time jobs are concentrated among older workers, while a disproportionate share of jobs available to young people are part-time.¹²⁹⁹ Phased retirement can increase part-time work options among older workers and allow a proportional shift from part-time to full-time work among younger replacement workers as their mentors gradually approach full retirement.

Box 9: Retire Early *and* Keep Your Job

Air Canada: Workers at Air Canada can retire early in a gradual phase-in program where they begin collecting their pensions while still working part-time. They also maintain their seniority and pro-rated wage rates. The net result is that more work hours become available for part-timers who want to go full-time, and fewer hours are possible for full-timers who want to go part-time. The program was negotiated in 1988 by the Canadian Auto Workers union (CAW) for both Air Canada and Canadian Airlines, but was only put in place in 1996.

To qualify for the program a worker must have 80 years combined age and service, or 25 years of service. It also depends on a part-time position opening up for the phased retiree. The program is beneficial for employees who qualify because they can gradually leave the workplace rather than experience a sudden transition. Employers can keep valued and skilled staff rather than lose them all at once.

Some career part-timers do not like the program because the early retirees (who become part-timers) keep their seniority, which means they get first priority in assignment of schedules and vacations at desired times, bumping the career part-timers down the list.¹³⁰⁰

At both Air Canada and Canadian Airlines the program was generally well-received by the full and part-time staff, and it continues today at Air Canada.

13.1.10 Vacation Time

European workers enjoy up to three times more vacation time than Canadians (or Americans). Based on the amount of vacation time provided based on years of service, Canadian workers would have to work, on average, 15 years before they received the vacation time mandated by some European countries after just one year of work.¹³⁰¹

¹²⁹⁸ Advisory Group on Working Time and the Distribution of Work, 1994, op. cit., p. 46.

¹²⁹⁹ Ibid. pp. 46-47.

¹³⁰⁰ Lu, Vanessa. "Retirement Plan Aids Workers of All Ages." *The Toronto Star*. December 7, 1998. Toronto. p. B1-B4.

¹³⁰¹ Hewitt and Associates. 2001. *Summer Vacation Highlights Global Differences in Paid Time off*. Internet. Available at <http://www.hewitt.com/hewitt/resource/newsroom/pressre/2001/06-06-01.htm>. Accessed October 24, 2002.

While two weeks vacation is required after one year of employment in Canada, workers receive various amounts of vacation time depending on where they work, whether they are unionized, and how long they've been employed. As Table 48 indicates, unionized workers receive more vacation time than non-unionized workers, with 60% receiving 16 or more days per year, compared with only 31% of non-unionized workers who receive that amount of vacation time. Overall, only one in four Canadian workers enjoyed more than four weeks paid vacation a year in 1995.

Table 48. Paid Vacation Leave, Canada, 1995 (% of all workers).

	10 Days Or Less %	11-15 Days %	16-20 Days %	More Than 20 Days %
All	28	28	19	25
Men	27	27	18	28
Women	29	30	20	22
Union	16	23	24	36
Non-union	37	32	15	16

Source: Jackson and Robinson, 2000, op. cit., p. 83. Original source of data: Statistics Canada, Survey of Work Arrangements, 1995.

In Nova Scotia the Labour Standards Code was recently amended so that workers are now entitled to three weeks of paid vacation time after eight years of employment instead of two weeks.¹³⁰²

One way of reducing and potentially redistributing work hours is to increase paid vacation time. For example, if someone worked a 40-hour week with no vacation time, they would work 2,080 hours per year. With two weeks off, this brings them to 2,000 hours per year. If vacation time were to be increased to the levels enjoyed in Europe – generally five weeks – then annual hours would be reduced to 1,880 hours. When added to the time off for paid national holidays, the figure is even lower. Of course, reducing weekly hours (from 40 per week to less) would also have a dramatic impact on the annual hours worked. Increasing vacation time along with reducing weekly work hours may help alleviate unemployment problems by making more annual hours of work available.¹³⁰³

Box 10: Europe ahead in vacation time

Europe: In 2002, the most recent data available, the statutory minimum annual paid leave (in days) for Sweden, Luxembourg, France, Denmark, and Austria was 25 days or five weeks. In the U.K, Netherlands, Italy, Germany, and Belgium, workers have by law at least 20 paid

¹³⁰² Smith, Amy. "NDP buys amended Sunday shopping bill. Law includes improvements to labour code." *The Chronicle-Herald*. October 25, 2003. Halifax. p. A1.

¹³⁰³ Best, Fred. 1981. *Work Sharing. Issues, Policy Options and Prospects*. W.E Upjohn Institute for Employment Research. Kalamazoo. pp. 60-164.

vacation days. The European average is 22 days. This statutory minimum does not account for the longer vacation times of more senior workers.

When average annual paid leave across the entire workforce is taken into account, the figures are even higher. In the Netherlands, for instance, average annual paid leave is 31 days or just over six weeks. Germany and Denmark are not far behind with 29 days each. In Sweden, Finland, France, Norway, Austria, and the U.K, workers take on average 25 days or five weeks of paid vacation.¹³⁰⁴

In Canada, data are not available for the average annual paid vacations taken by workers. This is a significant data gap, not only because vacation time or leisure is a key quality of life indicator but also because the annual duration of working time is influenced by the amount of paid annual leave to which workers are entitled. Without knowing how much time the average Canadian is taking off work, it is difficult to calculate accurately how many hours the average Canadian works per year.

Danish General Strike, 1998:

For eleven days in April and May of 1998 nearly 500,000 Danish private-sector employees went on strike. The general strike directly involved nearly one-fifth of the Danish workforce, and in the strike's final days effects were also felt by the rest of the labour market including the public sector. A key union demand at the time was for the introduction of a sixth week of annual paid vacation (five weeks were at the time guaranteed by law).

The government intervened and enacted legislation to end the dispute. The settlement which was finally imposed included one additional day's leave per year for all workers, plus two additional days off for family reasons, totalling three more days, instead of the five being asked for by the workers.¹³⁰⁵

13.1.11 Sabbaticals, Extended Leave, Career Breaks

"The possibility of periodically interrupting your working life to study or to learn a new occupation, to set up a band, theatre group, a neighbourhood cooperative, an enterprise or work of art, to build a house, to make inventions, to raise your children, to campaign politically, to go to a Third World country to volunteer, to look after a dying relative, and so on."

– Andre Gorz¹³⁰⁶

After several years of consecutive employment, Andre Gorz argues workers should have a right to take an extended leave for family, education, travel, career change, volunteer commitment, or

¹³⁰⁴ European Industrial Relations Observatory (EIRO). 2003. *Working Time Developments – 2002*. Available from <http://www.eiro.eurofound.ie/2003/03/Update/TN0303103U.html>. Accessed June 16, 2003. pp. 12-14.

¹³⁰⁵ European Industrial Relations Observatory (EIRO). 1998a. *1998 Annual Review for Denmark*. Available from <http://www.eiro.eurofound.ie/1998/12/feature/dk9812107f.html>. Accessed January 19, 2004.

¹³⁰⁶ Gorz, Andre. 1988. *Critique of Economic Reason*. Verso. London. p. 210.

personal development reasons. Extended leaves, according to some analysts, should also be accompanied by a guaranteed re-entry into the workforce at the same level and rate of pay.¹³⁰⁷

There are clearly financial drawbacks to unpaid leaves for many employees and, due to financial constraints, this form of work reduction is simply not an option for many workers. It has been argued that lower-income employees, particularly involuntary part-time workers, may benefit from the extra work hours made available by those taking leaves. However, if employers see unpaid leave as a way to save on labour costs without new hiring, it may also mean that those not taking a leave may be saddled with the additional workload of those who were fortunate enough to take it.¹³⁰⁸

However, the ability to take leaves (whether parental or otherwise) does not have to be dependent on the financial ability of workers to do so. Some professions like academia already incorporate a system of paid sabbatical leave. In other cases, workers can bank overtime hours and vacations, and take longer extended breaks after a few years. In a society that values children, the nurturing of family, and the development of the individual, the sabbaticals and leaves today accepted without question in the academic world could eventually even become a right for all workers.

Box 11: Sabbaticals and Extended Leave

Belgium: In 1985 a system of "career breaks" was introduced in Belgium, in which an employer was obliged to hire an unemployed person to take the place of an employee on a career break in return for a payroll tax reduction by the government. The legislation was called the "Recovery Act." In this system, a career break was defined as anything from a full leave to a reduction in working time. While the rules differ slightly in the public and private sectors, employees are generally allowed to take career breaks ranging from three months to six years in duration (maximum of five years in the private sector) without having to state a reason. Only a certain number of employees can be on career breaks at any given time and they have to give three months notice.

In January 2002, a new system was implemented for the private sector as a result of negotiations by social partners within the National Labour Council. The National Collective Agreement gives employees:

- the right to a "time credit" where, for a maximum of one year over their entire career, they can interrupt their work or reduce their hours without jeopardizing their contract or their benefits. Time credits can be extended to five years by mutual agreement.
- the right to reduce their work hours by one-fifth with a proportionate cut in pay and without jeopardy to their position, seniority, or career advancement. Every employee has the legislated right to work a 4-day week for a maximum period of five years during his or her career.

¹³⁰⁷ Curson, 1986, op. cit., pp. 176-178; Best, 1981, op. cit., p. 60.

¹³⁰⁸ Advisory Group on Working Time and the Distribution of Work, 1994, op. cit., p. 60.

- the right for workers over 50 years of age to reduce their working time by one-fifth or one-half.

While workers are using their time credits they also receive a monthly allowance from the government.¹³⁰⁹ The new system also differs from the old system because it does not require employers to replace workers on leave with unemployed people. So long as they replace the employee on leave, they are entitled to the same tax reduction.¹³¹⁰

The Belgian government also offered civil servants the right to reduce their weekly work hours by 20%, at 90% of their former pay. This initiative, which recognized that work reduction results in greater productivity, encouraged a high rate of voluntary take-up among civil servants.¹³¹¹

13.2 Less Work...More Jobs

"Research shows that, under the right circumstances, a major reduction in working time could result in a meaningful decrease in unemployment and a significant redistribution of jobs.... [I]f working-time reduction was introduced gradually, and if employees and employers negotiated reduced working hours out of future productivity gains, then the process could be managed without worsening the ability of Canadian firms to compete at home or abroad. This change could improve the fiscal position of governments."

– Advisory Group on Working Time and the Distribution of Work¹³¹²

Canada currently has the advantage of being able to learn from the lessons of work time reduction schemes that have been tried elsewhere. In many cases these schemes have been both popular and successful in achieving their original goals, including a reduction in unemployment and the creation and/or saving of jobs. However, there are also cases where the plans have met with much resistance, been poorly conceived or implemented, or have fallen short of expectations. Canada is today in the enviable position of being able to learn from the lessons of many work reduction experiments in Europe and North America, and to select those options most appropriate to Canadian circumstances and with the best potential for success.

Two prominent Canadian examples of shorter work time plans that were both introduced to avoid layoffs, but were poorly implemented and therefore short-lived were: 1) the "Rae Days" introduced by the Ontario New Democratic Party in 1993, and 2) Bell Canada's 4-day workweek introduced in 1994.

¹³⁰⁹ In 1999 an employee on leave was receiving roughly 12,000 Belgian francs, the equivalent of \$460 Canadian per month. From Hayden, 1999, op. cit., p. 157. This amount has been raised in the new 2002 system, although the new, higher allowance figures were not available to the author at time of publication.

¹³¹⁰ European Industrial Relations Observatory. 2003a. *Changeover from Career Breaks to Time Credits Proves Complex*. Available from <http://www.eiro.eurofound.ie/2003/08/feature/BE0108360F.html>. Accessed June 16, 2003.

¹³¹¹ Colman, Ronald and Anders Hayden. 1999. *Work Time Reduction in the Nova Scotia Civil Service. Recommendations to the NS Government and Public Sector Unions based on Successful Work Time Reduction Experiments in Europe and North America*. Genuine Progress Index Atlantic. Halifax. p. 14.

¹³¹² Advisory Group on Working Time and the Distribution of Work, 1994, op. cit., p. 3.

1) **Rae Days:** In an attempt to reduce public sector wage costs, Ontario Premier Bob Rae implemented a plan which involved unpaid days off for public sector workers. This cut costs for the government and avoided lay-offs, but it was strongly opposed by the unions mainly because it involved a loss of wages for its members. Analysts have argued that the Rae Days experiment was a contributing factor to the New Democratic Party's defeat in the 1995 election. According to Hayden, the "major flaw was the government's decision to take this action through legislation that reopened existing collective agreements – a move that, understandably, was bitterly resisted by public sector unions."¹³¹³ Paradoxically, Hayden notes, the extra time off was eventually "welcomed" by workers who gradually realized the non-wage benefits of the extra leisure time.¹³¹⁴

2) **Bell Canada:** Instead of laying off 5,000 employees in 1994, Bell Canada introduced a 36-hour (4-day) workweek for 12,000 technicians. Workers who were initially opposed to the idea, because it involved the loss of two hours a week of wages, ended up voting 70% in favour of the agreement because it guaranteed against lay-offs. Once the new work schedule was in place, the workers became quick converts. The reduction in pay was minimal (\$30 per week on average after tax) and the long weekends were popular. Workers could still work overtime if they wanted to do so. But by the year's end, workers were back on regular schedules because management was faced with "unexpected and costly difficulties" that led them to terminate the plan.¹³¹⁵

According to Julie White, a researcher with the Communications, Energy and Paperworkers Union, which represented the Bell employees in the negotiations, management had miscalculated its work requirements, and found that the shorter weeks did not leave enough workers to get the needed jobs done. Management also found it expensive and inconvenient to have employees off work on Mondays and Fridays, the busiest days for the company. In order to meet demand on those days, Bell workers clocked more overtime than ever. The workers were "very happy," says White. But by the end of the year Bell management "realized it had been a complete wash for them and wouldn't hear of continuing it on any basis whatsoever. It's very much an example of management being totally unprepared."¹³¹⁶

In the course of its research on the hours of work and the potential for job creation and improved work-family balance, GPI Atlantic has examined dozens of case studies of shorter worktime and flexible work arrangements in Europe and North America, in both the public and private sectors. From both successful and unsuccessful experiments, it is possible to draw several important lessons about what works and what does not.

For example, a successful experiment in Albany, New York, gave civil servants the summer off on a voluntary basis, and hired university students eager for summer work as replacements on a temporary basis. Because the students were hired for lower rates of pay to fill clerical positions,

¹³¹³ Hayden, 1999, op. cit., pp. 118-119.

¹³¹⁴ Idem.

¹³¹⁵ Ibid. pp. 122-123.

¹³¹⁶ Willis, John. 1998. "The New Work Order. A Roundtable on the Future of Work." *THIS Magazine*. July/August. Toronto. pp. 16-21. Julie White was one of the participants in the roundtable discussion.

the New York civil service saved substantial sums of money. The civil servants were guaranteed re-entry into the work force in September.¹³¹⁷

In general, successful work time reduction plans – that meet expectations of job creation *and* that are welcomed by employees and employers – have successfully balanced a number of key elements including consensus and cooperation among partners; legislation; financial incentives; collective bargaining; a range of voluntary options; and gradual, phased implementation allowing time for education and adaptation.¹³¹⁸ These will be discussed in further detail in Chapter 15 on *Policy Recommendations*.

In addition, according to University of Toronto labour economist, Frank Reid, there are three key elements necessary for work time reduction to create new jobs. These are:

- A large reduction in worktime – by 10%-20% (i.e. equivalent to a half-day or full day each week). Ideally, this magnitude of work reduction would be achieved by the implementation of a wide range of work reduction options that can be voluntarily chosen by employees. The wider the range of options, the higher the rate of voluntary take-up by employees will be. While a 10-20% reduction in worktime may seem large, it would do no more than bring North American work hours more closely into line with average hours currently worked in Western Europe.
- The reduction affects many workers at once.
- A strong commitment to the restriction of overtime use.¹³¹⁹

These will be discussed in further detail below.

13.2.1 Worktime Reductions and Productivity Increases

Evidence suggests that small reductions in worktime do not, even proportionally, result in the creation of as many jobs as large reductions do. For instance, Pierre Larroutou, a proponent of the 4-day workweek in France, estimated that the 35-hour week would create between 200,000 and 280,000 jobs, compared to 1.6 million jobs created with a 32-hour week.¹³²⁰ This is because small reductions in worktime are compensated for by increased productivity, while larger reductions require proportionately greater hiring.¹³²¹

¹³¹⁷ Colman, Ronald and Anders Hayden. 1999. *Work Time Reduction in the Nova Scotia Civil Service. Recommendations to the NS Government and Public Sector Unions based on Successful Work Time Reduction Experiments in Europe and North America*. Genuine Progress Index Atlantic. Halifax.

¹³¹⁸ For more detail on these elements please see Colman, Ronald and Anders Hayden. 1999. *Work Time Reduction in the Nova Scotia Civil Service. Recommendations to the NS Government and Public Sector Unions based on Successful Work Time Reduction Experiments in Europe and North America*. Genuine Progress Index Atlantic. Halifax. pp. 8-29.

¹³¹⁹ These three factors necessary for creating new hires are from labour economist Frank Reid. Cited in O'Hara, Bruce. 2000. *The Case for Shorter Work Time*. Available from <http://www.vcn.bc.ca/timework/share.htm>. Accessed November 17, 2002.

¹³²⁰ Pierre Larroutou is a workplace consultant with Arthur Andersen. From Hayden, 1999, op. cit., p. 142.

¹³²¹ Idem.

In *Hours of Work in Industrialized Countries*, Archibald Evans lists some of the factors that result in increases in productivity when work hours are reduced:

- Most people work more intensely over a short period of time than they are willing or able to work over longer periods.
- The reduction in hours has a favourable impact on absenteeism and sick leave. For example, employees on shorter hours tend to schedule doctor and dentist visits and other errands in their free time rather than during work hours.
- Changes in work hours often stimulate the re-examination of production methods and will often result in improvements in this area.
- The higher cost of an hour of labour may stimulate the search for more capital-intensive measures of production.
- Reduced hours may create better relations between labour and management and improved workplace morale, resulting in higher productivity.¹³²²

According to one U.S. study of 34 manufacturing plants, long hours and overtime are not necessarily more productive than shorter hours. The study concluded that "for hours above eight per day and 48 per week, it usually took three hours of work to produce two additional hours of output when work was light. When the work was heavy, it took about two more hours of work to produce one hour of additional output."¹³²³

Evans cites numerous studies from the 1960s and 1970s which all came to the same conclusion: a reduction in work hours is accompanied by an increase in *hourly* production and output.¹³²⁴

Productivity "offsets," as they are called, are important when it comes to the job creation potential of reduced hours. They are also important because they can be returned to employees in the form of financial incentives to reduce hours voluntarily. For instance, workers can opt to take future productivity increases in the form of leisure rather than wages.¹³²⁵

In addition to hourly productivity increases, there are other factors which play a role in making the job creation potential of work hours reductions less than a simple arithmetic exercise.¹³²⁶

¹³²² Evans, Archibald A. 1975. *Hours of Work in Industrialized Countries*. International Labour Organization. Geneva. pp.67-68.

¹³²³ From U.S. Department of Labor. 1947. *Hours of Work and Output*. Cited in Evans, 1975, op. cit., p. 69.

¹³²⁴ According to Anders Hayden, only in rare and extreme cases would total production actually increase. Thus it is important to distinguish here between hourly productivity increases on the one hand and total production on the other. From Hayden, Anders. Author of *Sharing the Work, Sparing the Planet*. Reviewer comments. August 25, 2003.

¹³²⁵ It should be emphasized that this discussion about the benefits of reduced work hours applies to those workers who a) want to reduce work hours, b) are overworked, c) are having difficulty balancing their work and their life, and d) are already adequately employed. For those individuals who are underemployed or unemployed, more hours are obviously more desirable rather than fewer hours. In addition, there is a growing number of workers who work excessively long hours at very low wages and who are still unable to make ends meet. For them, more hours are not the solution. But neither are less hours. In fact, it must be acknowledged that changes in work schedules are certainly not a panacea for all workplace problems. Low-wage workers currently putting in long hours need other solutions, like better jobs with higher remuneration. They also need a strong and adequate social safety net.

¹³²⁶ For instance, if a workforce of 1 million people working on average 2,000 hours per year were to reduce their workweek by 10%, it would free up 200 million hours. Based on a new workweek of 36 rather than 40 hours, this

Frank Reid, a labour economist at the University of Toronto's Centre for Industrial Relations, says there is a "leakage effect" or a variety of "barriers" that "inhibit" the straightforward translation of reduced hours into new jobs. "Skill mismatches" may exist between the workers reducing hours and the new hires. In other words, there are many employees with specialized skills that cannot be replaced easily. It is unlikely, according to Reid, that many of the unemployed, for instance, who have the greatest interest in job creation, would have the skills to fill vacancies of professionals or managerial workers – those most interested in worktime reductions.¹³²⁷ There may also be geographical mismatches between those reducing their hours and those wanting to increase their hours.¹³²⁸

The discovery of skill or geographical mismatches does not mean work hours reduction cannot succeed. It simply indicates where skills training programs are necessary. Just as in any economic or market adjustment, new demands and sectoral shifts require new education and training initiatives. Thus, the identification of these obstacles is not an argument to dismiss work reduction as a strategy for job creation, but indicates rather that the strategy must be *accompanied* by other appropriate strategies such as investment in skills training. Geography may be a more difficult barrier to overcome, but this kind of disparity, in regional unemployment rates for instance, already exists. It is not a function of the redistribution of work hours. In other words, it is not a question of whether work reduction and redistribution can work, but rather a question of whether we as a society are willing to invest the time and money for training programs to overcome mismatches if they arise.¹³²⁹

In addition, Reid says that some of the reduced worktime may go into the increased use of capital equipment or be cancelled out by other employees working overtime. For instance, rather than hire new workers, some firms might get their existing employees to work overtime to replace those workers who reduce their hours by taking longer vacations and leaves of absence. Hours reductions and leaves by some employees may also result in increased unpaid overtime where existing workers are forced to make up for the work of those away. In other words, for all these reasons, the hours freed up by reduced worktime may not be replaced by new hires.¹³³⁰

Some workers on reduced hours (especially compressed workweeks) may also choose to take on other work and moonlight in order to make more money, thus again reducing the job creation potential of hours reductions.

reduction would theoretically and arithmetically, produce more than 100,000 new full-time jobs. However, the analysis here indicates that the equation is not so simple or straight-forward.

¹³²⁷ Reid and Gunderson, Forthcoming, op. cit., pp. 121-122. Another related argument is that if a key goal of worktime reduction is to make room for the unemployed in the labour market, then it is generally those in lower skilled manual jobs who must receive new training, since the unemployed generally come from that background. (White, 1987, op. cit., pp. 28-29) However, while this may have been the case in the late 1970s, today the unemployment net includes workers from a far wider variety of industries and occupations. In fact, unemployment in the early to mid-1990s in Canada particularly affected white-collar workers.

¹³²⁸ Ehrenberg, Ronald G. and Paul L. Schumann. 1982. *Longer Hours or More Jobs? An Investigation of Amending Hours Legislation to Create Employment*. New York State School of Industrial Labor Relations. Cornell University. New York. p. 40.

¹³²⁹ Ibid. pp. 40-44.

¹³³⁰ Reid and Gunderson, Forthcoming, op. cit., p. 121.

Some have argued that the promise of new jobs would simply encourage the reserve of "hidden" unemployed to enter the labour force rather than reduce the unemployment rate. The addition of previously discouraged workers, who had given up looking for work, to the labour force would mean that the unemployment rate would not be reduced, as the unemployment rate is calculated as a percentage of the labour force rather than as a percentage of the working age population as a whole.¹³³¹ However, this argument points more to the problem of an inaccurate and inadequate calculation of the unemployment rate than it does to any problem with the job creation potential of work reduction. On the contrary, the argument reinforces the fact that the freed up hours created through work reduction do have the potential to create new jobs and provide more employment opportunities.

In 1994 the Federal Advisory Group on Working Time and the Distribution of Work concluded from a review of existing evidence that a 10% reduction in working time would produce a 5% increase in productivity (output per hour).¹³³² For example, if an employer were to cut work hours by four hours per week (10% of a 40 hour workweek), it would only cost the employer the equivalent of a loss of two hours because of the increased productivity associated with the reduced worktime. Furthermore, this employer may only look for new workers to replace two hours of lost time (not four), thus cutting the job creation potential indicated by the freed up hours in half.¹³³³

Some analysts have concluded that *all* the above factors – productivity offsets, skill mismatches, substitution into capital rather than employees, and increased hours from overtime or moonlighting by some employees – together reduce the job creation potential of hours reduction by 50%. In other words, it is reasonable to conclude from the available evidence that about half of worktime reductions translate into new jobs.¹³³⁴

The fact that reduced work hours do not translate on an hour-to-hour basis into new jobs does not make this reform any less *socially* desirable. First, if implemented properly, the number of jobs that shorter work hours are capable of creating is not insignificant, and can improve the lot of those who are underemployed or jobless. As noted earlier, the 35-hour week in France is credited with creating 300,000 new jobs, and work-hours reductions in the Netherlands are credited with contributing to a drop in the unemployment rate from 12% to just over 2%. Second, as also noted, there are many other social benefits to shorter work hours, including improved health, better balance between work and family, and more leisure time, which increase the quality of life and wellbeing of those who already have work.

13.2.1.1 Productivism

According to Anders Hayden, the idea that we can reduce work hours while at the same time stimulate economic growth is "environmentally suspect."¹³³⁵ It is true that reduced work hours

¹³³¹ Best, 1981, op. cit., p. 53.

¹³³² Based both on consultations with representatives of European countries that had implemented work reduction schemes and on discussions with Canadian firms that had experimented with shorter workweeks.

¹³³³ Advisory Group on Working Time and the Distribution of Work (AGWTDW), 1994, op. cit., p. 75.

¹³³⁴ Reid and Gunderson, Forthcoming, op. cit., p. 124; AGWTDW, 1994, op. cit., p. 75.

¹³³⁵ Hayden, 1999, op. cit., p. 64.

can increase productivity, and can potentially result in longer operating hours for firms and the more intensive use of machinery if shorter work hours are combined with an increase in shift work. In the conventional measures of progress based on GDP growth rates, these outcomes are all good for the economy and would add to the GDP. However, Hayden coins the word "productivism" for the widespread tendency of firms to use work-hours reductions simply to increase production. This occurs particularly when firms trade shorter hours for new work schedules that increase shiftwork, demand greater worker flexibility to increase and reduce their hours in response to changes in demand, and keep machinery operating for longer hours.

From a GPI perspective, therefore, further distinctions must be made to assess whether the increases in productivity that can result from reduced work hours are actually improving overall wellbeing or not. For example, if more hours are available for improved access to public services such as libraries or health care, then social wellbeing may be improved. But, as Hayden points out, if the productivity increases that result from work hours reductions are "about pushing machinery to churn out more stuff for excess consumption the planet cannot afford, that is a different matter." He points out that "infinite growth on a finite planet is clearly impossible. However, efficiency advocates, among others, point out that it is not the growth of Gross Domestic Product (GDP) itself that creates environmental problems and faces limits, but the growth of "throughput" – that is, resource and energy input and pollution output."¹³³⁶

Further, the use of shorter work hours to increase shift work – a frequent trade-off when employers use work time reduction to reorganize work schedules and to keep machinery operating for longer hours – may actually have negative effects on health, families, and social life. The Dutch experiment, one of the leading examples of shorter work hours in the industrialized world, has been criticized by some Dutch church leaders for the new "24-hour work day" and an increase in un-social work hours that threatens family life.¹³³⁷

Therefore, hourly productivity increases, in and of themselves, may or may not benefit society at large, and these examples again warn that work-hours reductions cannot be considered in isolation from the other social, economic, and environmental variables that constitute progress in the GPI. The quality, necessity, and nature of the "product" that emerges from productivity increases must be evaluated, along with the trade-offs made in reducing work hours.

13.2.2 Overtime Restrictions and Job Creation Potential

"People should spend overtime in life, not work."¹³³⁸

In 2001, an average of 1.2 million Canadians were out of work. At the same time, 2.4 million Canadians, or about 20% of the workforce, clocked about 21 million hours of overtime every week. In Nova Scotia in that same year, 72,200 employees (about 21% of the workforce) worked

¹³³⁶ Ibid. p. 3.

¹³³⁷ European Industrial Relations Observatory (EIRO). 1998. *Churches Rally Against the 24-hour Economy*. Available from <http://www.eiro.eurofound.ie/1998/07/feature/n19807189f.html>. Accessed January 19, 2004.

¹³³⁸ Ron Healey cited in Hayden, 1999, op. cit., p. 84.

about 643,000 hours of overtime each week while 45,600 people were jobless.¹³³⁹ Among those who work overtime in this province, nearly 38% get paid for it, while a striking 59% do not.¹³⁴⁰ In other words, in a typical week in Nova Scotia in 2001, roughly 373,000 hours were worked free of charge.¹³⁴¹

A simple arithmetic calculation indicates that the 21 million overtime hours clocked in Canada in 2001 are the equivalent of 525,000 full-time jobs. In Nova Scotia the 643,000 overtime hours would amount to more than 16,000 jobs, assuming a 40-hour workweek. If every one of these jobs were filled from the ranks of the unemployed, it would reduce unemployment by 35%.¹³⁴²

If we were to only consider paid overtime hours, the full-time job equivalents would be fewer. In Canada in 2001 there were 9 million hours of paid overtime per week (compared to more than 11 million unpaid overtime hours/week), with paid overtime the equivalent of 225,000 full-time jobs. In Nova Scotia, an average of 241,000 hours of paid overtime were worked every week, equal to more than 6,000 full-time jobs.¹³⁴³

The job creation potential of reducing overtime is evident in many work places that regularly use overtime instead of hiring. For instance, a union local recently went on strike at a cement-making company in Bath, Ontario, because workers were tired of having to work 300 to 400 hours of overtime a year. The workers cited concerns about safety, fatigue, injuries, and increased exposure to dust. The strikers noted that at least 20 new workers could be hired at the plant if overtime stopped. Instead the company wanted *more* access to overtime, not less.¹³⁴⁴

One study on overtime by the U.S. Bureau of Labor Statistics (BLS) analyzed overtime hours in the manufacturing sector between March, 1991, and January, 1998. The study found that the number of production workers in manufacturing increased by 601,000 during that time period, which they described as "modest" growth. Over this same time period, overtime hours increased by 48%. The study estimated that the full-time equivalents from the aggregate overtime change in manufacturing amounted to 571,000 jobs. In other words, "if employers had hired new workers instead of increasing overtime, nearly twice as many production workers would have been hired."¹³⁴⁵

¹³³⁹ Weekly overtime hours calculated by multiplying the average number of overtime hours of overtime workers in 2001 (8.9 hours) with the total number of employees working overtime in that year (72,200). Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

¹³⁴⁰ Approximately 3% of those who work overtime in N.S. work both paid and unpaid overtime hours.

¹³⁴¹ Total weekly unpaid overtime hours calculated by multiplying the average overtime hours of employees working unpaid overtime (8.8 hours) with the total number of employees working unpaid overtime (42,400).

¹³⁴² That is, using the official number of unemployed in Nova Scotia in 2001, which does not include the so-called "hidden" unemployed – including discouraged workers and involuntary part-timers.

¹³⁴³ Calculations based on paid and unpaid overtime hours, as reported in Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

¹³⁴⁴ Communications, Energy and Paperworkers Union of Canada. 2003. *CEP Shorter Work*. Available from http://www.cep.ca/swtime_e.html. Accessed June 20, 2003.

¹³⁴⁵ Hetrick, Ron L. 2000. "Analyzing the Recent Upward Surge in Overtime Hours." *Monthly Labour Review*. Bureau of Labor Statistics. Washington DC. pp. 30-33.

In Canada, between 1997 and 2001, 238,000 jobs were created in the manufacturing sector.¹³⁴⁶ During this same time period, 28 million *additional* overtime hours were worked in the manufacturing sector in 2001 over and above the overtime hours worked in 1997. This increase in overtime alone amounted to roughly 6,700 full-time equivalent jobs.¹³⁴⁷ In Nova Scotia during the same time period, 4,600 jobs were created in manufacturing and 1.1 million *additional* overtime hours were worked in the sector – equivalent to roughly 260 jobs that could have been created.¹³⁴⁸

Furthermore, 4.3 million overtime hours were worked in Canada in 2001 in the manufacturing sector alone. In Nova Scotia in the same year, 84,600 overtime hours were worked in manufacturing. If all these overtime hours were converted to new jobs, an additional 53,300 jobs would have been created in Canadian manufacturing in 2001 and an additional 1,060 jobs would have been created in manufacturing in Nova Scotia.¹³⁴⁹

Many labour analysts argue that the simple arithmetic translation of overtime hours to full-time jobs is an "abstraction," and that the realities of the workplace have to be taken into account. For example, overtime hours are often not systemic and regular, but may be required in direct response to sudden increases in demand. Those demand fluctuations are not easily dealt with through new full-time hires, but can more readily be responded to through temporary increases in overtime hours among particular employees. These mechanical calculations above should therefore be regarded as yielding a *maximum* potential estimate of employment creation, with the real numbers likely considerably lower. Clearly, a number of factors must be considered before drawing any conclusions about job creation potential. Nevertheless, analysts agree that, even when these actual workplace conditions, demand fluctuations, and other circumstances are considered, the job creation potential of reducing overtime hours can be substantial.¹³⁵⁰

Essentially, there are two main policy options that could potentially reduce overtime:

- Increase the overtime premium – the higher hourly rates paid for overtime work.
- Shorten the standard workweek after which overtime applies.¹³⁵¹

These will be discussed separately below.

¹³⁴⁶ Statistics Canada began collecting data on overtime in 1997. Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

¹³⁴⁷ The full-time equivalent of the aggregate change in overtime hours in Canada is calculated by taking the difference between the average weekly overtime hours (worked by overtime workers) in 1997 and 2001 which gives 532,700 hours. This is then divided by 40, representing the usual length of a full-time work week. Assuming a 50% conversion into new jobs, the final figure is 6,659. Data from Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

¹³⁴⁸ Idem. Using full-time annual hours, the additional overtime hours could have created about 523 new jobs in Nova Scotia, or about 260 jobs if just 50% of the additional overtime hours had been converted to full-time job equivalents.

¹³⁴⁹ Final figures are assuming a 50% conversion into new jobs. Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

¹³⁵⁰ Blyton, 1985, op. cit., pp. 49-50; Ontario Task Force on Hours of Work and Overtime. 1987a. *Working Times: Phase II. The Report of the Ontario Task Force on Hours of Work and Overtime*. Ministry of Labour. Toronto pp. 92-93.

¹³⁵¹ Ontario Task Force on Hours of Work and Overtime, 1987, op. cit., pp. 91-93.

Increasing the Overtime Premium

In 1987, the Ontario Task Force on Hours of Work and Overtime examined empirical evidence in the U.S., and found that raising the overtime premium does discourage the use of overtime. Relative to other options, including new hiring and training, it becomes more expensive for employers to opt for overtime.¹³⁵²

The Task Force found that the magnitude of the reduction in overtime occasioned by raising overtime premiums depends on a number of factors:

- The effect will be small if it is not easy to substitute other inputs such as new hires, part-timers, or those already on lay-off, for the reduced overtime hours.
- The reduction will be small if additional overtime hours are a small portion of the employer's cost of doing business.
- The effect will be small if the associated labour cost increase (from the increased premium) can be passed onto consumers in the form of higher prices without reducing demand.¹³⁵³

U.S. studies indicated that a 1% increase in the overtime premium was associated with less than a 1% decrease in the use of overtime hours. Empirical evidence showed that a 33% increase in the overtime premium from time and a half to double time (1.5 to two) would be associated with a 20% reduction in overtime use.¹³⁵⁴

Data from the U.S. further indicates that if the overtime premium were raised from 1.5 to two times the regular hourly wage, the resulting increase in employment would range from 0.5% to 2% of the workforce, with the average at 1.25%. In other words, in Ontario's workforce of 4 million full-time workers at the time of the study, an increase in the overtime premium from 1.5 to two times the regular hourly wage would likely produce 50,000 new jobs, with a minimum of 20,000 and a maximum of 80,000 possible.¹³⁵⁵

The possibility of reducing overtime in this way has only recently applied to Nova Scotia because prior to the recent changes made to the province's Labour Standards Code, overtime was calculated in relation to minimum wage, not regular hourly wages. The new changes now make the considerations of an overtime premium valid in this province (for most workers), and may provide a disincentive for employers to use overtime.¹³⁵⁶ Therefore, the new legislation, though far from increasing overtime to 2X regular wage, nevertheless does constitute a *sharp* increase in the overtime premium from 1.5X minimum wage (affecting very few workers and providing no

¹³⁵² Ibid. p. 92.

¹³⁵³ Idem.

¹³⁵⁴ Idem. Also: Human Resources Development Canada. 1997. *Evaluation of Federal Labour Standards. Phase 1. Final Report*. Available at <http://www11.hrdc-drhc.gc.ca/pls/edd/FEDLABSTAN/lhtml>. Accessed January 15, 2003.

¹³⁵⁵ Ontario Task Force on Hours of Work and Overtime, 1987, op. cit., p. 92.

¹³⁵⁶ The overtime premium of 1.5X the regular wage does not apply to professionals such as doctors or lawyers, or managers and supervisors. In addition, the minimum wage order was restored for the logging and forestry industry. From Nova Scotia Department of Environment and Labour. 2003. *New Regulations to Clarify Overtime Provision*. Press Release. November 28, 2003. Available from <http://www.gov.ns.ca/news/details.asp?id=20031128002>. Accessed November 30, 2003.

real financial incentive to employers) to 1.5X regular wage (affecting far more employees). This can be expected to increase jobs in the province.

There are a number of "offsetting" factors that may lower the employment gains from reduced overtime:

- Some of the "substitution" from overtime hours may go into additional capital or other inputs, and not necessarily into hiring new workers.
- Higher labour and production costs mean higher prices, leading to a decline in demand and hence output, which in turn reduces the need for labour. The Ontario Task Force estimated that a 33% increase in the overtime premium to double time could raise prices and dampen demand sufficiently to reduce the expected employment gains by about 20%.
- Small businesses with only a few employees may not be able to substitute a new person for the reduced overtime hours.
- Skill mismatches mean that some new jobs may be difficult to fill due to skill shortages or geographical limitations. Evidence suggests that 8.5% of potential new jobs would remain empty. In other words, if a 33% increase in the overtime premium produced a 1.25% increase in jobs – or 50,000 potential new jobs in Ontario's 1987 workforce of 4 million full-time workers – then about 4,250 of those new jobs would not in fact be filled due to lack of appropriate skills.
- About 10% to 20% of employees who work overtime do not actually receive the existing legislated overtime premium of time and a half. If this non-compliance rate remained the same with a premium increase, then employment gains would be reduced by a corresponding 10% to 20%. If the incidence of non-compliance increased, then employment gains would be even less.¹³⁵⁷

Assuming that all these offsets exist at the same time, it can be estimated that together they would reduce expected employment gains by about 50%. Therefore, if the estimated number of jobs that might potentially be created through increasing overtime premiums and reducing overtime is 50,000, then this gain would likely be reduced to 25,000 because of the aggregate effects of the offsets noted above.

Despite the potential offsets described here, it is not unusual for the job creation potential from reduced worktime to be calculated based on the assumption that one work-hour freed produces one work-hour created for a new employee. Thus, in 1997 Statistics Canada found that the equivalent of 169,000 new full-time jobs could be created in Canada if the 6.8 million hours of overtime worked in one week in November 1995 were translated into new hires.¹³⁵⁸

The Statistics Canada report acknowledges that its estimate is based on several assumptions, namely that the factors outlined above would not offset any employment gains. In addition, Statistics Canada estimated that the additional 169,000 jobs could reduce the unemployment rate at the time from 8.7% to 7.5%. Again, this presupposes that there are no obstacles to the straight

¹³⁵⁷ Ibid. p. 94.

¹³⁵⁸ Galarnau, Diane. 1997. "The Redistribution of Overtime Hours." *Perspectives*. Catalogue no. 75-001-XPE. Statistics Canada. Ottawa. p. 26. Statistics Canada based its calculation on a standard workweek of 40.5 hours – the average number of weekly hours reported by full-time workers in Canada in November, 1995.

conversion of overtime hours to new jobs, and that the "announcement of new jobs would not persuade new workers to enter the labour force," thus dampening the decline in the unemployment rate.¹³⁵⁹ But even if all the offsets were operational and if they did reduce the expected employment gains by 50% as noted above, the potential gain of 84,500 jobs remains substantial.

In the early 1980s a U.S. study found for the first time that income distribution also affects overtime use. The study found that overtime premium legislation produced the greatest benefits to middle-income families than to lower-income families or higher-income families since low-income families were disproportionately represented in those occupations where little overtime was worked and higher-income families tended to work more unpaid overtime. For this reason the study concluded that raising the overtime premium was a "regressive" measure.¹³⁶⁰

The same study found that increases to the overtime premium would bring substantial financial benefits to the middle and high-income groups that would increase income disparities. It found that incomes over US\$20,000 (\$1982) – equivalent to nearly Cdn\$50,000 today – accounted for 25.6% of U.S. families but 45.9% of those working overtime, and that the higher the income, the higher the likelihood of overtime. However, at income levels over US\$25,000 (1982) – equivalent to roughly Cdn\$62,000 today – the study found that overtime was more likely to be unpaid.¹³⁶¹

Future updates of this report should investigate overtime hours by income group for Nova Scotia and Canada, in order to assess whether increasing the overtime premium here would likely have a regressive net effect when impacts on job creation and income disparity are both taken into account.

Because a majority of overtime hours are currently worked for free, a reduction in overtime will require more than just an increase in the overtime premium. As previously noted, in 2001 there were more unpaid overtime hours in Canada and Nova Scotia than paid ones. Eleven million unpaid overtime hours were worked in Canada compared to 9 million for pay, and in Nova Scotia, 59% of those working overtime were did so for free, working a total of 373,000 hours.¹³⁶²

Shortening the Standard workweek

The length of the legislated workweek determines when the overtime premium takes effect. Reducing the legislated workweek means that a worker would be paid overtime after fewer hours of work (for example after 40 hours rather than 48, or after 36 hours instead of after 40 hours).

¹³⁵⁹ Idem.

¹³⁶⁰ Ehrenberg, Ronald G. and Paul L. Schumann. 1982. *Longer Hours or More Jobs? An Investigation of Amending Hours Legislation to Create Employment*. New York State School of Industrial Labor Relations. Cornell University. New York. pp. 90-101.

¹³⁶¹ 1982 U.S. dollar amounts were first converted to Canadian funds using the U.S. exchange rate for June, 1982 of 1.28. The Canadian dollar amounts were then converted to 2003 constant dollars using the Consumer Price Index. From Statistics Canada. *CANSIM Database*, Matrix 926. Exchange rates in Canadian \$, monthly unadjusted. Also, Bank of Canada, *Inflation Calculator*.

¹³⁶² Calculations derived from data in Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

This has a similar effect to raising the overtime premium, since the cost of additional overtime hours will rise relative to the cost of new hires. This overtime disincentive could therefore lead to new job creation.¹³⁶³

As this report went to press, the Nova Scotia government had made amendments to new legislation that promised changes to Nova Scotia's labour laws so that overtime would be paid at time and a half of a workers' hourly wage (vs. 1.5 time minimum wage), after 48 hours a week. However, once the new legislation was introduced, the business community protested the economic impact of paying overtime rates would be too severe. In response to the outcry from the business community, the government amended the new overtime provisions by extending the workweek of the roadbuilding and construction industry to 55 hours, instead of 48. In other words, overtime at 1.5 times regular pay would only have to be paid after 55 hours of work/week. The new regulations also reinstated some pre-existing exemptions for professionals, managers and supervisors. The minimum wage order was also restored for the logging and forestry industry. The only other provinces in Canada that do not pay overtime at least time and one-half of the regular wage are New Brunswick and Newfoundland, which pay one-and-a-half times the minimum wage.¹³⁶⁴

If the workweek were reduced, a firm that opted not to hire new workers but simply pay more overtime to existing staff would find its labour and production costs rise because it would have to pay overtime sooner and for more hours than previously. This cost increase would occur even if overtime premiums remained the same. This increased cost, when weighed against the cost of new hires, might result in the creation of jobs.

Studies have found that reducing the length of the standard workweek had a "significant employment-enhancing effect" in firms that did not use overtime prior to the reduction in the workweek. Firms that did use overtime used more once the workweek was reduced, so that labour costs went up, and potential job creation was offset.¹³⁶⁵

These findings demonstrate that any worktime reduction plan must take into account how firms are likely to react to the proposed changes, based on the empirical evidence available. Pure mechanical and arithmetic translations of overtime hours to new jobs that do not account for a wide range of offsets, are likely to signify maximum levels of job creation potential. A more realistic accounting of likely reactions from businesses does not mean dismissing the job creation potential of overtime reduction. Rather, it points to policies that could be introduced to offset some of the costs associated with additional hiring. For example, payroll tax reductions could be offered for documented conversions of overtime hours to new hires. Thus, *disincentives* to overtime use can be creatively combined with *incentives* to job creation, as in the French and Belgian examples noted earlier where tax incentives helped stimulate a redistribution of hours in the interests of new job creation. These policy options will be discussed in Chapter 15 on *Policy Recommendations*.

¹³⁶³ Ontario Task Force on Hours of Work and Overtime, 1987, op. cit., pp. 94-95.

¹³⁶⁴ Nova Scotia Department of Environment and Labour. 2003. *New Regulations to Clarify Overtime Provision*. Press Release. November 28, 2003. Available from <http://www.gov.ns.ca/news/details.asp?id=20031128002>. Accessed November 30, 2003.

¹³⁶⁵ Idem.

13.2.3 Job Creation Potential of Early and Phased Retirement

Early Retirement

According to the Advisory Group on Working Time and the Distribution of Work, early retirement does not automatically result in new jobs. Over the last decade in particular, early retirement has been a way for the public and private sectors to "downsize" their workforce – by enticing older, higher paid workers to leave voluntarily with retirement packages.

Many retirees also maintain connections with the workforce by taking on other work or starting a business. However, the evidence suggests that the majority of those who take early retirement do withdraw from the workforce, leaving potential spaces for new, and younger workers.¹³⁶⁶

There have been a number of European examples where incentives were offered to encourage older workers to retire early and employers to replace them with young, unemployed people. The Advisory Group studied many of these early retirement plans and the problems encountered in attempting to translate them to new jobs. Overall, the Advisory Group concluded, the plans were very costly to government and had only modest job creation potential:

- The cost of paying additional pension benefits for early retirees exceeded the costs of paying unemployment benefits for the younger worker, because the "additional pension obligation attached to the early retirement could involve up to five years of extra pension benefits, whereas the expected periods of unemployment for younger workers were normally less than one year."
- Incentive programs to convert early retirement options to new job creation were abused by firms who were already planning on expanding their workforce.
- Some firms used the programs to avoid paying severance to older, senior workers whom they were planning to lay off anyway.¹³⁶⁷

As a result of these problems, early retirement plans that are still offered in Europe have tightened eligibility requirements.

Phased-in Retirement

The benefits of phased-in or gradual retirement for the retiree, the firm and for co-workers have been discussed in Section 13.1.9. Based on these documented benefits, and on the "sheer demographic weight that the older-worker population will have in our society in years to come," the Advisory Group concluded in its report that initiatives to encourage voluntary early or phased-in retirement have "a small but significant potential for job creation or preservation, as well as for enhancing the choice and quality of life of those affected."¹³⁶⁸

¹³⁶⁶ Advisory Group on Working Time and the Distribution of Work (AGWTDW), 1994, op. cit., p. 47.

¹³⁶⁷ AGWTDW, 1994, op. cit., pp. 48-49.

¹³⁶⁸ Idem.

13.2.4 Size of the Firm and Job Creation Potential

The ability to turn a reduction in work hours alone into new jobs depends largely on the size of the firm. For example, if the workweek were reduced from 40 hours to 35 hours and a small business had only five employees, it would mean that 25 hours would become available – enough for one part-time job. A smaller hours reduction would translate into fewer available hours and an even greater difficulty in cobbling together a job for someone. An even greater obstacle is that the one potential new part-time job would be created by combining the hours from five potentially very different jobs. Finding a suitable person to take over the additional freed up hours might prove very challenging.¹³⁶⁹ By contrast, a large assembly line firm with large numbers of fairly similar jobs would have a much easier time converting hours reductions to new jobs.

Another problem cited by business representatives is that small firms located in rural areas may have great difficulty in recruiting skilled employees to replace those working fewer hours.¹³⁷⁰

This challenge, as it pertains to Nova Scotia, will be discussed in further detail in Chapter 14.

¹³⁶⁹ Cuvillier, 1984, op. cit., p. 74; Reid and Gunderson, Forthcoming, op. cit., p. 122; Hachey, Leanne. Policy Analyst. Canadian Federation of Independent Business. Halifax. Personal communication. May 30, 2003.

¹³⁷⁰ Hachey, Leanne. Policy Analyst. Canadian Federation of Independent Business. Halifax. Personal communication. May 30, 2003.

Chapter 14. Case Study: Job Creation Potential in Nova Scotia

"Research shows that, under the right circumstances, a major reduction in working time could result in a meaningful decrease in unemployment and a significant redistribution of jobs."

– Advisory Group on Working Time and the Distribution of Work¹³⁷¹

If the Advisory Group was correct in its analysis and conclusion, then there is good reason for Nova Scotia to look carefully at the potential for working-time reduction to create jobs in this province. This chapter examines this potential in some detail and applies the Advisory Group's findings to Nova Scotia conditions and circumstances.

14.1 New Jobs from Overtime Reduction

In 2001, 45,600 people in Nova Scotia were officially without work. At the same time, 72,200 employees (about 21% of the workforce) worked about 643,000 hours of overtime each week. Among these 72,200 overtime workers, 38% were paid for their overtime hours, but 59% were not. Roughly 3% worked both paid and unpaid overtime hours. In other words, in 2001 in a typical week, roughly 373,000 hours were worked free of charge. Assuming that unpaid overtime hours are more difficult to convert into new jobs, as employers have no immediate financial incentive to do so, what would happen if all of the *paid* overtime were eliminated? As the previous chapter stated, straight arithmetic calculations translating one overtime hour to one new job hour may be overly simplistic. The offsets described in the previous chapter will likely reduce the number of full-time job equivalents created through any reduction in overtime hours. Nevertheless, the one-to-one conversion provides an upper limit on possible job creation.

Table 49 therefore shows the maximum effect that an elimination of paid overtime could potentially have had on the unemployment rate in Nova Scotia and Canada in 2001, if all paid overtime hours had been converted into new jobs for the unemployed. In Canada, the creation of 225,000 new jobs would have reduced the ranks of the unemployed by 19%, and brought the unemployment rate down from 7.2% to 5.8%.¹³⁷² In Nova Scotia, the creation of 6,000 new jobs would have reduced the ranks of the unemployed by 13% and brought the unemployment rate down from nearly 10% to 8.4%.¹³⁷³

¹³⁷¹ AGWTDW, 1994, op. cit., p. 3.

¹³⁷² New unemployment rate calculated by dividing the new number of unemployed (945,000) with the labour force in 2001 (16,246,300). Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

¹³⁷³ New unemployment rate for N.S. calculated by dividing the new number of unemployed (39,600) with the total labour force in 2001 (468,900). Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

Table 49. Maximum Potential Effect on Unemployment Rate of Elimination of Paid Overtime, Canada, and Nova Scotia, 2001.

	Total unemployed	Total paid over-time (hrs/wk)	New FTE* jobs created from over-time conversion	% drop in number of unemployed	Unemployment rate	
					Before new jobs	After new jobs
Canada	1,169,000	9 million	225,000	19.2	7.2	5.8
Nova Scotia	45,600	241,000	6,000	13.2	9.7	8.4

*Full-time equivalents based on a 40-hour week and assuming exact arithmetic translation of overtime hours into full-time equivalent jobs.

Note: Unemployment rate after creation of new FTE jobs is calculated by taking the new number of unemployed (2001 actual unemployed minus new FTE jobs potentially created by converting overtime hours) and dividing it by the Labour Force numbers to get the new unemployment rate.

Source: Calculations are based on data from Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

It should be noted that nearly 60% of those who clocked overtime hours in Nova Scotia in 2001 did not get paid for those hours. Overall, more unpaid overtime is worked than paid – roughly 373,000 hours every week by 42,400 workers.

Table 50 shows the job creation potential if both paid and unpaid overtime hours were eliminated in Nova Scotia, and if all those overtime hours had been converted into new jobs in 2001. As noted earlier, it is fully recognized that such a scenario is purely hypothetical, as employers have no incentive to convert unpaid overtime hours which cost them almost nothing into paid positions. Nevertheless, the results are instructive, as they do illustrate that the increasing polarization of work hours and expansion of overtime hours in Canada in the 1990s carries hidden costs in terms of higher than necessary unemployment rates, taxpayer-funded employment insurance, and social security costs.

The results of the exercise indicate that if overtime hours had been eliminated in Nova Scotia's goods-producing sector, roughly 3,300 additional jobs could have been created – an employment increase of nearly 5%, with the majority of jobs being created in manufacturing (2,060) and construction (633). In proportion to the size of their workforces, job creation among goods-producing industries was highest in utilities (7.4%) and manufacturing (5.4%).

Similarly, the elimination of all overtime hours in the service sector would have resulted in an additional 14,300 new jobs overall – with the highest number of new jobs in education (3,500), health care and social services (1,658), and public administration (1,555). New jobs in health would have represented a 13% increase in employment in that sector. The job increases in the professional field (7.9%) and public administration (6.7%) are also relatively high. Among all industries, educators clocked the most overtime hours.

Table 50. Potential Job Creation from Complete Elimination of Paid and Unpaid Overtime, by Industry, Full-time Jobs, Nova Scotia, 2001.

Industry	No. of Paid Employees	Average Overtime Hours per Employee*	Average Straight Hours per Employee	New Jobs with Zero Overtime**	Percent Employment Increase***
Agriculture	4,100	0.7	43.0	67	1.6
Forestry, mining, fishing, oil and gas	8,300	2.1	50.3	347	4.2
Utilities	2,400	2.9	39.2	178	7.4
Construction	17,600	1.5	41.7	633	3.6
Manufacturing	37,800	2.2	40.4	2,060	5.4
Subtotal: Goods Producing Industries	70,200	2.0	42.4	3,285	4.7
Trade	64,800	1.2	34.6	2,247	3.5
Transportation and warehousing	16,100	2.6	42.2	794	4.9
Finance	16,300	1.8	36.5	804	4.9
Professional	12,100	3.0	37.8	960	7.9
Management	13,800	1.4	35.9	538	3.9
Education	27,100	4.3	33.5	3,479	12.8
Health care and social assistance	41,100	1.4	34.7	1,658	4.0
Information, culture, recreation	15,300	1.8	33.6	820	5.4
Accommodation and food services	26,000	1.0	33.3	781	3.0
Other services	11,900	1.7	34.2	592	5.0
Public administration	23,200	2.5	37.3	1,555	6.7
Subtotal: Service Producing Industries	267,700	1.9	35.4	14,228	5.3
Total: All Industries	338,000	1.9	36.9	17,573	5.2
Assuming 50% conversion into new jobs	338,000	1.9	36.9	8,787	2.6

* Includes paid and unpaid overtime hours averaged among all employees in the industry, including those who do not work overtime.

** New jobs calculated by multiplying the number of employees in each industry by the average overtime hours in that industry, and then dividing the result by the average straight-time hours worked in that industry. Numbers in this column are rounded, but are calculated from the un-rounded Labour Force Historical Review data.

*** Per cent employment increase is calculated as the number of potential new jobs in each industry divided by the number of existing jobs in the industry, expressed as a percentage of the existing paid employees.

Note: Industry Classification based on the North American Industrial Classification System (NAICS). This system has been the basis of the Labour Force Survey (LFS) since January 1999 and differs from the preceding Standard Industrial Classification (SIC 1980). Titles of groupings have not changed but what is included within each grouping has changed. In order to provide comparable and consistent time series, Statistics Canada has recalculated its historical data based on NAICS going back to 1987.

Sources: Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa; Ontario Task Force on Hours of Work and Overtime, 1987, op. cit., Table 13.2, p. 104.

If all paid and unpaid overtime had been eliminated across the board for all industries, Nova Scotia could have been 17,573 jobs richer – an increase in employment of 5.2%. If offsets that reflect more realistic industry responses to overtime reduction efforts reduced this job creation potential by 50%, there would have been 8,787 new jobs. In actual fact, the conversion rate would be considerably less, because of the inclusion of unpaid overtime hours, which employers have no incentive to convert to paid work. Therefore, the following should not be considered as descriptive of actual jobs that could be created given current economic realities, but a theoretical exercise designed to illustrate the hidden costs of overtime in terms of lost potential jobs and consequent taxpayer-funded employment insurance and social security costs.

14.2 New Jobs from Hours Reduction

There is a paucity of reference material and quantitative research in Canada on the effects of worktime reduction, with the exception of the work of Frank Reid, labour economist at the University of Toronto, and one significant study conducted by the Federal Advisory Group on Working Time and the Distribution of Work in 1994. The findings of the Federal Advisory Group, informed by the background study and modelling exercise provided by Informetrica Limited, are discussed in further detail below. In addition, Informetrica's background study has been used as the template for Section 14.2.2 below.

14.2.1 Canada

One of the key tasks the federally commissioned Advisory Group on Working Time and the Distribution of Work (AGWTDW) was charged with in 1994 was assessing whether and how shorter working time and a more equitable distribution of work could contribute to job creation in Canada. At the time, unemployment had reached "crisis levels" in Canada. Official rates of joblessness peaked in 1993 at 11.4% – a level of unemployment not seen in the country since the Great Depression. In 1994 the unemployment rate dropped slightly to 10.4%. But for at least 20 years, unemployment in Canada had remained persistently high and had steadily increased. Unemployment rates rose from an average of 4% in the late 1960s to an average of 6.7% in the 1970s, to an average of 9.3% in the 1980s, to over 10% in 1993-94.¹³⁷⁴

Canada was not alone in its job shortage. In the 26 countries of the OECD there were an estimated total of 35 million unemployed at the time of the Advisory Group deliberations – Canada accounting for 1.5 million of these at the time.¹³⁷⁵

In addition to high unemployment, there were other troubling trends characterizing the evolving nature of paid work in the late 1980s and early 1990s. These included the increased polarization of work hours, the rapid growth of non-standard work, and a marked shift away from goods-producing industries to service-producing industries. In addition, many corporations were

¹³⁷⁴ Statistics Canada. *ESTAT Database*; and Statistics Canada. *Canadian Economic Observer. Historical Statistical Supplement*. Catalogue no. 11-210-XPB. Ottawa.

¹³⁷⁵ AGWTDW, 1994, op. cit., pp. 2-3.

responding to increased "competitive pressures" by laying off workers in what became known as "restructuring" or "rationalizing" or "downsizing" the workforce. As a result, no job was secure.¹³⁷⁶ As well, the rapid influx of women into the labour force and the dramatic increase in dual-earner families in the previous two decades had led to a growing struggle by many families to balance the demands of paid work and family life, with women in particular under increasing stress and pressure from their double burden of paid and unpaid work. All these trends gave the Advisory Group's work particular urgency and made its task highly relevant to policy concerns at the time.

In order to calculate the job creation potential and other economic impacts of a reduction in hours worked, the Advisory Group commissioned Informetrica Limited, a computer-modelling, economic analysis and forecasting firm, to apply its Canadian econometric model to the issue. In order to examine the impact of a large-scale reduction in work hours on Canada, a number of assumptions were made in this modelling exercise, based on the available empirical evidence and realistic policy scenarios:

- The working time of all current Canadian workers would be reduced by 10%, which would be followed by a 5% increase in hourly labour productivity, which in turn would partially offset the job creation potential of the reduction in work hours.
- Hours could be reduced in a number of ways: shorter workweeks, more vacation time, phased-in retirement, etc. rather than according to any single method.
- Worktime reductions would be phased in gradually over a five-year period from 1995 to 1999, and then held at the reduced level up to 2004.
- Hourly wage rates would be increased in line with productivity increases so that employer's labour costs would remain unchanged.
- There was assumed to be no effect on inflation or in the exchange rate.¹³⁷⁷

The impacts of reduced hours under these conditions on several key economic indicators were then compared to the status quo.

Table 51 summarizes the main findings of Informetrica's hours reduction simulation for Canada. The Informetrica simulation found that reducing and redistributing worktime by 10% would result in a "substantial redistribution of jobs." Between 1995 and 2004, the unemployment rate was predicted to drop by four percentage points due to the reduction in work hours. GDP would be little affected because neither more nor less was being produced as a result of the change in work arrangements. In other words, the sizes of the "pie" would not change much overall. Real disposable income would decline slightly due to the shorter work hours, but this would be offset by substantial increases in leisure time for those who were working. The situation of the unemployed would also improve because many of them would find work.¹³⁷⁸

¹³⁷⁶ *Idem.*

¹³⁷⁷ *Ibid.* p. 4.

¹³⁷⁸ "Leisure" time would decrease substantially for those who found work after being unemployed. But for them, presumably, this change would be welcomed. Also, it is debatable whether the free time they previously had while unemployed should be termed "leisure," since it was likely unwanted.

In addition, government expenditures on social assistance and employment insurance would decrease, the tax base would widen, and corporate profits would rise slightly. In fact, the fairly substantial predicted increase in government revenues would allow the possibility of a commensurate cut in taxes that would compensate workers for the slight decline in real disposable income. This could produce a revenue-neutral solution for government. As well, part of the predicted increase in real corporate profits could also be returned to employees, thus ameliorating the slight reduction in real disposable income. In other words, the indicators examined should not be looked on in isolation as absolute outcomes of a reduction in work hours. Rather, they suggest appropriate policy responses that could potentially redistribute benefits and produce highly favourable outcomes for all stakeholders.

According to Arthur Donner, who chaired the Advisory Group, the linkage of work time reductions to jobs is both "complex and imprecise.... There are leakages all around." He says: "The Advisory Group simulation concluded that it all depended on whether you viewed the cup half empty or half full."¹³⁷⁹

Table 51. Summary of the Main Findings of Informetrica's Hours Reduction Simulation for Reduction in Worktime by 10%, Canada, 1995-2004.

Selected indicators	1995 %	1999 %	2004 %
Unemployment rate (points)	-0.8	-4.1	-3.9
Real GDP	0.0	-0.0	-0.3
Real disposable income	-0.2	-0.7	-1.4
Real corporate profits	0.1	1.5	2.0
Total Government balance (\$ billions)	1.2	3.0	4.9
Output per hour	1.1	5.7	5.7
Wage rate per hour	1.1	5.7	5.7
Leisure time	0.5	2.6	2.7

Note: Worktime reduction of 10% was phased in from 1995 to 1999 and then maintained at the lower level up until 2004.

Source: Advisory Group on Working Time and Distribution of Work. 1994. *Report of the Advisory Group on Working Time and the Distribution of Work*. Human Resources Development Canada. Hull. Appendix VI, p. 76.

One of the key conclusions reached by the Advisory Group was that the modelling showed "it is possible to reduce the unemployment rate significantly without affecting Canada's inflation rate or international competitiveness."¹³⁸⁰

¹³⁷⁹ Donner, Arthur. Economic consultant, who chaired both the federal Advisory Group on Working Time and Distribution of Work, and the Ontario Government's Task Force on Hours of Work and Overtime. Reviewer comments. August 19, 2003 and August 21, 2003.

¹³⁸⁰ AGWTDW, 1994, op. cit., p. 76.

14.2.2 Nova Scotia

This GPI Work Hours report has found that the basic trends highlighted in the 1994 Federal Advisory Group report continued through most of the 1990s in Canada and in Nova Scotia. The data indicate that from 1996 to 2001 there was an improvement in some of the key indicators, but, for the most part, hours polarization, job insecurity, the incidence of non-standard work, and inequality have persisted and remain more pronounced than 15 years ago. In Nova Scotia, unemployment is still at very high levels, especially in Cape Breton and some rural areas of the province, and there are still large numbers of "hidden unemployed" in the form of discouraged workers and involuntary part-timers.

In 2001 there were 45,600 officially unemployed in Nova Scotia – or 9.7%. But this provincial average conceals wide intra-provincial disparities. The official unemployment rate in the Halifax area in 2001 was 7.1%, just below the national average of 7.2%, while the official unemployment rate in Cape Breton was 18.6%. Once the underemployed and discouraged workers are added in, the more comprehensive unemployment rate jumps to 14% province-wide. This is an improvement from 1997 when nearly 19% of Nova Scotians were unemployed, according to Statistics Canada comprehensive unemployment rate.¹³⁸¹

In Nova Scotia, where unemployment has been as chronic and persistent as it has, any measures to tackle the problem are worthy of serious consideration. As the Advisory Group study showed, reduced worktime is one potentially effective measure that is not currently on the provincial government agenda but can make a significant contribution to job creation in tandem with other measures.

For the purposes of this report we have used Informetrica's background study for the Federal Advisory Group in 1994 as a template for estimating the impact of a 10% reduction in worktime in Nova Scotia. As specific computer modelling was not done for Nova Scotia, we are limited here to estimating changes to the unemployment rate and to leisure time.¹³⁸²

According to Informetrica's background study, the "payoff" for shorter worktime is primarily in the labour market, where unemployment rates can be significantly reduced. Also, workers with reduced hours benefit by having more leisure time.¹³⁸³

¹³⁸¹ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

¹³⁸² It was suggested to GPI Atlantic that in the absence of computer modelling, we should concentrate on the labour force dimensions of a reduction in worktime. From McCracken, Mike. Informetrica Limited. Personal communication. June 29, 2003.

¹³⁸³ McCracken, Mike and Geoff Bromfield. 1994. *Reduction of Working Time: Macroeconomic Issues. Background Study prepared for Advisory Group on Working Time and the Distribution of Work*. Study kindly provided by M. McCracken. June 24, 2003. p. 1.

14.2.2.1 Employment Effects

As noted earlier, a 10% reduction in working time for those who are currently employed would likely result in an increase in hourly labour productivity of 5%. Because of this productivity offset, only about half of the reduction in work hours would result in new jobs.

Thus, in 2001, Nova Scotians worked a total of 15.6 million hours per week. Theoretically, a 10% reduction in work hours would have amounted to almost 1.6 million freed up hours, available both for new hires from among the unemployed and for redistribution among the underemployed.¹³⁸⁴ This is equivalent to roughly 38,740 full-time jobs, or about 85% of the 45,600 officially unemployed that year.¹³⁸⁵ Due to the offsetting effect of productivity increases, only half of the hours reduction would have resulted in new jobs. Therefore, about 19,370 new jobs could have been created. Assuming that all the new jobs were filled from the ranks of the unemployed, this job creation would have brought the unemployment rate down from 9.7% to 5.6%.¹³⁸⁶

However, there is a wide range of intervening variables that complicate the equation between work hours reduction and job creation. For example, the size of businesses in Nova Scotia presents a special challenge in translating shorter work time into job creation potential. Nearly three out of four businesses in this province are small, employing fewer than five people. Nine out of 10 businesses in the province have fewer than 20 employees.¹³⁸⁷

As noted earlier, the ability to create new jobs from the reduction of hours alone depends in part on the size of the firm. For example, if the workweek were reduced from 40 hours to 35 hours and there were only five employees, this would mean that 25 hours would be available – enough for just one part-time job. A smaller reduction in hours would translate into fewer available hours and even greater difficulty in cobbling together a job for a new worker. An additional obstacle is that the new part-time job is likely to be created by combining the hours from five potentially very different jobs, and it may be very challenging to find a worker with the requisite skills to replace several different job functions.¹³⁸⁸

Another problem cited by business representatives is that small firms located in rural areas may face particular difficulties in recruiting skilled employees to replace the lost work hours of other employees.¹³⁸⁹ The evidence indicates that it is much easier for large firms to create new jobs

¹³⁸⁴ The reduction in work hours can be achieved in a number of ways, many of them discussed in Chapter 13. These include shorter workdays, shorter workweeks, sabbaticals, longer vacations, phased-in retirement etc.

¹³⁸⁵ Full-time jobs are calculated by dividing the total available hours by the average usual workweek for full-time work in Nova Scotia in 2001 which was 41.3 hours. Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

¹³⁸⁶ New unemployment rate calculated by dividing the new number of unemployed (26,230) by the labour force in 2001 (468,900).

¹³⁸⁷ Hachey, Leanne. Policy Analyst. Canadian Federation of Independent Business. Personal communication. May 30, 2003.

¹³⁸⁸ Cuvillier, 1984, op. cit., p. 74; Reid and Gunderson, Forthcoming, op. cit., p. 122; Hachey, Leanne. Policy Analyst. Canadian Federation of Independent Business. Halifax. Personal communication. May 30, 2003.

¹³⁸⁹ Hachey, Leanne. Policy Analyst. Canadian Federation of Independent Business. Halifax. Personal communication. May 30, 2003.

through a reduction in work hours, and there is no doubt that the predominance of small firms in Nova Scotia poses particular challenges.

However, these challenges are not insuperable, and are not fundamentally the product of schemes to reduce work hours. Skills shortages in many areas already pose challenges, particularly to small businesses, and the potential solutions have very little to do with reducing work hours. Rather they lie in identifying current job-skills mismatches and in making available programs that can train new workers in the skills required in today's job market. Government incentives, such as reductions in payroll taxes as in some European countries, may also make it easier for firms to engage in the necessary recruitment, hiring, and training processes.

14.2.2.2 Productivity Effects

It is generally agreed that shorter hours results in higher productivity (output per hour). Based on studying the available empirical evidence, the Federal Advisory Group concluded in 1994 that a 10% reduction in work hours would likely result in a 5% increase in productivity. According to Infrometrica, the productivity effect may depend on the ways in which work hours are reduced. The reduction in work hours can be achieved in a number of ways, many of them discussed in Chapter 13. These include shorter workdays, shorter workweeks, sabbaticals, longer vacations, phased-in retirement, and other methods, each of which affects productivity in different ways.

For example, overtime reduction often makes the remaining hours more productive, as workers suffer less fatigue and make fewer errors. Employees anticipating a sabbatical may work more productively before their extended time off in order to accomplish and complete longer-term tasks and projects. Flexitime, which does not necessarily involve a reduction in hours, can result in large productivity effects through reduced absenteeism and scheduling of physician visits and errands during time off rather than during work hours.¹³⁹⁰ In sum, each method of work reduction has its own concomitant effects on productivity, and the average 5% improvement found in a number of empirical studies reflects a combination of all these and other effects.

14.2.2.3 Income Effects: Per Capita, Government, and Corporate

Infrometrica's simulation for Canada in 1994 assumed that the wage rate per hour could increase in line with productivity increases, by about 5%. This means that overall labour costs in relation to output would remain unchanged, and there would therefore be no change in unit labour costs for employers and in prices for consumers. Consumer demand would not, therefore, be substantially affected by the new work schedules, so there would be no discernible feedback loop to labour demand. Once tax effects are added to the hourly wage increase, there would also be relatively little change in disposable income for workers.

Hourly productivity gains also benefit the private sector, even when workers receive the primary benefits of the productivity increase in higher hourly wages. Infrometrica's simulation considered

¹³⁹⁰ McCracken, Mike and Geoff Bromfield. 1994. *Reduction of Working Time: Macroeconomic Issues. Background Study prepared for Advisory Group on Working Time and the Distribution of Work.* p. 4.

four scenarios: 1) no increase in the hourly wage rate; 2) an increase of 10% in the hourly wage rate; 3) an increase of 5% in the hourly rate; and 4) an increase in the hourly rate to maintain unit labour costs at the same level. Infrometrica found that corporate profits increased in all scenarios tested through its econometric model, except where the 10% hours reduction is accompanied by a 10% increase in hourly wage rates.¹³⁹¹ In other words, if the incomes of workers remain the same in absolute terms (even while working 10% fewer hours), they are in effect receiving a 10% pay increase, resulting in higher unit labour costs. Because of productivity increases, the firm's labour costs in fact only go up 5%.¹³⁹² But unless these increased labour costs are offset by government incentives, which is of course possible, the increase in labour costs could result in higher prices, reduced consumer demand, and consequently a reduced demand for labour. However, aside from this 10% hourly wage increase scenario, Infrometrica found that corporate profits would rise as a result of shorter work hours under all other scenarios tested.

The Infrometrica modelling exercise found that one of the chief beneficiaries of shorter work hours is government. Government balances improve as a result of hours reductions because there are fewer taxpayer-funded expenditures on social assistance and employment insurance benefits as a result of the new jobs created and the consequent decline in unemployment. Because there are also more people working, there are also more people paying taxes and contributing to the public purse in general. For Canada as a whole, Infrometrica found a \$3 billion improvement in the government balance sheet at the end of the five-year shorter worktime phase-in period, and a \$4.9 billion improvement after 10 years.¹³⁹³

In addition to the direct savings mapped by Infrometrica, a reduction in work hours can also produce significant indirect cost savings. As Part 2 of this report has shown, the costs associated with ill health, family breakdown, crime, and inequality due to hours polarization and unemployment are substantial. Reducing and redistributing work hours can therefore help to reduce these indirect costs, which are invisible in our conventional system of accounting.

14.2.2.4 Leisure Effects

Statistics Canada's General Social Surveys distinguish between personal care time on the one hand and leisure time or free time on the other. Personal care includes essential activities that are mainly choiceless, like sleep, showering, and eating meals, whereas leisure time involves choice and includes socializing, watching TV, reading, going to church, going to the movies, exercising, and a wide range of other discretionary activities. Leisure time is therefore the time remaining in a day after paid work, unpaid household work, volunteer activity (also classified by Statistics Canada as unpaid work), education, sleep and other personal care activities are subtracted.

According to the time-use survey that was part of Statistics Canada's 1998 General Social Surveys, Canadians have an average of 40.4 hours a week of leisure time; put in 50.6 hours of paid and unpaid work; and spend 73 hours a week on sleep and other personal care activities. Nova Scotians spend an average of 43.3 hours on leisure time; 48.5 hours on paid and unpaid

¹³⁹¹ McCracken and Bromfield, 1994, op. cit., p. 6.

¹³⁹² Ibid. pp. 6-9.

¹³⁹³ Idem.

work; and 72.5 hours on personal care – with the higher "leisure" hours at least partly attributable to the province's higher rate of unemployment.¹³⁹⁴

Because of their longer work hours, Canadians generally have less free time than Europeans. Comparative time-use studies have found that Canadians have five fewer hours of leisure time per week than the British, six less than the Finns, and 11 hours less than the Danes.¹³⁹⁵

Overall, a reduction in working time results in more leisure time. However, this is true for those who were already working and whose hours of work have been reduced. This group outnumbers the unemployed or underemployed who would pick up the newly available work hours. This group would have less free time in contrast to being unemployed. However, assuming that the free time of the unemployed is not desired or chosen, it should probably not be classified as "leisure" at all, and a reduction in this complement of unwanted free time would be considered a net benefit.

For those who are already working, 10% fewer work hours would theoretically translate into 10% more free time. For example, if an employee worked a 40 hour week, a 10% reduction in work hours could mean four more hours to be engaged in leisure activities per week, or more than 200 additional hours per year – the equivalent of five 40-hour workweeks. The extra time could also be used to help alleviate work-life conflict and the stress associated with difficulties balancing paid work, unpaid household work, and family life.

In our conventional measures of progress, based on the economic growth statistics, the value of this additional leisure time is invisible, as only paid work is counted. However, the Genuine Progress Index (GPI) recognizes that leisure time contributes to quality of life, wellbeing, and community cohesiveness and is therefore assigned explicit value. In fact, the value of leisure time is one of the 22 core components of the GPI, and its expansion is registered as a sign of genuine progress.

From the GPI perspective, therefore, the leisure effects of a reduction in work hours constitute a key part of the equation and a central element in assessing impacts. As noted in Table 51 above, Informetrica's econometric model found a 2.6% expansion of leisure time at the end of a projected five-year phase-in of a 10% reduction of work hours, and a 2.7% expansion after 10 years.

¹³⁹⁴ Statistics Canada. 1999c. *General Social Survey: Overview of the Time Use of Canadians*. Table 1: Canada, regions and provinces, special tabulations run for GPI Atlantic. Statistics Canada's GSS definitions and results differ from those used by some other analysts. For example, Redefining Progress estimated that sleep and other personal activities required 14 hours per day, leaving 10 hours per day of discretionary time. Informetrica used 4,000 hours per year as the sum of leisure and work, which accords more closely with the General Social Survey findings. The total amount of leisure time is less important in this analysis than the change in hours available.

¹³⁹⁵ Harvey, Andrew. 1995. "Canadian Time Use in a Cross-National Perspective." *Statistics in Transition*. Vol. 2, no. 4. p. 603.

14.2.2.5 Effects of Work Hours Reduction on Predicted Labour Shortage

By the year 2015 it is predicted that Canada (and the provinces) is going to be facing a labour shortage "crisis," partially as a result of demographic changes and the high percentage of people who will be at retirement age.¹³⁹⁶ According to the Canadian Federation of Independent Business (CFIB) the shortage of skilled labour is already being felt in Canada, with a total of 250,000 to 300,000 jobs unfilled in 2000.¹³⁹⁷

This view is not held by all analysts however. In a recent article on the issue that appeared in *Maclean's*, pollster and political commentator Allan Gregg pointed out:

"...to accept such straight-line projections as inevitable or the forces of demography as immutable leads to a faulty assessment of the future and blinds us to alternative possibilities that may be more in keeping with the future we want."¹³⁹⁸

Gregg argues that society does not "evolve in the linear fashion that demography may suggest." He argues that the presence of large numbers of older Canadians will likely result in the end of mandatory retirement – something he notes four Canadian provinces and all three territories have already done.

"Members of the big generation may not work as much, or in the same jobs, but having been the central focus of society for their entire lives, it is unlikely they'll slip quietly into retirement. So, far from experiencing labour shortages, it is more likely we'll see legions of octogenarian consultants offering their services in the workplace."¹³⁹⁹

According to one CFIB survey, labour shortages are currently being experienced by small businesses in Canada. Nearly 46% of small businesses in Canada identified the shortage of qualified labour as a problem that compromised their ability to expand and create jobs. The study pointed to a lack of necessary skills as the reason that nearly one out of every 20 jobs remains unfilled.¹⁴⁰⁰ Currently, in Nova Scotia, according to CFIB, one quarter of small businesses operate with fewer employees than they actually need.¹⁴⁰¹ The CFIB study found no one cause for the problem but cited training as one possible solution.

Since a reduction in work hours would likely lead to the creation of new jobs, it can be argued that this would exacerbate the already problematic shortage of skilled workers. However, as the

¹³⁹⁶ Lucas, Chad. "Seniors push for end to mandatory retirement." *The Chronicle-Herald*. July 12, 2003. Halifax. p. A7.

¹³⁹⁷ Canadian Federation of Independent Business. Press Release. February 21, 2001. Available from <http://www.cfib.ca/legis/novascot/5106.asp>. Accessed July 14, 2003.

¹³⁹⁸ Gregg, Allan R. "Aging is as Aging Does. Don't Expect the Baby Boomers to Slip Submissively into Old Age." *Maclean's*. Vol. 116, no. 32. August 11, 2003. Toronto. p. 44.

¹³⁹⁹ *Ibid.* p. 45.

¹⁴⁰⁰ Canadian Federation of Independent Business. Press Release. February 21, 2003. Available from <http://www.cfib.ca/legis/novascot/5106.asp>. Accessed July 14, 2003.

¹⁴⁰¹ Canadian Federation of Independent Business. 2003. *Nova Scotia Firms do their Part to Address Shortage of Skilled Labour*. Press Release. Available from <http://www.cfib.ca/legis/novascot/skills/asp>. Accessed July 14, 2003.

earlier discussion on skill mismatches indicates, shorter work strategies cannot be viewed in isolation from other policy initiatives. Therefore, a reduction in work hours *in combination with* other initiatives may in fact help alleviate Nova Scotia's twin challenges of continuing high unemployment and underemployment combined with skills shortages in particular areas. The following elements are all relevant to these challenges:

- According to the AGWTDW, it is generally agreed that when an economy is "growing rapidly" and "creating jobs," people come out of the woodwork in search of work.¹⁴⁰² When the economy is in recession or growing only slowly, there may be a withdrawal from the labour force. If work hours were reduced and redistributed, there would be additional jobs available, which in turn could encourage the reserve of "hidden" unemployed to enter the labour force.¹⁴⁰³
- The implementation of phased retirement could keep retirees working longer, imparting their skills to younger, less experienced employees. In this way, retirees can help to train new workers and to alleviate the skills shortage problem, while at the same time reducing their own hours of work. They can also help reduce skills shortages directly by voluntarily staying in the labour force longer, albeit at reduced hours. Phased retirement plans would also accord with the call by seniors advocacy groups in Nova Scotia for the elimination of the mandatory retirement age of 65, on the grounds that many older workers have skills to impart that would help alleviate the skilled labour shortage.
- Training programs could be provided to workers to increase skill levels in areas where they are needed most. These programs could be provided by firms themselves or in conjunction with community colleges and other educational institutions. The advantage of firm-sponsored training is that it is not generic or theoretical but geared to the actual, practical on-the-job needs of the firm itself. Additional costs incurred by small businesses that opt to invest in training programs that result in new hires could be offset by various government incentives, including tax credits and reduction in payroll taxes. Useful models for this exist in the European context.

The substantial increase in government revenues projected by Infrometrica as a result of work-hours reductions (due primarily to reduced EI and social security payments and an expansion of the tax base) can be used to fund and support such training incentive programs. The end result can be revenue-neutral for government at the same time as three major policy objectives are achieved simultaneously (reduced unemployment, training, and improved quality of life).

- There is scope for increasing the supply of skilled labour by improving overall labour force participation rates through more attractive and family-friendly work schedules.¹⁴⁰⁴ Improving work arrangements so they alleviate work-life conflict may encourage more highly skilled and educated people, particularly women, to participate in the labour force

¹⁴⁰² Advisory Group on Working Time and the Distribution of Work, 1994, op. cit., pp. 2-3.

¹⁴⁰³ Best, 1981, op. cit., p. 53.

¹⁴⁰⁴ The labour force participation rate is the number of employed and registered unemployed (actively looking for work) expressed as a proportion of the working age population.

without compromising their other priorities. This has been the case in the Netherlands, where the improvement of part-time work conditions (equal hourly pay, pro-rated benefits, equal opportunity for career advancement) has *both* reduced overall work hours and unemployment *and* increased labour force participation, including by skilled workers. In Canada, many highly educated women currently choose to stay outside the labour force because they cannot effectively balance their careers with their commitment and desire to spend sufficient time with young children. Reducing work hours can help restore that balance and make these lost career skills available to the economy.

- There are many underemployed people in Nova Scotia who are not using all the skills they have. Their time availability and skills could be made more available through freeing up additional work hours, and thereby utilized in a projected labour shortage.¹⁴⁰⁵
- If Nova Scotia implemented leading-edge and modern labour standards, possibly following some of the successful European models that currently exist, it could make the province more attractive to highly educated and skilled workers, and encourage more people to live here – thus adding to the pool of skilled labour.
- As noted earlier, evidence indicates that large firms can more easily translate work hours reductions into new jobs. However some analysts have remarked that the wide range of work-reduction options transcends simple arithmetic translation of freed hours into new jobs, and that many work-reduction options and flexible work arrangements may be highly suitable to small business. Mike McCracken, president of Informetrica, argues that small businesses are in many ways far more flexible than large firms and may be able to accommodate some kinds of changes in hours of work more easily and successfully than larger firms can.¹⁴⁰⁶

According to Arthur Donner, Chair of The Advisory Group on Working Time and the Distribution of Work, a "buy-in by the private sector" has been "glaringly absent" on the issue of work hours reductions. He writes:

"What I learned from both the Task Force and the Advisory Group was that the key missing element for work redistribution is the lack of private sector leadership and support. The private sector sees the issue as a cost hike and inflexibility. Over the longer run it can benefit the private sector employer."¹⁴⁰⁷

Donner goes on to say that government could go in any direction on the issue of worktime reduction but awaits a "political lead from the opinion polls." He notes that adequate support for the proposition has also been lacking from organized labour:

¹⁴⁰⁵ Hayden, Anders. Reviewer comments. August 26, 2003.

¹⁴⁰⁶ Reviewer comment by McCracken, Mike, Informetrica Limited, July 14, 2003.

¹⁴⁰⁷ Donner, Arthur. Economic consultant, who chaired both the Federal Advisory Group on Working Time and Distribution of Work, and the Ontario Government's Task Force on Hours of Work and Overtime. Reviewer comments. August 19, 2003 and August 21, 2003.

"Organized labour supports work time reduction in theory but not in practice, because many of its own members want to work unusually long hours. I know that in actual collective agreement negotiations, the labour side will initially have work time reduction among their list of demands, but it quickly falls off the table in the bargaining process."¹⁴⁰⁸

Because a substantial increase in government revenues is projected through worktime reduction, as demonstrated in Informetrica's econometric modelling, it appears that government is best placed to take the lead in this process. In Nova Scotia, government could lead by way of example and start the process of work-hours reduction on a voluntary basis within the civil service. If introduced on a voluntary basis, as recommended in an earlier GPI Atlantic study, it could be instituted in a way that did not threaten any major party. Thus, the potential rewards of work-hours reduction could be eventually demonstrated by successful example rather than imposition.¹⁴⁰⁹

14.2.2.6 Effect of Size of Firm

According to Leanne Hatchey, Policy Analyst for the Canadian Federation of Independent Business in Nova Scotia, roughly three out of four businesses in the province employ fewer than five people, and 90% of all businesses employ under 20 people.¹⁴¹⁰

But this does not necessarily mean that most employees work in small firms. In fact, the majority – 60.5% – of all Nova Scotian employees in 2001 worked in firms with more than 20 employees (Table 52). Nearly 30% of all Nova Scotian employees worked in firms with more than 100 employees in 2001.¹⁴¹¹

Therefore, while small businesses are clearly an important part of the business landscape in this province, the greater challenges they may face in translating work-hours reductions into new jobs do not constitute an impediment to instituting work-hours reductions for very substantial portions of the provincial labour force. In fact, a five-year phased-in work-reduction plan, such as that recommended by the Federal Advisory Group on Working Time and the Distribution of Work, could begin with larger firms and gradually embrace smaller firms over time as the new work arrangements gradually took hold. France also instituted its 35-hour workweek in phases according to firm size.

¹⁴⁰⁸ Idem.

¹⁴⁰⁹ Colman, Ronald and Anders Hayden. 1999. *Work Time Reduction in the Nova Scotia Civil Service. Recommendations to the NS Government and Public Sector Unions based on Successful Work Time Reduction Experiments in Europe and North America*. Genuine Progress Index Atlantic. Halifax.

¹⁴¹⁰ Hatchey, Leanne. Policy Analyst. Canadian Federation of Independent Business. Personal communication. May 30, 2003.

¹⁴¹¹ Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

Table 52. Employees by Size of Firm, % of total employees, Nova Scotia, 2001.

Size of Firm	Number of Employees (000)	% of Total Employees*
Firms with less than 20 employees	145.2	39.5
Firms with 20-99 employees	122.4	33.3
Firms with 100 to 500 employees	68.5	18.6
Firms with more than 500 employees	31.6	8.6
Subtotal: Firms with more than 20 employees	222.5	60.5

* In 2001, the total number of employees in Nova Scotia was 367,800.

Source: Statistics Canada. 2002. Labour Force Historical Review 2001. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

There are special challenges small firms face in reducing work hours. But, according to Anders Hayden: "The chances that hours reduction could work in Nova Scotia have got to be pretty good, since every place in the industrialized world has managed to reduce average work hours significantly over the past 150 years."¹⁴¹²

According to Hayden, a number of steps have been taken in other countries, which provide examples of what could be done here in Nova Scotia. For example, in France, a number of actions have been taken to assist small firms (fewer than 20 employees) in the transition, including:

- Small firms have been given an extra two years to comply with the 35-hour law (2002 instead of 2000).
- Small firms have been given an additional transition period during which the 36th to 39th hours per week have been paid at a lower overtime premium (10% rather than 25%).
- Small firms have received a four-year phase-in period, until 2004, before the 130-hour maximum allowable annual overtime quota would apply to all hours above the 35-hour week.
- In fall 2001, the French government gave small firms a larger overtime quota (a maximum of 180 hours per employee per year vs. 130 hours for other firms), in case they found it difficult to adapt.
- Consultancy support is provided to small businesses by the French government to help them reorganize as they reduce work time.
- Additional payroll tax reductions were given to small firms that reached a 35-hour agreement with their employees.
- Some small firms that could not justify hiring an additional worker on their own have joined together with one or two other small firms to share a new employee between them.¹⁴¹³

¹⁴¹² Hayden, Anders. Reviewer comments. August 26, 2003.

¹⁴¹³ Idem.

Hayden says that these major concessions to small businesses (i.e. extra transition periods) are one reason why so few small firms in France had moved to the 35-hour week by 2001.

In the Netherlands and Germany, where new laws have given individuals the right to reduce their work hours (and for part-timers to increase them), small firms (with 10 employees or less in the Netherlands) have been exempted.

Hayden says that some of the measures used in France might be worth considering in Canada, where, he says, the context for small firms is "even more flexible":

"Since Canadian provinces do not have annual overtime maxima, firms that find it difficult to adjust to reduction of work time always have the option of turning to overtime hours (assuming work reduction is pursued through legislation). Of course, if work-time reduction is pursued through collective bargaining and voluntary agreements, possibly stimulated by financial incentive policies, then there is less of a concern about small businesses."¹⁴¹⁴

In sum, there are a wide variety of methods available to accommodate the concerns of small businesses and to tailor work-reduction policies to their particular needs and circumstances.

¹⁴¹⁴ Idem.

Chapter 15. Policy Recommendations

"[A]chieving an ecologically sustainable and socially equitable model of development in the wealthy nations of the North – one that the South can realistically hope to attain as well – requires ideas that are both visionary enough to lead to significant change and pragmatic enough to be realizable; and work-time reduction, I strongly believe, is one such idea."

– Anders Hayden¹⁴¹⁵

We will never make headway towards greater sustainability, equity, or leisure while our measures of wellbeing and prosperity are based on a misleading and narrow set of market statistics that do not properly value our natural, human, or social wealth nor tell the true or whole story about the changing nature of work. Ultimately, if we value livelihood security, quality of life, our natural world, population health, equity, and quality of work, we have to measure these assets and keep track of their health as agreed social goals.

So long as crude quantitative measures like GDP growth and numbers of jobs are our only signposts of progress, we will never pay attention to the quality of those jobs, and vital work issues that affect our health, families, and livelihood will never receive priority in the policy arena. Based on those growth statistics, politicians, bureaucrats, economists, and journalists will continue to tell the public that their employment anxieties are unfounded, and will sow seeds of confusion that muddy the waters, befuddle the public discourse, and distract attention from social priorities.

What we count and measure completely reflects what we value as a society. As a first priority, and as the basis of all other actions and recommendations, we need to change our benchmarks of progress so they represent the full range of consensus on social values. In doing so we literally change the social dialogue. Including trends in livelihood security, quality of work, population and resource health, community cohesiveness, and quality of life in our core measures of progress will naturally encourage new, much-needed policy initiatives. The good news is that our capacity to measure progress more accurately and comprehensively along a wider range of social, economic, and environmental dimensions now exists. Both the methodologies and the data sources have been well developed in the last 20 years, and the new measures of progress are gaining increasing currency.

Based on the evidence in this study, the following are recommended as five key indicators of genuine progress as it relates to paid work. Below each indicator are recommended policy directions that could help achieve progress in these areas.

¹⁴¹⁵ Hayden, 1999, op. cit., p. 12.

1) A decline in work hours for those who already have full-time work, who are working overtime, and who are working excessively long hours.

- In 1994 the Advisory Group on Working Time and the Distribution of Work recommended that the redistribution and reduction of working time be a "new public policy priority." The Advisory Group urged governments, employers, trade unions, and employees to place "more emphasis on working time issues in collective bargaining and workplace decision making."¹⁴¹⁶ Interestingly, there are countries where this is already the case, which can act as models for Canada. In the Scandinavian countries, the key issues at the bargaining table are often flexible and family-friendly work arrangements and more leisure time rather than wages.
- Canadian governments should amend current provincial and federal employment standards to give workers the *right* to voluntary work-time reductions with a proportionate reduction in pay without imperilling career advancement opportunities.¹⁴¹⁷ This will improve employee autonomy, quality of life, employee morale, and productivity. It is also recommended that a wide range of work-reduction options be made available. The wider the range, the higher the rate of take-up by employees will be.¹⁴¹⁸

Again, good models exist. The *right* of workers to choose shorter work time voluntarily has been legislated in the Netherlands and in Germany. Dutch workers were guaranteed this right in 2000 with the introduction of the Working Hours Adjustment Act. Germany introduced similar legislation that same year. According to Anders Hayden: "If a Dutch or German worker wants a four-day week for four days' pay, for example, the employer can only refuse if he or she can show it is not possible without serious hardship for the firm. This promises to be a very significant reform, giving people more power to balance work with the rest of their lives."

The Advisory Group recommended voluntary and negotiated approaches to worktime reduction in both the private and public sector.¹⁴¹⁹

Voluntary and negotiated changes should be accompanied by government initiatives to eliminate the already existing incentives towards long hours. Financial incentives in the form of payroll reductions or rebates could also be used to encourage firms to create new jobs from the freed up hours made available by work reduction.¹⁴²⁰ (See #2 below)

¹⁴¹⁶ AGWTDW, 1994, op. cit., pp. 52-53.

¹⁴¹⁷ Hayden, Anders. 2003. "Europe's Work-Time Alternatives." *Take Back Your Time: Fighting Overwork and Time Poverty In America*. Berrett-Koehler. San Francisco. pp. 202-210.

¹⁴¹⁸ See Chapter 13 for details on the various types of new work schedules that could be made available.

¹⁴¹⁹ AGWTDW, 1994, op. cit., p. 52.

¹⁴²⁰ The Atkinson Letter. 1999. *Are Canadians Working Too Many Hours? Part 1 and 2*. Atkinson Charitable Foundation. Toronto. p. 2; Colman, Ronald and Anders Hayden. 1999. *Work Time Reduction in the Nova Scotia Civil Service. Recommendations to the NS Government and Public Sector Unions based on Successful Work Time Reduction Experiments in Europe and North America*. Genuine Progress Index Atlantic. Halifax. p. 27.

- The standard for vacations with pay should be increased. Currently, Canadians rank near the bottom of OECD countries in the annual amount of vacation time to which they are entitled. Again, the European countries can provide working models of industrialized economies in which dramatically longer vacations and shorter annual work hours do not imperil high productivity, prosperity, and a high standard of living. In 1987, The Ontario Task Force on Hours of Work and Overtime recommended legislation be amended to include a three-week paid vacation after five years of service, retaining the current two weeks after one year of service.¹⁴²¹

In Nova Scotia the Labour Standards Code was recently amended so that workers are now entitled to three weeks of paid vacation time after eight years of employment instead of two weeks.¹⁴²²

- There should be a legislated right for all workers to take unpaid educational, parental, and sabbatical leaves.¹⁴²³
- The most critical ingredient of a successful worktime reduction plan is education, which in turn is dependent on gradual, phased implementation. Since worktime reduction is an unfamiliar concept to most North American workers, the full range of options and the pay ramifications (if any) should be fully explored, explained, and understood by employees and employers in a cooperative and consensual manner.¹⁴²⁴ Impacts on pay should include discussion and explanation of the impacts of work reduction on productivity, on government revenues, and on after-tax pay, as all these factors can help reduce the size of any pay cut that may accompany worktime reduction. Case studies have shown that when such education and discussion happens, understanding develops, and employees generally appreciate worktime reduction and do not want to return to full-time work and salaries when given the option to do so.

Through education and through phased implementation, employers can also appreciate through their own experience the advantages arising through increased productivity and workplace reorganization, and can gradually adapt to the new systems in ways that do not compromise (and may enhance) their productivity, competitiveness, and profits.

Through education, particularly about successful case studies and impacts on government revenues, government officials can also recognize the potential for effective implementation of work reduction options in revenue-neutral ways. Such methods can return gains to government coffers (through an expanded tax base and reduced EI and social security payments) to firms and workers, thus increasing incentives for voluntary

¹⁴²¹ The Ontario Task Force on Hours of Work and Overtime, 1987, op. cit., p. 132.

¹⁴²² Smith, Amy. "NDP buys amended Sunday shopping bill. Law includes improvements to labour code." *The Chronicle-Herald*. October 25, 2003. Halifax. p. A1.

¹⁴²³ The Atkinson Letter, 1999, op. cit., p. 2. Recommended by the Ontario Task Force on Hours of Work and Overtime, 1997, op. cit., p. 132. Also recommended by the AGWTDW, 1994, op. cit., p. 61. The Advisory Group recommended that this basic entitlement be linked to the length of service with a company or organization.

¹⁴²⁴ "Rae Days" in Ontario and Bell Canada's attempt to reduce the workweek in 1994 are examples of cases where employers and employees were not educated properly, and where implementation was not properly phased to allow for the development of consensus building and understanding. For more detail see Section 13.2.

adherence, and government can lead the way by example in its own civil service sector. Education should therefore include exploration of successful worktime reduction schemes in Europe, where payroll reductions to firms (as in France), and less than proportionate reductions in pay for workers (as in Belgium where civil service workers were offered a 20% reduction in worktime for a 10% reduction in pay) helped implement the schemes.

In general, successful work time reduction plans – that meet expectations of job creation *and* that are welcomed by employees and firms – have balanced a number of key elements including consensus and cooperation among partners; legislation; financial incentives; collective bargaining; a range of voluntary options; and gradual, phased implementation allowing time for education and adaptation.

2) A decline in hours polarization, unemployment, and underemployment.

Statistics Canada found hours polarization to be a key factor in growing earnings-inequality in the 1990s. Therefore reduced hours polarization can ultimately reduce income disparities and social inequality, and increase social cohesion.

- A nation's monetary and fiscal policies play a significant role in determining levels of unemployment. NAIRU, or the non-accelerating inflation rate of unemployment, has been used as an "excuse" to fight inflation regardless of the costs from the unemployment it creates.¹⁴²⁵ As has been shown in Part 2 of this report, there are substantial economic and social costs associated with unemployment. Currently, the official monetary policy in Canada accepts unemployment and poverty over inflation. What is needed is the political will on the part of governments to make the economy function to do what it is supposed to do: "meet needs, starting with the needs of the poorest among us."¹⁴²⁶
- The government needs to take steps to remove systemic disincentives to new hiring. The current payroll tax system, with *ceilings* on Employment Insurance, Canada Pension Plan and Workers Compensation deductions based on annual earnings, has the "unintended side-effect of providing a bias against worksharing and in favour of layoffs."¹⁴²⁷ It also provides incentives to employers to employ existing workers for long hours, as employers do not have to pay additional payroll taxes once the ceilings for those workers are reached, whereas they would have to pay these taxes on new hires. The system can be reformed in a number of ways: Ceilings can be abolished and premiums adjusted to make them directly proportional to hours worked, or ceilings can be calculated on an hourly rather than annual basis. Alternatively, employer contributions can be assessed on a firm-by-firm basis according to total full-time job equivalents, rather than on an

¹⁴²⁵ Please refer to Section 5.7.2 for a discussion about how deflationary policies affect the unemployment rate. According to Dalhousie University Economist Michael Bradfield, NAIRU has been used as "an excuse, with limited theoretical or empirical support, to fight inflation." Bradfield, Michael. Personal communication. February 3, 2004.

¹⁴²⁶ Idem.

¹⁴²⁷ Meltz et al., 1981, op. cit., p. 66.

employee basis.¹⁴²⁸ All these reforms can be implemented in a revenue-neutral way to ensure that firms do not pay more in aggregate, and that the changes are not perceived as a tax grab by government.

In his review comments on this report, Arthur Donner, who chaired both the federal Advisory Group on Working Time and Distribution of Work, and the Ontario Government's Task Force on Hours of Work and Overtime, wrote: "On both my Task Forces I tried to tackle the high fixed costs issue in a public policy sense, i.e. find a mechanism for converting fixed costs to variable/hourly costs. No such luck because none of the key players – organized labour, management or government – wanted to tamper with existing well intended programs that destroy full-time jobs."

- Beyond the removal of disincentives to new hiring that currently exist, government incentive programs could also be implemented to encourage worktime reduction to be used to create new jobs. These incentives, for example in the form of payroll tax reductions, could be self-financing through the EI surplus, through savings to EI (since more people will be working), and through the increased tax revenues that will result from an expanded tax base. Studies and empirical evidence from Europe have shown that if a desired outcome of worktime reduction is job creation, then reductions to payroll taxes can be successfully offered in exchange for new hires. Alternatively, the savings could simply be used to increase hourly wages.
- In 1987, The Ontario Task Force on Hours of Work and Overtime recommended that workers be given the right to refuse overtime work after the legislated standard workweek of 40 hours. This right should be incorporated into employment standards legislation. In 1994, the Federal Advisory Group made the same recommendation.¹⁴²⁹ Currently in Nova Scotia the overtime premium kicks in for most workers only after 48 hours, and workers do not have the right to refuse overtime.¹⁴³⁰
- Employers and employees should be encouraged to offer and utilize time off (at the overtime rate) in lieu of overtime pay after the standard workweek. For example, an hour's overtime work would be compensated by 1.5 additional hours off, and five hours of overtime can be compensated by an additional day off (or long weekend), rather than by increased pay.¹⁴³¹

¹⁴²⁸ Donner, Arthur. Economic consultant, who chaired both the federal Advisory Group on Working Time and Distribution of Work, and the Ontario Government's Task Force on Hours of Work and Overtime. Reviewer comments. August 19, 2003 and August 21, 2003.

¹⁴²⁹ The Ontario Task Force on Hours of Work and Overtime, 1987, op. cit., pp. 128-129; Also AGWTDW, 1994, op. cit., p. 55.

¹⁴³⁰ Recent changes to Nova Scotia's Labour Standards Code extended the workweek of workers in the construction and road building industry from 48 to 55 hours per week. Workers in these industries will now be eligible to receive 1.5 times their regular pay rate for overtime worked after 55 hours. Nova Scotia Department of Environment and Labour. 2003. *New Regulations to Clarify Overtime Provision*. Press Release. November 28, 2003. Available from <http://www.gov.ns.ca/news/details.asp?id=20031128002>. Accessed November 30, 2003.

¹⁴³¹ Ibid. p. 57.

- If skill mismatches arise from work-hours reductions, time and money should be invested in skills training programs. Just as in any economic or market adjustment, new demands and sectoral shifts require new education and training initiatives. Again, the revenues for such training programs can potentially come from the increased government revenues that will result from reduced unemployment and an expanded tax base, as projected by Informetrica in its work for the Federal Advisory Group. Geography may be a more difficult barrier to overcome, but this kind of disparity, in regional unemployment rates for instance, already exists and is not the result of work reduction initiatives.
- Adequate leisure time is a key contributor to health and quality of life, and its value is one of the 22 core components of the Nova Scotia Genuine Progress Index. It should also be considered a basic right of *all* workers. To this end, minimum wage levels should be increased to a living wage, so that all workers can freely choose to reduce their hours and enjoy more leisure time.¹⁴³² If low minimum wages and sharp income inequality persist in their present form, then the working poor will not likely choose a reduction in work hours. Instead, they would likely retain their hours or increase them as they became available in order to make ends meet. Those with financial resources would be able to reduce hours and enjoy more leisure time. But this would ultimately result in a leisured class working short hours and a low-wage class working long hours with virtually no gains in free time.¹⁴³³ Thus, worktime reduction issues inevitably raise equity issues.

3) An increase in work that contributes to positive human development and quality of life.

- The reduction of workplace stress should be recognized by governments and businesses as a source of substantial savings in both health and social costs. In a wide-ranging review of the literature, the *American Journal of Health Promotion* found stress to be the most costly of all modifiable risk factors, including smoking, obesity, and physical inactivity.¹⁴³⁴ Stress has also been documented as extraordinarily costly for the business community. The Global Business and Economic Round Table on Addiction and Mental Health, a coalition of health experts and business people, notes that mental illness and stress-related work absences are the fastest-growing area of disability and insurance claims and are costing the Canadian economy more than strikes, plant shutdowns or product defects.^{1435, 1436}

¹⁴³² Some analysts have recommended not only that the minimum wage should be raised, but also that it should be indexed to the economy's average wage. In Nova Scotia, for example, only a small fraction of the working population receives minimum wage but when it increases, pressure is put on those wages that are somewhat higher to increase as well. This upward pressure on low wages can potentially improve the living standards of many low-wage workers beyond those on the minimum wage. Inflationary tendencies can be countered through worktime reductions and partially proportionate pay cuts among overworked, higher-income workers to ensure that *total* wage packages remain relatively stable.

¹⁴³³ Schor, 1991, op. cit., p. 150. Schor advocates a *mandatory* increase in free time, such as longer legislated vacation entitlements, as in Europe, to ensure that all workers benefit from increased leisure time.

¹⁴³⁴ Goetzel, Ron (ed). 2001. "The Financial Impact of Health Promotion." *American Journal of Health Promotion*. 15 (5). May/June.

¹⁴³⁵ Formerly called the Business and Economic Roundtable on Mental Health.

¹⁴³⁶ Business and Economic Roundtable on Mental Health. 2000. *The Unheralded Business Crisis in Canada: Depression at Work. An Information Paper for Business*. GPC Canada. Toronto. pp. 23-36.

The coalition recommended a series of 12 steps for businesses to strengthen efforts to combat workplace stress and mental illness, including:

- education to improve the early detection of depression and mental illness.
- implementing annual targets to reduce the effects of depression at work.
- identification and reform of management practices that produce harmful stress and contribute to depression at work.
- evaluation of the effects of email and voice mail on the efficiency and "quality of life" of their organizations in order to use it in healthier ways.
- recognition of the link between depression and heart disease.
- create an inventory of "emotional health hazards at work" which have a "corrosive effect on employee and executive wellbeing."
- enact work-life balance policies as a mental health supportive initiative.
- formulate a company "health index" to assess whether the workplace is functioning in a healthy manner and to document the effect stress is having on employee morale, the quality of work, and productivity.¹⁴³⁷

The British Health and Safety Executive recently launched a six-point "stress code" which firms have to abide by or risk legal action by employees. The six stress tests deal with job demands, worker control, support, relationships, roles and responsibilities, and organizational change.¹⁴³⁸

- To improve work-family balance and quality of life, family supportive work options should be promoted, with high profile awards given to Nova Scotia businesses that are innovators in the field and whose example can serve as a model for other firms. Raising children is undoubtedly one of the most important types of work in terms of societal wellbeing and directly contributes to human capital. Yet its value is almost entirely invisible in our current system of economic accounts, because unpaid work has no value in market-based measures of progress. When the paid and unpaid worktime of dual-earner families are both considered, we have seen that working parents today generally have less free time and correspondingly less time to spend with their children than parents did 100 years ago.

In an effort to reduce work-life conflict, a range of flexible work arrangements and work reduction options should be offered including jobsharing, extended maternity leave, paid family leave, and shorter workdays that coincide with children's school schedules. Telecommuting, flexitime arrangements, and workplace childcare should also be made available to parents who want it. As noted in this study, such work arrangements can improve productivity and worker morale, reduce absenteeism, and make lost skills available to the market economy by encouraging labour force participation among many parents who currently have to choose between their careers and their children.

¹⁴³⁷ Idem.

¹⁴³⁸ BBC News. "Stress Code for Firms Launched." *BBC*. June 16, 2003. Available from <http://www.bbc.co.uk/2/low/health/2993116.stm>. Accessed July 22, 2003.

Currently, paid maternity/paternity leave (that is a top-up to EI benefits) is available to a limited number of workers covered by progressive collective agreements.

- The reduction of work hours should be accompanied by guarantees against the intensification of work (i.e. increased workloads). Work reduction schemes will backfire and fail to improve overall quality of life if employers simply reduce hours and expect the same amount of work from their current workers. Incentive programs need to address this issue and ensure that any reduction in hours is accompanied by a redistribution of the freed up work among additional hires.

Anders Hayden points out that despite documented instances of work intensification that accompanied France's 35-hour work legislation, surveys indicate that a large majority of 35-hour workers in France feel their quality of life overall has improved. Work intensification, where it has been documented in France, has generally been found to be more than compensated by the other benefits of increased leisure time. Hayden notes that work intensification would be less likely to emerge with smaller, more gradual reductions in work time:

"Smaller reductions lead to noticeably smaller employment gains. In France, the priority objective was the reduction of unemployment, hence the choice of a large, one-time reduction in hours (and the associated risk that some employees might experience significant work intensification). Where the goal is mainly to improve quality of life for people with jobs, it may be more appropriate to move more slowly and gradually. Quality of life improvement for workers has been the main goal of work time reduction in countries such as Denmark and Sweden, where more gradual reductions have been implemented and discussed in recent years."¹⁴³⁹

- In 1987 the Ontario Task Force on Hours of Work and Overtime recommended that long hours of work should be considered a health hazard when designing or revising occupational health and safety regulations.¹⁴⁴⁰
- The provincial and federal governments should initiate studies on the effects of long hours of work on worker health and safety.
- Workers should be given a range of choices in how to use entitlements of time off over their lifetime – a concept that has been referred to as "time sovereignty."¹⁴⁴¹ Because of workers' different needs and circumstances, one size clearly does not fit all. Some workers, particularly with growing children, may prefer more frequent periods of time off (such as more long weekends or vacations) while their children are young, while others may prefer to bank their time off for longer sabbaticals later.

¹⁴³⁹ Hayden, Anders. Reviewer comments. August 26, 2003.

¹⁴⁴⁰ Ontario Task Force on Hours of Work and Overtime, op. cit., p. 134.

¹⁴⁴¹ "Time sovereignty" is discussed by Gosta Rehn in, Hinrichs, Karl, William Roche, and Carmen Sirianni (eds). 1991. *Working Time in Transition: The Political Economy of Working Hours in Industrial Nations*. Temple University Press. Philadelphia. p. 8.

4) An increase in types of work that are socially and environmentally benign and a corresponding decrease in work that is damaging to communities and the environment.

- Ecological tax reforms (ETRs) would encourage households and firms to use energy and materials more efficiently and pollute less, and could also potentially result in more jobs. ETRs can involve charges on energy/carbon, primary materials, water, pollution emissions, pesticides, landfill disposal, road use, disposable products, and other products and activities that deplete resources and cause environmental damage.

There are many ways in which ETR's can spur job creation. According to William Rees: "Ecological tax reform will also confirm the central role of reuse, repair, reconditioning and recycling in an 'optimal utilization' economy...replacing large-scale energy- and capital-intensive units by smaller-scale, labour- and skill-intensive, independent, locally integrated work units."¹⁴⁴²

ETR's also involve the elimination of ecologically destructive subsidies. For example, between 1970/71 and 1998/99, \$40 billion of direct federal money was spent to support non-renewable energy in Canada, excluding nuclear technology. During the same time period only \$0.2 billion was spent supporting the development of renewable energy. However, the renewable energy sector creates more jobs for every million dollars invested – 12.2 jobs per \$million compared with roughly 7.3 jobs per \$million created in conventional energy projects.¹⁴⁴³

But the most important way in which ETR's spur job creation is that they begin to replace existing taxes on income, profits, and employment, which can be correspondingly reduced as ETR's are introduced, ensuring that tax reform remains revenue-neutral. Not only does this replacement mechanism ensure that the aggregate tax burden on firms and households does not increase, but a reduction in taxes on income, profits, and employment can spur investment and job creation. According to Rees: "It should gradually become more productive to lay off unproductive kilowatt hours and barrels of oil than to lay off people."¹⁴⁴⁴

It is important to note that ecological tax reform without compensating income tax reform could potentially place the burden of increased prices for some goods and services (like gas and heating fuel) disproportionately on lower income brackets. Proponents of ETR therefore recognize that this potentially regressive outcome would have to be counteracted through progressive income tax reductions, in which income taxes are reduced proportionately more for low-income groups than for higher-income groups.

¹⁴⁴² Rees, William E. 1995. "More Jobs, Less Damage. A Framework for Sustainability, Growth and Employment." *Alternatives Magazine*. Vol. 21, no. 4. Waterloo. p. 28.

¹⁴⁴³ Report of Commissioner of Environment and Sustainable Development. 2000. Cited in Landon, Laura and Linda Pannozzo. 2001. *Crude Costs: A Framework for a Full-cost Accounting Analysis of Oil and Gas Exploration off Cape Breton, Nova Scotia*. Halifax. p. 103 and p. 129. Available on the GPI Atlantic website at www.gpiatlantic.org

¹⁴⁴⁴ Canadian economist William E. Rees, cited in Hayden, 1999, op. cit., p. 21. For more information on how ETRs can work, please see Rees, 1995, op. cit., pp. 24-30.

Successful ETR, with compensating income tax reductions, should not disproportionately increase the tax burden on any segment of society.¹⁴⁴⁵

- Productivity gains can be channelled toward greater free time without expanding production and consumption. According to Hayden, work time reduction can form the "core of a new non-material vision of progress by providing a green way to benefit from economic and technological advances."¹⁴⁴⁶
- Employment could be generated in socially desirable and environmentally sound areas including:
 - energy conservation, building retrofits, public transport, affordable housing.
 - forest restoration and value-added wood industries.¹⁴⁴⁷
 - public services such as childcare, eldercare, and education.
 - non-market production and exchange alternatives such as Local Employment Trading Systems (LETS).
 - the "third sector" or social, health, and personal services. Increasing paid work in this sector could help address community needs as well as the needs of workers.¹⁴⁴⁸ Jeremy Rifkin further suggests tax deductions be given for every hour of volunteer time given to legally certified charities, and treating hours of volunteer work for tax purposes in the same way that money donations presently are. According to Rifkin, the reduced tax revenue would be more than compensated for by the "diminished need for expensive government programs to cover needs and services best handled by volunteer efforts in the third sector."¹⁴⁴⁹

These examples illustrate that worktime reduction can best be implemented within and as an integral part of a larger social vision and framework that includes the wide range of social, human, economic, and environmental values that are measured in the Genuine Progress Index.

- Environmentally friendly work options can be encouraged and promoted. Telecommuting and flexible work schedules help reduce commuting (number of days per week) and commuting time (avoidance of peak hours). Less driving can help reduce air pollution and greenhouse gas emissions.

5) An increase in job security and a corresponding decline in "non-standard" work which is characterized by low pay, insecurity, lack of benefits, and lack of worker autonomy.

¹⁴⁴⁵ Rees, cited in Hayden, op. cit., p. 21.

¹⁴⁴⁶ Hayden, 1999, op. cit., p. 32.

¹⁴⁴⁷ An in depth discussion about the employment creation potential of value-added industries in the forest sector can be found in Pannozzo, Linda and Minga O'Brien. 2001. *The Forest Accounts. A Way Forward*. Vol. 2. GPI Atlantic. Halifax. pp. 184-190. Available from GPI Atlantic Web site: <http://www.gpiatlantic.org>.

¹⁴⁴⁸ Hayden, 1999, op. cit., p. 36; Also, Canadian Mental Health Association. 1984. *Work and Well-being. The Changing Realities of Employment*. CMHA. Toronto. p. 203; Rifkin, Jeremy. 1995. *The End of Work: The Decline of the Global Labor Force and the Dawn of the Post-market Era*. G.P Putnam's Sons. New York. pp. 256-257.

¹⁴⁴⁹ The ramifications of rewarding volunteer efforts in this way are examined in Rifkin, 1995, op. cit., pp. 257-274.

- In 1983, the Commission of Inquiry into Part-time Work in Canada made 32 recommendations, including that the Canadian government introduce a new labour standard that would ensure part-timers receive fringe benefits and pension plans (on a pro-rated basis) where an employer provides them to full-time workers.¹⁴⁵⁰ To this day, this key recommendation, which is standard practice in the Netherlands, remains unfulfilled in Canada. As the Advisory Group on Working Time and Distribution of Work pointed out in 1994, pro-rated benefits and pension coverage for part-timers is important not only so that part-timers are treated fairly and equitably but also to "facilitate easier movement between part-time and full-time work. A full-time clerical worker or nurse, for example, will think twice – if at all – about reducing hours if this means giving up pension benefits, even if she or he is prepared to trade some income for more free time."¹⁴⁵¹

In Canada, only the government of Saskatchewan began to move in this direction by passing legislation in 1996 guaranteeing pro-rated benefits for part-time workers. Essentially, a business with 10 or more full-time equivalent employees must provide benefits to eligible part-time workers.¹⁴⁵²

Because unions tend to represent their senior members most effectively, and have inadequately represented part-time, temporary, and casual workers, provisions that can improve security for the contingent work force are unlikely to find their way into collective agreements without government initiative.

- The Federal Advisory Group recommended that employment standards pay "special attention" to non-standard workers to "ensure they are fully covered and protected, have access to collective bargaining rights, and receive at least the minimum hourly wage and other workplace-related benefits."¹⁴⁵³
- Globalization forces Canadian workers to compete against cheap labour abroad and is at the root of some of the trends towards contingent and insecure work in the last 20 years noted in this and many other analyses. Few buffers exist against global business cycles, and communities experiencing these pressures may feel increasingly powerless, as decisions affecting their future are often made in other countries. As a result, community cohesiveness and self-sufficiency may be degraded. This points to a clear need for governments to ensure that the interests of citizens and communities are paramount in global trade agreements. In addition, one of the most practical antidotes to some of the

¹⁴⁵⁰ Commission of Inquiry into Part-time Work. 1983. *Part-time Work in Canada*. Ministry of Labour. Ottawa.

¹⁴⁵¹ AGWTDW, 1994, op. cit, p. 32.

¹⁴⁵² Saskatchewan Labour. *Rights and Responsibilities Guide. Benefits for Part-time Employees*. Available from <http://www.labour.gov.sk.ca/standards/guide/benefits.htm>. Accessed January 21, 2004. Part-time employees are eligible when: they have been continuously employed for 26 weeks and have worked 390 hours in that period; after the qualifying period they work at least 780 hours in each calendar year; full-time employees who work in comparable positions receive some or all of the four benefit plans; they are not full-time students. The eligible benefits include dental plans, group life, accidental death and dismemberment plans, and prescription drug plans.

¹⁴⁵³ AGWTDW, 1994, op. cit, p. 58.

most problematic and disempowering trends of globalization is investment in community economic development that enhances local self-reliance.

The use of local inputs into industry, the strengthening of local markets for local business, support for small business, the strengthening of the voluntary sector, the creation of local apprenticeships for school students, community service as a required part of schooling, food cooperatives, community-shared agriculture, local currency, and micro-lending activities are among the tested activities that can strengthen communities, and create good job opportunities close to home.

- Every week in Canada, millions of overtime hours are put in by workers free of charge. In an uncertain job market, a growing number of Canadian workers are afraid to refuse extra work for fear of losing their jobs. One possible solution, proposed by shorter worktime advocate Bruce O'Hara, is to convert all salaried positions to hourly paid positions. In this way, the overtime premium would have to be paid for all overtime work.¹⁴⁵⁴
- The speed at which new technologies are transforming the workplace is staggering. Currently the proliferation of new technologies is not regulated. Heather Menzies has proposed the introduction of legislation that limits and regulates the scale of new technologies so that they do not de-skill workers and destroy local economies. Menzies notes that when mechanical looms were introduced in the late 18th century, the government of England introduced about 70 laws restricting their proliferation because they threatened the livelihoods of thousands of weavers. By the early 19th century, those laws were overturned because of lobbying by the increasingly powerful mercantilist sector. "The switch from public regulation of technology in the interests of the common good to strictly private regulation and control by business" led to the birth of the Luddite movement. The Luddites, Menzies notes, were not against new technologies but wanted their proliferation limited and regulated so that "instead of eliminating people from the economy and cheapening what they do, the technology would include people and extend what they can do." Menzies argues that this issue is as urgent today as it was 200 years ago, and that some considered regulation of technology could help counter the rapid growth of insecure, non-standard work.¹⁴⁵⁵

6) DATA NEEDS: If the trends noted in this report are to be accurately assessed on a regular basis, there is a need for up-to-date and periodically collected data on several key issues that are inadequately tracked and monitored today. There is perhaps an even more urgent need to bring some data sets that do exist to the attention of policy makers. In light of gaps discovered in the process of researching this report, some of the most urgent data needs include:

- **The effect of long work hours on women's health:** There is a glaring gap in the stress literature about how women's paid and unpaid work in particular combine and interact to

¹⁴⁵⁴ O'Hara, Bruce. *Full Employment: What Governments Can do*. Available at <http://www.swt.org/policy.htm>. Accessed July 17, 2002.

¹⁴⁵⁵ Menzies, Heather. 1996. *Whose Brave New World? The Information Highway and the New Economy*. Between the Lines. Toronto. pp. 160-164.

create stresses that are detrimental to women's health. The added stress of household work, mostly still performed by women, is neglected in the literature on work stress, likely because unpaid work (looking after the home, children, and elderly relatives) is not recognized and counted as work in the conventional economic accounts.

- **Population-wide health data:** More population-wide health data should be made available comparing the health of the unemployed with the population as a whole. In order to do an accurate costing exercise this is crucial because the population attributable fraction (PAF) is the incidence of the illness in relation to the population, whereas the relative risk ratios (RR) are for the employed versus the unemployed and exclude those who are not in the labour force. In addition, most of the studies conducted in the 1970s and 1980s that examined the health impact of unemployment on women looked at the spouses of unemployed men, rather than on women who had themselves lost their jobs. There is a need for more studies on the mental and physical health of unemployed women, especially since they are more likely to be laid off and much more likely to be single parents than are men.
- **Hours polarization:** Currently Statistics Canada's LFS data provide information on the incidence of long and short hours among different segments of the working population. However, as has been noted by a number of labour economists, hours polarization may not only be occurring between different groups of workers. In many cases, the *same* individuals might be working very long hours during some periods and be unemployed or underemployed during others. It is likely that longitudinal studies will be required to ascertain the degree to which this is true in Canada.
- **The impacts of working time policy developments in Canada, Europe, and elsewhere.** For example, there is a serious dearth of studies on the impact of worktime reductions on the health, livelihood security, and time-use patterns of workers, and on the wellbeing of communities, including the strength of the voluntary sector.
- **The amount of paid vacation time being taken in Canada by demographic group:** It is important to know which groups are and are not presently taking vacation time, and how much they are taking. Currently Statistics Canada does not directly collect information on patterns and trends in paid vacation time.¹⁴⁵⁶
- **The real levels of unemployment:** Currently official unemployment rates do not include the "hidden" unemployed – the discouraged workers and the underemployed (involuntary part-timers). As a result the official unemployment rate can actually go down simply by reducing the number of jobless who are actually counted. Rates of unemployment should reflect the real severity of the problem, so that it registers properly

¹⁴⁵⁶ According to the OECD, the Labour Force Survey (LFS) in Canada (and in other countries with similar labour force surveys) should capture vacation time taken by employees in the actual hours data. However, other types of time off are captured in actual hours including sick days. The OECD suggests that it would be "instructive to see to what extent monthly or continuous labour force surveys do yield plausible estimates of average annual vacation time." From OECD, 1998a. *Annual Hours of Work: Definitional and Comparability Issues*. Organization for Economic Co-operation and Development. Paris. pp. 7-8.

on the radar screens of policy makers. To its credit, Statistics Canada does now track supplementary and more comprehensive unemployment rates that include these categories, but few policy makers, journalists, or analysts are aware of them outside specialized academic and expert circles, and efforts are needed to bring these data into the policy arena.

- **The relationship between self-employment and underemployment:** It is necessary to assess whether a portion of the growth in self-employment in Canada is actually underemployment in disguise. This is particularly true for the growing majority of self-employed workers who run one-person businesses with no paid help.¹⁴⁵⁷ For example, it is important to compare the incomes of these workers with their employed counterparts to assess what proportion of self-employment is marginal.
- **The level of public interest in worktime reduction:** Statistics Canada should replicate its important 1985 Survey of Work Reduction, including survey questions similar to those produced by GPI Atlantic for its Community GPI. By comparison with the detailed 1985 survey, the questions on work reduction in the 1995 Survey on Work Arrangements were inadequate to the extent that they yielded potentially misleading results. It is crucial that future survey questions on work reduction are asked with the same care, at the same level of detail, with the same attention to nuance, and with the same level of background information provided to respondents as in the one-time 1985 survey.
- **The worktime reduction and flexible employment practices of employers:** Statistics Canada should conduct more frequent and periodic surveys to assess the prevalence of worktime reduction practices and flexible work arrangements in Canada.
- **The non-standard workforce:** More data on contingent workers should be collected. In many cases, non-standard workers would simply register as part-timers in the Labour Force Survey. Not since the 1995 Survey on Work Arrangements have detailed data been collected in Canada on the contingent and non-standard workforce. Better data on job security and the availability of benefits, for example, would help to elucidate the impact of the changing workplace on workers in Canada.

In the 1990s there have been some very notable studies and books written on the subject of Canada's changing workplace and the reduction of work hours. In 1993, there was the groundbreaking study by the federal Advisory Group on Work Time and the Distribution of Work, headed by Arthur Donner. In 1995 a book by Lars Osberg, Fred Wien and Jan Grude, titled *Vanishing Jobs. Canada's Changing Workplaces*, focused on a series of case studies selected from Nova Scotia which illustrate the changing structure of employment in both the goods and service sectors. Finally, in 2000, Andrew Jackson and David Robinson wrote *The State of Working Canada, 2000*, published by the Canadian Centre for Policy Alternatives. This book documented the "declining economic and social wellbeing of Canadian working people." Apart from these important Canadian studies, the issue of work-time reduction in Canada has fallen off both the research and policy agendas, though it is as important now as ever.

¹⁴⁵⁷ In Nova Scotia 61% of self-employed fall into this category.

- **Overtime:** Statistics Canada should conduct another detailed analysis of overtime data for 2002, that is analogous to Duchesne's 1997 analysis, in order to assess trends since 1997, when data on overtime were first collected.¹⁴⁵⁸

"Shorter hours of work are about being against the downsizing, long hours, let's compete, lean and mean philosophy of business corporations. More time off is about better health and safety and improving family and social life. It's about less unemployment, jobs for young people and a better community life. While most European countries move to shorter hours, to the south of us the United States is moving in the opposite direction, towards longer hours of work. In Canada, we have some choices to make."

– Julie White¹⁴⁵⁹

¹⁴⁵⁸ Duchesne, Doreen. 1997. "Working Overtime in Today's Labour Market." *Perspectives*. Statistics Canada. Catalogue no. 75-001-XPE. Minister of Industry. Ottawa.

¹⁴⁵⁹ White, Julie. 2002. "A New Look at Shorter Hours of Work in the Communications, Energy, and Paperworkers Union." *Just Labour*. Vol. 1. Toronto. pp. 41-49.

APPENDIX

Data Considerations: Which Numbers Should We Believe?

There are three different sources of Canadian national data on work hours:

- data from establishments: Survey of Employment, Payrolls and Hours, Statistics Canada
- data from individuals: Labour Force Survey, Statistics Canada (time-estimate approach)
- data from individuals: General Social Survey, Statistics Canada (time use diaries)

There has been an ongoing, major controversy among U.S. researchers, on which data sources and methods of analysis are most appropriate to assess trends in work hours. Depending on sources used, very different and conflicting sets of evidence on work hours trends have been produced. This debate has been most acute in the U.S. in light of International Labour Organization data showing that the U.S. now has work hours as long as Japan, which traditionally had the longest work hours.¹⁴⁶⁰ Although the controversy on methods and data considerations has been much more muted in Canada, the same basic issues and arguments apply to this country, and the same alternative data sources exist here as in the U.S. The U.S. debate is presented here in detail because the arguments on both sides have been made so cogently and forcefully. But Canadian readers should recognize that very similar considerations apply to the data sources in this country.

The Canadian equivalent of the monthly U.S. Current Population Survey, using time-estimates, is Statistics Canada's monthly Labour Force Survey. The U.S. Employment and Earnings is similar to Canada's Survey of Employment, Payroll and Hours. Statistics Canada administers time diaries once every six years as part of its General Social Survey (GSS), with the most recent data available for 1998, and time series available back to 1986. Similar issues of potential over-estimates and under-estimates due to recall methods, sample size, survey frequency, annual vs weekly hours, business cycle fluctuations, hours polarization, and so on, exist in relation to the Canadian evidence.

A vigorous debate has been brewing in the U.S. since the 1991 release of Juliet Schor's groundbreaking book, *The Overworked American*. Some economists have not only questioned Schor's key finding that Americans are overworked, but also, in the process, placed the data themselves under a microscope. In the following we will present some of the criticisms of Schor's findings followed by Schor's rebuttal.

The data in question are those derived from time-estimates used in the U.S. Department of Labour Statistics' Current Population Survey (CPS) and in Statistics Canada's Labour Force Survey (LFS). These are the data on which researchers predominantly rely to determine trends in work hours according to age, gender, industry, occupation, and other characteristics.

¹⁴⁶⁰ See Table 2 for a summary of ILO data on work hours in industrialized countries in 2000. More recent data has since been released by the ILO which indicate that the U.S. and Japan are at about the same level in terms of annual hours worked. South Korea reported the longest work hours of all countries for which data were available in 2002. In that country people worked on average 2,447 hours a year – 26% more than U.S. workers. International Labour Organization. 2003a. *New ILO Study Highlights Labour Trends Worldwide: US productivity up, Europe Improves Ability to Create Jobs*. Press Release. September 1, 2003. ILO. Geneva. Available from <http://www.ilo.org/public/english/bureau/inf/pr/2003/40.htm>. Accessed October 25, 2003.

In Canada, the Labour Force Survey (LFS) is a monthly telephone survey, which compiles information regarding work from a representative sample of approximately 54,000 Canadians.¹⁴⁶¹ The interviewer asks respondents to recall, among other things, the number of hours they *usually* work (excluding overtime) and how many hours they *actually* worked in the reference week, which is usually the week preceding the survey.¹⁴⁶² In their 1997 book, *Time for Life*, Robinson and Godbey argue that there is an implicit assumption in these time-estimate questions that respondents are able to answer them correctly. They argue that there is a tendency for respondents either to "cluster" their answers and report exactly 40 hours – despite the fact that a 9-5 job only adds up to 40 hours if a respondent works through lunch and breaks, – or else to over-estimate their hours. According to Robinson and Godbey: "People think they know how many hours they work, that is, until they actually try to figure it out."¹⁴⁶³

Statistics Canada analysts have also raised this concern. In an unpublished paper presented at an International Time Use Conference, the authors pointed out that "a very large portion of the LFS responses are rounded." They wrote: "Based on comparisons with time use diary data and considering the internal consistency of LFS data, there is a high likelihood that a substantial amount of this reporting is inaccurate – ie., that individuals systematically round their responses to the nearest 40 hours, for example."¹⁴⁶⁴ They argued that as a result, much of the analysis on hours of paid work is "potentially biased" and that while the bias could be minimal for averages it likely "understates the dispersion in hours."¹⁴⁶⁵

Time diaries are fundamentally different from such estimates based on recall. Robinson and Godbey argue that time use diaries give little opportunity for respondents to "distort activities in order to present themselves in a particular light."¹⁴⁶⁶ According to Andrew Harvey, president of the International Association for Time Use Research, and Director of the Time Use Research Program at Saint Mary's University in Halifax, time use diary data can be more accurate than the work time-estimate data because they capture the detail in the life of an individual. What is referred to as work often includes activities, and therefore time, that might not be excluded or counted in the time-estimate approach. For instance, travel or personal business conducted during work hours, meals, coffee breaks, travel to and from work, and work-related activities conducted outside one's normal place and time of work, are all activities that are captured in the time diaries – and which can then be used to determine total paid and unpaid work time.¹⁴⁶⁷

¹⁴⁶¹ Statistics Canada's LFS has a 5% non-response rate. Statistics Canada. 2002a. *Guide to the Labour Force Survey*. Catalogue no. 71-543-G1E. Minister of Industry. Ottawa. p. 16.

¹⁴⁶² The LFS questionnaire can be found in Statistics Canada's 2002 Guide to the Labour Force Survey. Catalogue no. 71-543-G1E. Minister of Industry. Ottawa.

¹⁴⁶³ Robinson, John P. and Geoffrey Godbey. 1997. *Time for Life. The Surprising Ways Americans Use Their Time*. The Pennsylvania University Press. Pennsylvania. p. 82.

¹⁴⁶⁴ Rowe, Geoff, Huan Nguyen, and Michael Wolfson. *Is the Time Crunch Real?* Presented at the International Time Use Conference on Time Pressure, Work-Family Interface, and Parent-Child Relationships. March 21-23, 2002. Unpublished. Statistics Canada. Ottawa. pp. 2-3.

¹⁴⁶⁵ Idem.

¹⁴⁶⁶ Robinson and Godbey, 1997, op. cit., p. 65.

¹⁴⁶⁷ Harvey, Andrew S. 1992. *Working Paper #8. Time Use Module of the General Social Survey*. Statistics Canada. Ottawa. p. 10. Also Andrew Harvey, Professor of Economics and Director of Time Use Research Program, St. Mary's University, Halifax. Personal communication. February 13, 2003.

Complicating the debate about which data to use, there is the question about what should count as work. In household surveys (using the work-estimate method) respondents are asked how many hours they worked last week. Their answer likely includes all the time they spent "officially" at their place of work. However, Robinson and Godbey point out that not all time at work is spent working (including breaks, lunch, talking to co-workers, making personal phone calls, etc), and they therefore subtract "on-the-job leisure" as well as "on-the-job-training" from their work hours estimates.¹⁴⁶⁸

Every ten years or so since the 1960s, (1965, 1975, 1981, 1985) the *America's Use of Time Project* has collected several thousand time use diaries in which Americans record their daily activities on an hourly basis for a 24-hour period. Using these time diary data, Robinson and Godbey reach different conclusions from Schor, whose controversial book states that the average employed American worked 163 hours more in 1987 than twenty years earlier. Schor notes that most of that increase was due to women's longer paid work hours. Robinson and Godbey take issue with Schor's use of data pointing specifically to her selective use of time use data and her use of work-estimate data.¹⁴⁶⁹ Robinson and Godbey found instead that Americans had more free time, and that work hours had decreased.

Bluestone and Rose also question the accuracy of the data used by Schor and others. They cite the work of Larry Mishel and Jared Bernstein, of the Economic Policy Institute, who re-estimated Schor's annual work hours for 1973 to 1992 using the CPS survey that uses the work time-estimate approach. Their research confirmed, according to Bluestone and Rose, that annual working hours were on the rise between 1973 and 1992, but their estimates were only three-fifths as large as Schor's – reporting an increase of 100 hours during that period, equivalent to 2.5 additional weeks of full-time work. Bluestone and Rose then did their own estimates of work hours changes using longitudinal survey data, and found an increase of 66 hours a year.¹⁴⁷⁰

Figure 62 illustrates the estimated increase in paid work hours over a twenty-year period by various labour analysts. Bluestone and Rose's 66-hour increase amounts to the equivalent of 1.6 additional weeks of full-time work, well below Schor's estimate of 4 additional weeks (163 hours) of full-time work, and about one-third below Mishel and Bernstein's estimate of 100 more hours or 2.5 more weeks of work. Whichever estimate is accepted, all point to an increase in average annual work hours. While the data presented in Figure 62 are for men and women combined, all analysts agree that the increase in work hours among women has been most dramatic. In fact, Bluestone and Rose's estimate for increases in women's work hours exceeded Schor's estimate. They found that over a twenty-year period women's hours increased by an average of 18.8 hours per year, so that by 1989 they were working 376 hours more per year than in 1967, or the equivalent of nearly 9.5 additional weeks of work per year. During the same period, working hours among men declined "slightly," say the authors, but no data were provided.¹⁴⁷¹ According to Schor, women were working about 305 additional paid hours per year

¹⁴⁶⁸ For Schor's objections to this strategy, see Schor, Juliet. 2000. "Working Hours and Time Pressure: The Controversy About Trends in Time Use." In *International Trends, Theory, and Policy Perspectives*. Golden, Lonnie and Deb Figart (eds). Routledge. New York.

¹⁴⁶⁹ Robinson and Godbey, 1997, op. cit., p. 50.

¹⁴⁷⁰ Bluestone and Rose, 1997, op. cit., p. 5.

¹⁴⁷¹ Ibid. p. 9.

in 1987 than in 1969, the equivalent of 7.5 additional weeks, while men worked nearly 98 more hours per year for pay, the equivalent of 2.5 more weeks. When averaged out, Americans overall were working 163 more hours in 1987 than they had in 1969.¹⁴⁷² Based on 1989 CPS data, Schor found that work hours had increased by 138 hours between 1969 and 1989.¹⁴⁷³

Bluestone and Rose's estimates (from longitudinal data) exclude labour force participants who were not working in any given year. They also only used data for workers in the 25-54 age group.¹⁴⁷⁴ Schor, on the other hand, used CPS data for all workers aged 18 years and older. She excluded the underemployed from her estimates. Inclusion of the underemployed would bias the numbers downward. According to Schor, the estimates which show the largest increases in hours are those which exclude those labour force participants who are either underemployed or unemployed. In other words, the group that has seen the most substantial increases in their annual hours are those who are neither unemployed or underemployed.¹⁴⁷⁵

Bluestone and Rose attribute much of the decline in work hours for black men to higher unemployment rates and shorter workweeks.¹⁴⁷⁶ The large increase in female working hours cited by Bluestone and Rose as well as Schor may be attributed to longer weekly schedules and more weeks of work. Schor points out that the large increase in market hours for women was not due to increases in married women's labour force participation the fact that people are on the job "more steadily throughout the year" – a factor which she says accounts for more than two-thirds of the total increase in hours for men and women – has been especially important for women. "Women now take less time off for the birth of a child and are not as likely to stop working during the summer recess in order to care for children. For better or worse, the pattern of women's employment is getting to look more and more like men's."¹⁴⁷⁷

¹⁴⁷² Schor, 1991, op. cit., pp. 28-29. Schor differentiates between the "unconstrained labour force" – employed persons who are not involuntarily underemployed – and the "constrained labour force" that cannot get the hours it needs to make ends meet. The unconstrained group has seen "substantial increases in their annual hours," while the constrained group has experienced the "reverse." 163 hours refers to the increase experienced by the "unconstrained group." Schor excluded the unemployed as well as the underemployed when she calculated the unconstrained labour market group. Schor, Juliet B. Economist. Harvard University. Personal communication, October 27, 2003.

¹⁴⁷³ Work hours increased a total of 138 hours for the "unconstrained" group in that time period; 72 for men and 287 for women. Schor, Juliet B. 2000. *Working Hours and Time Pressure: The Controversy About Trends in Time Use*. In *International Trends, Theory, and Policy Perspectives*. Golden, Lonnie and Deb Figart (eds). Routledge. New York. p. 28.

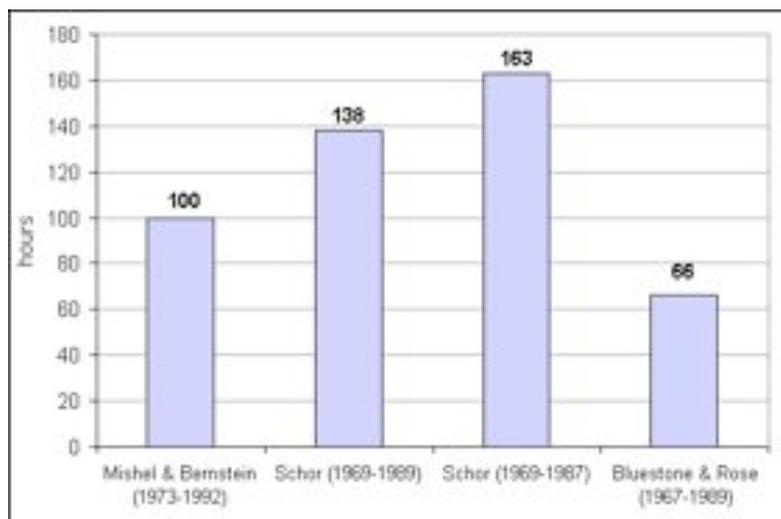
¹⁴⁷⁴ Bluestone and Rose, 1997, op. cit., p. 8.

¹⁴⁷⁵ Schor, Juliet B. 2000. "Working Hours and Time Pressure: The Controversy About Trends in Time Use." In *International Trends, Theory, and Policy Perspectives*. Golden, Lonnie and Deb Figart (eds). Routledge. New York. pp. 7-11.

¹⁴⁷⁶ Bluestone and Rose, 1997, op. cit., p. 9.

¹⁴⁷⁷ Schor, 1991, op. cit., pp. 29-30. Bluestone and Rose do not give any direct reasons for the increase in work hours for women, though they do discuss the fact that the U.S. has undergone the transition from the "prototypical 'Ozzie and Harriet' division of labour of the 1950s to the dual-career family of the 1980s and 1990s." By this, they seem to be implying the same reasons as Schor. Bluestone and Rose, 1997, op. cit., p. 9.

Figure 62. Which Numbers Should we Believe? Increase in average annual (paid) work hours over twenty-year period, U.S., According to different estimates.



Sources: **Mishel and Bernstein** based their calculations on 1973 and 1992 U.S. Current Population Survey (CPS) data. Their findings can be found in Bluestone and Rose, 1997, op. cit., p. 5; **Schor's** estimates are based on the following: 1969 and 1989 CPS data from Schor, Juliet B. 2000. "Working Hours and Time Pressure: The Controversy About Trends in Time Use." In *International Trends, Theory, and Policy Perspectives*. Golden, Lonnie and Deb Figart (eds). Routledge. New York. 1969 and 1987 CPS data: Schor, Juliet B. 1991. *The Overworked American: The Unexpected Decline of Leisure*. Harper Collins. New York; **Bluestone and Rose** base their estimates on the Panel Study of Income Dynamics (PSID) – longitudinal data collected by the University of Michigan's Survey Research Centre on the average hours worked annually from 1967 to 1989. Information about the same people was gathered every year since 1968 and findings are summarized in Bluestone and Rose, 1997, op. cit., p. 8.

The International Labour Organization (ILO), headquartered in Geneva, also compiles data about annual work hours for industrialized countries ("developed economies") and countries with "transitional economies." Table 53 compares the annual hours worked per person in various countries in 1980 and then again approximately 20 years later. These figures indicate that for the most part, annual work hours have decreased, with some exceptions. However, it is not clear from these data, whether the decline/increase is due to changes in the workweek or changes in holidays/vacation. For example, Mishel and Bernstein, as well as Schor, demonstrated that work hours in the U.S. increased between 1973 and 1992, but the increase was due more to the increase in the average number of weeks people worked, than to an increase in the hours worked per week.¹⁴⁷⁸

According to the ILO, average annual hours in Canada over the last twenty years have remained relatively flat. The ILO figures also demonstrate that Japan has the longest annual hours of work of any industrialized country with 1,842 hours, followed by the U.S. with 1,834 hours. This is a shift from much of the 1990s when the U.S. ranked higher than Japan in annual work hours.

¹⁴⁷⁸ Bluestone and Rose, 1997, op. cit., p. 5.; Schor, 1991, op. cit., pp. 29-30.

It is interesting to note that while average hours per week can appear stable, hours per year may increase or decline. This can be caused by a number of factors including a decline or increase in vacation time or an increase or decline in the number of weeks worked.

Table 53. Annual Hours Worked per Person, Selected Industrialized Economies, 1980-2000.¹⁴⁷⁹

Country	1980 (hours)	2000 (hours)	% Change
France	1,794	1,604	- 11
Germany	1,573	1,480	- 6
Netherlands	1,581	1,365	-14
Norway	1,512	1,376	- 9
United Kingdom	1,769	1,720	- 3
Spain	2,003	1,812	- 10
Canada	1,805	1,807	+ 0.1%
Japan	2,121	1,842	- 13
Sweden	1,503	1,624	+ 8
United States	1,883	1,834	- 3
New Zealand	1,820	1,817	- 0.2

Notes:

- Data for 2000 were available at time of writing for all countries except in the cases of France (1998), Netherlands (1997), UK (1999), and Japan (1999).
- The ILO reports that its data on annual hours for Canada are derived from Statistics Canada's Labour Force Survey, supplemented by the Survey of Employment, Payroll and Hours, the annual Survey of Manufacturers, and the Census of Mining.

Source: International Labour Organization. Key Indicators of the Labour Market. Table 6b. Available from <http://www.ilo.org/public/english/employment/strat/kilm/table.htm>.

At the time of the original research and writing of this report 2000 numbers were the most recent. However, at the time of publication, ILO had released 2002 numbers and found that hours worked in the U.S. had declined since 2000, dropping from 1,834 to 1,815 in 2002. More significant declines were found during the same period in Norway (from 1,376 to 1,342), Sweden (from 1,624 to 1,581); France (from 1,587 to 1,545), Canada (from 1,807 to 1,778), Germany (from 1,463 to 1,444). Japan and the U.S. are on par in terms of the number of hours worked per year, says the ILO. South Korea reported the longest hours worked at 2,447 hours per year – 26% more than people in the U.S. and 46% more than the Netherlands, which had the lowest hours worked of all the economies for which data were available.¹⁴⁸⁰

A comparison of work time-estimate data and diary entries suggests, according to Robinson and Godbey, not only that people overestimate how much they work, but also that the more hours

¹⁴⁷⁹ For the reader's convenience, Table 53 above can also be found in Chapter 3 as Table 2.

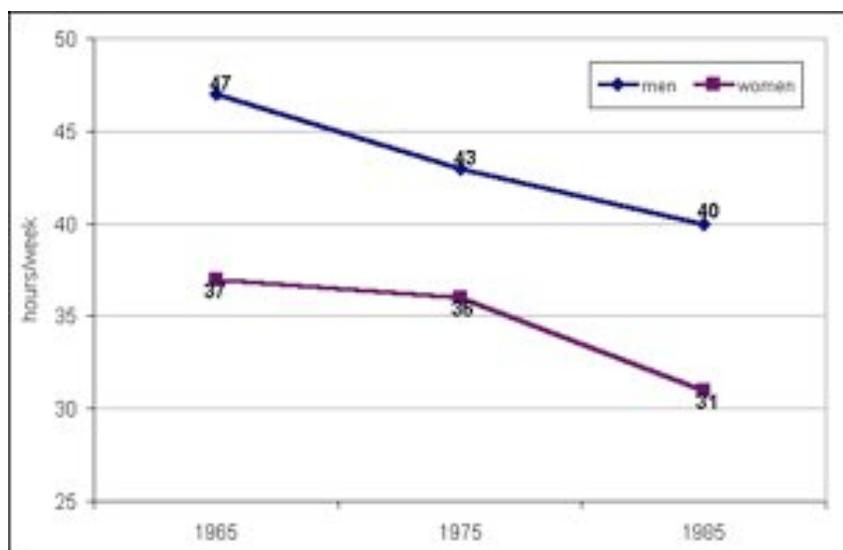
¹⁴⁸⁰ International Labour Organization. 2003a. *New ILO Study Highlights Labour Trends Worldwide: US productivity up, Europe Improves Ability to Create Jobs*. Press Release. September 1, 2003. ILO. Geneva. Available from <http://www.ilo.org/public/english/bureau/inf/pr/2003/40.htm>. Accessed October 25, 2003.

they work, the bigger their overestimates. For example, Robinson and Godbey found that workers who claim they usually work more 60 hours per week, are probably averaging closer to 53-hour weeks.¹⁴⁸¹

Relying exclusively on time use data from 1965, 1975 and 1985, Robinson and Godbey found that average hours of paid work for women declined from 37 hours a week in 1965 to 31 hours a week in 1985, while employed men worked an average of 47 hours a week in 1965 and less than 40 hours a week in 1985.¹⁴⁸² Figure 63 illustrates the trend suggested by time use diaries in the U.S.

Robinson and Godbey argue that on average free time has actually increased – by 5 hours between 1965 and 1985 – but that the prevailing sense of lack of time or "time famine" stems from the fact that people today are "doing more and doing things more quickly and simultaneously." They argue that television watching, which occupies a large portion of the average American's (and Canadian's) spare time, is partly to blame for the sense that leisure is on the decline.¹⁴⁸³

Figure 63. Average Weekly Work Hours (Paid) from Time Use Diaries, U.S., 1965-1985.



Source: Robinson and Godbey, 1997, op. cit., p. 94.

While Robinson and Godbey show an increase in leisure coupled with a decline in paid work hours, it is also possible, according to Andrew Harvey, to have situations where changes in free

¹⁴⁸¹ Bluestone and Rose, 1997, op. cit., p. 6.

¹⁴⁸² Robinson and Godbey, 1997, op. cit., p. 94.

¹⁴⁸³ According to Robinson and Godbey, there were a total of 39.6 hours of free time per week in 1985. Of this, nearly 40% or 15 hours were spent watching television. Canadians watched just as much television as Americans. pp. 124-126.

time and paid work move in the same direction.¹⁴⁸⁴ But when you include other segments of the working population, it is less clear what is happening to leisure time.

This general increase in leisure cited by Robinson and Godbey, if correct, masks the trends taking place within the working population (i.e. the loss of leisure among full-time employed parents and lone-parents). Time diaries also make no distinction between the "constrained" and "unconstrained" labour force and therefore include the underemployed. Their inclusion, according to Juliet Schor, has a large impact on hours of work and free time "imparting a downward bias to estimates of hours," and an upward bias to estimates of leisure.¹⁴⁸⁵

Robinson and Godbey also seem to suggest that the decline in work time is causing the increase in leisure. However, in Canada, a comparison of time use surveys from 1986, 1992 and 1998 does not indicate this. Instead, it shows that leisure is occupying a larger share of the day for some but not because work time is decreasing but because people are sleeping less. The time use data suggest that the extra leisure time has come at the expense of personal care activities (i.e. sleeping, eating, washing and dressing).¹⁴⁸⁶

In general, in Canada, those with the most responsibilities tend to work the longest days (paid and unpaid) and have the least amount of leisure time. The 1998 General Social Survey's Time Use study indicated that in that year the "struggle to juggle" was most difficult for prime age married parents working full-time. Men in this group averaged 48.6 hours and women 38.8 hours per week of paid work and work-related activities. This was up 2.0 hours a week since 1992 for both men and women. Table 54 shows how employed fathers, aged 25-44, saw their total work hours increase by 10% between 1986 and 1998, while employed mothers, aged 25-44, saw their work hours increase by 11.5%.

Married men, aged 25-44, with no children, saw their work hours increase by 9.6% and their female counterparts experienced a 3.6% increase. Employed single men saw their work hours increase by 14.5% in the same time period and single women's hours declined by 3.6%.

According to Harvey, time use diaries in numerous countries, including Canada, indicate that, on average, leisure increased in the period from 1960s to 1990s. In contrast, total work time (paid, unpaid and education) was much more variable, and either increased, decreased or remained steady. In Canada total work time has increased for some demographic groups, especially for employees with young families. So extra free time in those cases has come from "devoting less time to personal care activities."¹⁴⁸⁷

¹⁴⁸⁴ Harvey, Andrew S. 2000. "All You Need is... Time-use Research Lessons from an International Socio-Economic Perspective." In *New Technologies in Survey Research Applications for Time-Use Studies*. Manfred, Ehling and Joachim Merz (eds). University of Luneburg Research Institute on Professions and Federal Statistical Office. Vol. 14. Nomos Verlagsgesellschaft. Baden-Baden. pp. 129-154.

¹⁴⁸⁵ Schor, 2000, op. cit., p. 15.

¹⁴⁸⁶ Fast, Janet, Judith Frederick, Nancy Zukewich and Sandra Franke. 2001. "The Time of our Lives." *Canadian Social Trends*. Statistics Canada. Catalogue No. 11-008. Ottawa. p. 20.

¹⁴⁸⁷ Ibid. p. 20.

Table 54. Average Total Weekly Work Hours (paid and unpaid), Based on Time Use Surveys, Canada, 1986-1998.¹⁴⁸⁸

	1986 (hours)	1992 (hours)	1998 (hours)	% Change
Single, aged 25-44, no children	women: 57.4 men: 48.3	women: 55.3 men: 53.9	women: 55.3 men: 55.3	- 3.6% +14.5%
Married, aged 25-44, no children	women: 58.8 men: 58.1	women: 60.9 men: 63.7	women: 60.2 men: 61.6	+3.6% +9.6%
Parents, aged 25-44, with children under 25	women: 60.9 men: 63	women: 65.8 men: 65.1	women: 67.9 men: 69.3	+11.5% +10%

Source: Fast et al. 2001. "The Time of our Lives." *Canadian Social Trends*. Catalogue no. 11-008. Statistics Canada. Ottawa. p. 22.

Robinson and Godbey provide some reasons that explain why work time tends to be lower in the diary approach¹⁴⁸⁹:

- Work time can be combined with other activities (i.e. one can take care of paying bills, socialize, or read the newspaper during work time) but in the time-estimate approach, for reasons already discussed, it might be difficult to recall this kind of detail and it is unlikely to be subtracted from work hours reported.
- Time diary studies were not designed to elicit precise data on time spent at work, but rather to indicate how all the hours in a given day are spent, and how a wide range of different activities are balanced.
- Time diary data are based on a single day, so "synthetic weeks" are created by adding together equal numbers of Monday diaries, Tuesday diaries, etc. for all seven days, to estimate work hours for the week.
- People who work longer hours have a more difficult time reporting accurately, because such hours are not usually tied to a regular work schedule. These people often work during hours of the day and week when others do not, and they have a greater propensity to overestimate their hours of work.
- A statistical phenomenon known as "regression to the mean," which arises when people are asked to estimate their hours worked "last week" may also help explain the longer

¹⁴⁸⁸ Time use data reported in the table were measured at different points in the business cycle, according to Andrew Heisz of Statistics Canada. Heisz suggested comparing points near cyclical peaks, such as 2001 and 1989. At the time of writing this report, time use data were not available for 2001. Heisz, Andrew. Senior Research Economist, Business and Labour Market Analysis Division, Statistics Canada. Reviewer comments. Received October 23, 2003. GPI Atlantic acknowledges that time use surveys should be conducted more often than every six years. Three years ago, GPI Atlantic, in partnership with several Atlantic Canadian organizations, including the Atlantic Centre of Excellence for Women's Health and the Nova Scotia Advisory Council on the Status of Women wrote the Chief Statistician of Canada, Ivan Fellegi, requesting that Statistics Canada conduct time use surveys more frequently. Fellegi wrote back that the demand did not exist for more frequent surveys.

¹⁴⁸⁹ Robinson and Godbey, 1997, op. cit., pp. 85-87.

reported work hours in the time estimate surveys. Regression to the mean is essentially a technical term in probability and statistics that says that if left to themselves, things tend to return to normal. To the extent that regression to the mean is in operation, people who worked long hours in the previous week are likely to compensate by working fewer hours during the week or day being reported in the diary. That would also lead to estimates that are longer than diary workweeks by those estimating long workweeks.

But in subsequent papers, Schor confronts her critics, and defends both her original findings and the use of time-estimate data:

- **Sample size, frequency, and bias:** The Current Population Survey (CPS) is a *large*, representative sample of U.S. households conducted on a *monthly* basis. Time-diaries are very *infrequent* (once every 10 years) and samples are *much smaller* and "*un-representative* of the country in ways which *bias* the results."¹⁴⁹⁰ CPS surveys are administered monthly to 60,000 U.S. households.¹⁴⁹¹ In contrast, time use diaries in the U.S. were administered in 1965, 1975, 1981 by the University of Michigan, and in 1985 by the University of Maryland. The sample size was roughly 2,000 respondents, about 3% of the sample size in the CPS.¹⁴⁹² As a result, the time use diaries data are unrepresentative of the population. According to Schor, the 1965 sample for instance, was "whiter, more affluent, and more employed than the actual population."¹⁴⁹³
- **Annual hours:** Time diaries do not measure annual hours, only weekly ones. Schor says that given that two-thirds of the increase in annual hours occurred because people were working more days per year, as opposed to more hours per week, Robinson and Godbey's emphasis on weekly estimates in the time use approach is "misleading."¹⁴⁹⁴
- **Macroeconomic variables:** Time-diary data are also limited because they do not take into account the business cycle. "Time-diary researchers compared hours at the peak of the business expansions with hours in the midst of recessions. My methods corrected for all these macroeconomic influences."¹⁴⁹⁵ The 1965 time diary was conducted in the midst of an expansion while the 1981 diary was conducted during a deep recession – biasing hours upward in 1965 and downward in 1981. In contrast, the *monthly* CPS data can be corrected for business cycles. Schor says that average hours of work change and fluctuate with the business cycle "rising in expansions, as firms increase production more rapidly than employment, and falling in recessions as production shrinks."¹⁴⁹⁶
- **Recall Accuracy:** Schor concedes that time-estimate data may be overestimated, but argues that the *level* of work time is not as important as the *trends*. "As long as the

¹⁴⁹⁰ Schor, 2003, op. cit., p. 4.

¹⁴⁹¹ U.S. Department of Labour. 2002. *BLS Handbook of Methods*. Available from http://www.bls.gov.opub/hom/homch1_a.htm. Accessed July 29, 2003.

¹⁴⁹² Multinational Time Use Study. 1965. *Technical Details of Time Use Studies*. Available from <http://www.iser.essex.ac.uk/mtus/studies/usa-1965.php>. Accessed July 29, 2003.

¹⁴⁹³ Schor, 1991, op. cit., p. 168.

¹⁴⁹⁴ Ibid. p. 3.

¹⁴⁹⁵ Ibid. p. 4.

¹⁴⁹⁶ Schor, 2000, op. cit., p. 13; Schor, 1991, op. cit., pp. 168-170.

tendency to overestimate is stable, the upward trend of the CPS data is still a valid indicator."¹⁴⁹⁷

- **Inclusion of underemployed:** Schor differentiates between the "unconstrained labour force" – employed persons who are not involuntarily underemployed – and the "constrained labour force" that cannot get the hours it needs to make ends meet. The unconstrained group has seen "substantial increases in their annual hours," while the constrained group has experienced the "reverse." This is the phenomenon of the polarization of work hours seen in both the U.S. and Canada since the early 1980s, and is a key finding of Schor's work: "While the majority of Americans did experience an increase in hours of work over time, a growing minority found themselves unable to find adequate amounts of work."¹⁴⁹⁸ Unlike the CPS and Canada's Labour Force Survey, time diary questionnaires do not ask questions about labour market constraints, and so the inclusion of the underemployed has a "large impact" on hours. One reason for this bias is that the *number* of underemployed has been increasing at the same time that their average hours of work "have fallen precipitously. Inclusion of these individuals imparts a downward bias to estimates of hours." Therefore, "if average hours of work fall because involuntary underemployment is rising, the general conclusion that Americans have more free time, while strictly speaking true, is misleading."¹⁴⁹⁹ Time diaries are unable to capture the polarization of hours. In sum the "averages" reported by Robinson and Godbey conceal the fact that a large segment of the American population are working longer, are more time squeezed, and have less free time, while a growing number cannot get the hours they need to make ends meet.
- **Measurement of Work:** In the time-use diaries, not all time spent at work is categorized as time spent working. Some employees spend time on the job socializing, making personal phone calls and going to the bathroom. In Robinson and Godbey's estimates, this time is called "on-the-job-leisure" and is subtracted from the work hours. Also subtracted is time spent on-the-job-training. According to Schor the question of measurement deals with the nature of the information being sought. In other words, if we were concerned with measurement of productivity alone then the time spent working might be the correct approach. "For larger concerns, such as work-family pressure, or the trend in civic engagement, time on the job is preferable, because it measures time that is formally committed to the employer and not available for many other uses."¹⁵⁰⁰ Time use diaries do not distinguish between usual and actual hours of work whereas the CPS/LFS data do and are therefore able to break down reported hours of paid work into their component parts in ways that the time diaries cannot do.
- Despite the acknowledged problems with the work time-estimate approach, establishment data simply do not capture many of the fine points in work time that are of interest to

¹⁴⁹⁷ Schor, 2000, op. cit., p. 13.

¹⁴⁹⁸ This was also subsequently found by Bluestone and Rose, and others. Comparable trends in Canada have been described by Statistics Canada in Hall, Karen. 1999. "Hours Polarization at the end of the 1990s." *Perspectives*. Statistics Canada. Catalogue No. 75-001-XPE. Ottawa; and Morissette, Rene and Deborah Sunter. 1994. *What is Happening to Weekly Hours Worked in Canada?* Statistics Canada. Analytical Research Branch. Ottawa.

¹⁴⁹⁹ Schor, 2000, op. cit., p. 15.

¹⁵⁰⁰ Schor, 2000, op. cit., p. 20.

most labour analysts. For instance, the U.S. Employment and Earnings data (much like Canada's Survey of Employment, Payrolls and Hours) does not tell us anything about *who* is working longer or shorter hours, the ages/gender of employees, overtime, moonlighting, etc. They only tell us the number of hours per job, not per employee. For all these reasons, Schor concludes that the CPS data remain the most reliable, consistent, and frequent source of trends in U.S. work hours.

According to Schor, the second edition of Robinson and Godbey's book (1999) found that weekly hours of work for women had actually begun to rise dramatically, so that even the time diary data confirmed some of her own key findings.

Although the preceding debate has referenced U.S. sources, because the arguments on methods and data sources have been made so much more explicitly and forcefully by researchers in that country, it is clear that the same data considerations apply to Canada. The Canadian equivalent of the monthly U.S. CPS, using time-estimates, is Statistics Canada's monthly Labour Force Survey. Canada's Employment, Payrolls and Hours is equivalent to the U.S. Employment and Earnings. Statistics Canada administers time diaries once every six years as part of its General Social Survey (GSS), with the most recent data available for 1998, and time series available back to 1986. Similar issues of potential over-estimates and under-estimates due to recall methods, sample size, survey frequency, annual vs weekly hours, business cycle fluctuations, hours polarization, and so on, exist in relation to the Canadian evidence.

In Canada too, time use diary data are available for a single day rather than for a full week, and they are not conducted on a regular basis in this country, but only once every six years.¹⁵⁰¹ Canadian time-use diaries are also not designed to be any more sensitive to time use around work than in relation to any other daily activity, such as television viewing or sleeping. The detail provided about work is up to the respondent. As noted, the diaries cannot, therefore, capture vital information on work characteristics, trends in underemployment and hours polarization, usual vs actual hours of work, and fluctuations in the business cycle.

In contrast, the Labour Force Survey (LFS) provides monthly estimates of total employment, including self-employment, full and part-time employment, unemployment, and labour force participation, as well as both usual and actual hours of work (including overtime). In total, roughly 54,000 respondents are surveyed, providing a large representative sample.¹⁵⁰² Because the LFS is also a major source of information on the personal characteristics of labour force participants, it allows a correlation of diverse forms of employment status with age, sex, marital status, educational attainment, and family and other characteristics, in order to detect more accurately *where* significant changes in work hours are occurring.¹⁵⁰³

¹⁵⁰¹ In Canada, time-use data are available for 1986, 1992 and 1998 – from Statistics Canada's General Social Survey (GSS). In 1986 the survey was carried out in November and December and in 1992 and 1998 it was year long. Sample size is 10,000. Statistics Canada. 2001. *General Social Survey. An Overview*. Catalogue no. 89F0115X1E. Minister of Industry. Ottawa.

¹⁵⁰² Statistics Canada. 2002a. *Guide to the Labour Force Survey*. Catalogue no. 71-543-G1E. Minister of Industry. Ottawa. p. 16.

¹⁵⁰³ Personal characteristics include age, sex, marital status, educational attainment, and family characteristics. Statistics Canada. 2002. *Guide to Labour Force Survey*. Cat. no. 71-543-G1E. p. 4.

For these reasons, and evaluating the conflicting evidence on data considerations outlined above, this report relies predominantly on the LFS historical data to assess trends in work hours in Canada and Nova Scotia. However, GPI Atlantic fully acknowledges the extraordinary utility of time use diary data when appropriately used, and it references those data regularly, particularly in assessing the value of unpaid work. Time use diary data have also been used in this report, particularly in the sections on leisure and total work hours (paid and unpaid work hours combined).

Because of their very different methodologies, and because they include different variables, these two data sets are not comparable, and they are referenced separately throughout this report.

Usual Hours versus Actual Hours

Statistics Canada's Labour Force Survey collects information on a monthly basis about hours of work. Respondents are asked how many hours they usually worked and how many hours they actually worked during the reference week (which is generally the week prior to the administration of the survey). Usual hours worked are defined as normal paid or contract hours, not counting overtime. By contrast, actual hours are the number of hours actually worked by the respondent during the reference week, and include paid and unpaid overtime. As a general rule, annual average usual hours plus any extra hours (overtime) less time lost (due to holidays, illness, labour dispute, etc.) equal the annual average actual hours.¹⁵⁰⁴

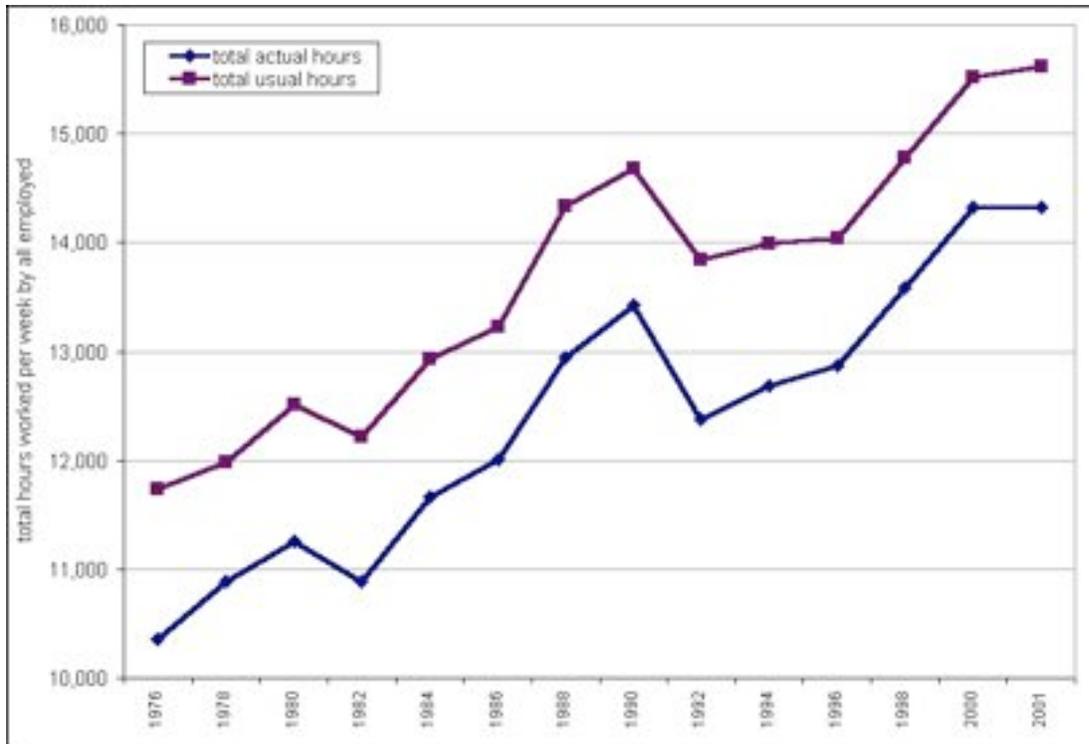
Temporary increases or decreases in work schedules due to overtime, holidays, vacation, illness, strikes, etc do not affect usual hours. They are based on the normal or average Actual hours, on the other hand, are a count of hours that were actually worked in a particular week, and therefore reflect temporary increases or decreases in work schedules. As Figure 64 illustrates, total actual weekly hours are consistently lower than total usual hours because "net time lost from work is always greater than net hours worked in excess of the regular schedule."¹⁵⁰⁵ Figure 64 also demonstrates a steady increase in both usual and actual hours in Nova Scotia in the past 25 years, dipping only briefly during the recessions of the early 1980s and early 1990s.

Annual averages for usual and actual hours are calculated by dividing the total hours worked (full-time and part-time) in Nova Scotia by the number of employees in that year. Figure 64 shows total usual and actual hours worked by all employed persons per week in Nova Scotia between 1976 and 2001.

Figure 64. Total Usual Hours vs. Total Actual Hours worked per week, All Employed, Nova Scotia (1976-2001)

¹⁵⁰⁴ Morissette, Rene and Deborah Sunter. 1994. *What is Happening to Weekly Hours Worked in Canada?* Statistics Canada, Household Surveys Division. Analytical Research Branch. Ottawa. p. 2.

¹⁵⁰⁵ Statistics Canada. 1997. *Labour Force Update. Hours of Work.* Minister of Industry. Ottawa. p. 7.



Notes:

- Total actual hours worked are lower than total usual hours because net time lost from work due to vacations, statutory holidays, sick days etc. is always greater than net hours worked in excess of the regular schedule.
- Numbers above do not represent averages but totals. Therefore, they are going up (unlike average usual/actual hours), due to increases in the size of the work force. Total usual/actual hours reflect the number of people employed.
- These numbers include all employed, which includes the self-employed and all employees.

Source: Statistics Canada. 2002. Labour Force Historical Review 2001. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

Since actual hours include overtime hours, trend lines constructed using actual hours data are typically more dramatic than trend lines using usual hours data. Furthermore, work hours data can be manipulated in a number of ways which will ultimately affect the resulting statistic. For instance, it is possible to construct a trend line showing that work hours in Canada over the past 25 years has declined. Using average usual hours for all employed from 38.6 hours/week in 1976 to 36.6 hours in 2001. However, this overall average is masking trends taking place in long and short hours. When we look at usual work hours of the full-time employed in Canada (instead of the total employed, which includes part-timers) we find that 12.1% worked 50 hours or more in 1976, 16.1% in 1994 and 11.7% in 2001.

When actual hours, which include overtime, are used the trends are much more dramatic. In Canada between 1976 and 2001 there was a 15% increase in the proportion of full-time workers clocking 50 hours or more a week in their main job from 13% to 15%, peaking in 1996 at 18%.

If we include those with multiple jobs we find that 14% of full-time employed worked 50 or more hours a week in 1976 compared with nearly 20% in 1996 and 17% in 2001.¹⁵⁰⁶

The two points that are being made here are that averages mask the fact that for some segments of the working population work hours are increasing while for others they are decreasing. Second, the data can be manipulated in countless ways in order to downplay an existing trend, or conversely, to highlight a trend.

Throughout this report, unless otherwise stated, usual hours have been used to create trend lines for the following reasons:¹⁵⁰⁷

- Usual hours are defined as those normally worked in a week and are not affected by temporary increases or decreases in work schedules. Since we are interested in the number of hours people normally work, the concept used here will be usual hours.
- This report relies heavily on Statistics Canada's literature on work hours, which is based almost entirely on usual hours data. Therefore, when citing Statistics Canada literature, usual hours will most likely be used and/or displayed in table or chart format.¹⁵⁰⁸
- In general, international comparisons have been made with great caution simply because data sources often vary, as do definitions and survey questions. Since usual hours data are not affected by characteristics of the survey week (such as public holidays) they tend to be used by international organizations such as the OECD and the ILO. Therefore, for international comparison purposes, usual hours data have been used for Canada.¹⁵⁰⁹

From 1976 to 1996, usual hours referred to hours worked in a typical week and therefore could have included paid or unpaid overtime hours if the employee usually worked overtime hours. In the revised questionnaire administered since 1997, the definition of usual hours remained the same for self-employed workers, but changed for employees. Usual hours for employees are now defined as those normally worked in a week, not including overtime, and information on overtime hours is collected separately. Statistics Canada introduced this change to provide a better understanding of normal or standard work schedules and overtime behaviour. According to Jeff Bowlby, head of analysis for the Labour Force Survey, the changes to the definition were "subtle" and would have likely caused a slight decline during the 6 month phase in period when the new questionnaire was being introduced, but would have had no effect on the trend lines. Any trends in usual hours after 1996 would be "real" and not the result of any changes in the definition.¹⁵¹⁰

¹⁵⁰⁶ Based on actual hours data. Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

¹⁵⁰⁷ In the case of assessing trends in long work hours, actual hours data were useful in capturing paid and unpaid overtime, which would not be captured in usual hours data.

¹⁵⁰⁸ Hall, Karen. 1999. "Hours Polarization at the end of the 1990s." *Perspectives*. Catalogue no. 75-001-XPE. Minister of Industry. Ottawa. p. 28.

¹⁵⁰⁹ OECD. 1998a. *Annual Hours of Work: Definitional and Comparability Issues*. Organization for Economic Co-operation and Development. Paris. pp. 7-8.

¹⁵¹⁰ Bowlby, Jeff. Statistics Canada. Head of Analysis for Labour Force Survey. Personal communication. July 30, 2003.

Currently vacation time is not adequately tracked in the Labour Force Survey. The actual hours data includes any temporary increases or decreases in work schedules due to overtime, holidays, vacation, illness, strikes, etc. As a result it would be correct to assume that vacation time is embedded or implicit in the actual hours data. It is probably also correct to assume that one of the most significant deviations from standard working time is vacation. However, Statistics Canada has not yet analyzed these data to determine trends in vacation time in Canada.¹⁵¹¹ Statistics Canada's Survey of Work Arrangements (1995) does give data for length of paid vacation leave, but we do not currently have any data to show changes over time.¹⁵¹²

This data gap is not unique to Canada. All OECD countries have labour force surveys, and many of them do not track vacation time accurately. The OECD suggests that it would be "instructive to see to what extent monthly or continuous labour force surveys do yield plausible estimates of average annual vacation time."¹⁵¹³

¹⁵¹¹ Heisz, Andrew. Senior Research Economist, Business and Labour Market Analysis Division, Statistics Canada. Personal communication. March 26, 2003.

¹⁵¹² Jackson, Andrew and David Robinson. 2000. *Falling Behind. The State of Working Canada, 2000*. Canadian Centre for Policy Alternatives. Ottawa. p. 83.

¹⁵¹³ OECD. 1998a. *Annual Hours of Work: Definitional and Comparability Issues*. Organization for Economic Co-operation and Development. Paris. pp. 7-8.

BIBLIOGRAPHY

Advisory Group on Working Time and Distribution of Work. 1994. *Report of the Advisory Group on Working Time and the Distribution of Work*. Human Resources Development Canada. Hull.

Akyeampong, Ernest B. 1989. "Discouraged Workers." *Perspectives*. Statistics Canada. Minister of Industry. Ottawa.

Akyeampong, Ernest B. 1992. "Discouraged Workers – Where have they gone?" *Perspectives*. Statistics Canada. Catalogue no. 75-001E. Minister of Industry. Ottawa.

Akyeampong, Ernest B. 1993. "Flexitime Work Arrangements." *Perspectives*. Statistics Canada. Catalogue no. 75-001E. Minister of Industry. Ottawa.

Akyeampong, Ernest B. 2001. "Fact Sheet on Unionization." *Perspectives*. Statistics Canada. Catalogue no. 75-001-XPE. Ottawa.

American Medical Association. 2001. *Depression and Cardiac Mortality*. Available from <http://archpsyc.ama-assn.org/issues/>. Accessed. November 8, 2002.

Amundson, N. and W. Borgen. 1992. *At the Controls: Charting your Course Through Unemployment*. Employment and Immigration Canada. Toronto.

Aristotle. 1958. *Politics*. Ernest Barker (trans). Oxford University Press. New York.

Baran, Joni. 1996. *Payroll Taxation and Employment. A Literature Survey*. Industry Canada. Ottawa.

Barnet, Richard J. 1993. "The End of Jobs. Employment is one thing the global economy is not creating." *Harpers Magazine*. September. New York

Barry, Anthony. 1974. *Holidays and Hours of Work in the European Community*. Institute of Personnel Management. London.

Battle, Ken and Sherri Torjman (eds). 1999. *Employment Policy Options*. Caledon Institute of Social Policy. Ottawa.

BBC News. "Work Stress doubles Heart Risk." *BBC*. October 17, 2002. Available from <http://news.bbc.co.uk/2/low/health/2337611.stm>. Accessed November 18, 2002.

BBC News. "Sleep Drug Boost for Shift Workers." *BBC*. October 31, 2002. Available from <http://news.bbc.co.uk/2/low/health/2376179.stm>. Accessed November 31, 2002.

BBC News. "'Stress Code' for Firms Launched." *BBC*. June 16, 2003. Available from <http://www.bbc.co.uk/2/low/health/2993116.stm>. Accessed July 22, 2003.

BBC News. December 11, 2003. Available from http://news.bbc.co.uk/1/hi/world/south_asia/3292619.stm.

Bedard, Marcel. 1996. *The Economic and Social Costs of Unemployment*. Applied Research Branch. Human Resources Development Canada. Ottawa.

Beehr, Terry A. 1995. *Psychological Stress in the Workplace*. Routledge. New York.

Bellemare, Diane and Lise Poulin-Simon. 1994. *What is the Real Cost of Unemployment in Canada*. The Canadian Centre of Policy Alternatives. Ottawa.

Benimadhu, Prem. 1987. *Hours of Work: Trends and Attitudes in Canada*. Conference Board of Canada. Ottawa.

Benjamin, Dwayne, Morley Gunderson, and W. Craig Riddell. 1998. *Labour Market Economics. Theory, Evidence, and Policy in Canada*. McGraw-Hill Ryerson. Toronto.

Best, Fred. 1981. *Work Sharing. Issues, Policy Options and Prospects*. The W.E Upjohn Institute for Employment Research. Kalamazoo, Michigan.

Bluestone, Barry and Stephen Rose. 1997. "Overworked and Underemployed: Unravelling an Economic Enigma." *The American Prospect*. No. 31. Available from <http://epn.org/prospect/31/31blue.html>.

Blyton, Paul. 1985. *Changes in Working Time. An International Review*. St. Martin's Press. New York.

Bond, James T., Ellen Galinsky, and Jennifer E. Swanberg. 1997. *The 1997 National Study of the Changing Workforce*. Families and Work Institute. New York.

Bosch, Gerhard, Peter Dawkins, and Francois Michon (eds). 1993. *Times are Changing: Working time in 14 industrialized countries*. International Institute for Labour Studies. Geneva.

Bowlby, Jeff. Statistics Canada. Head of Analysis for The Labour Force Survey. Personal communication. July 30, 2003.

Bozic, Mike. 2001. "Maquiladoras: Economic Miracle or Debacle?" *The United*. Vol. 3, no. 5. Available from <http://myams.org/united/3-5/articles/bozic.html>. Accessed March 28, 2003.

Bradfield, Michael. Professor of Economics. Dalhousie University, Halifax. Personal communication. February 3, 2004.

British Columbia Teacher's Federation. *The Four Day School Week*. Available from www.bctf.bc.ca/info/research/fourdaySchoolWeek.html. Accessed June 19, 2003.

- British Medical Journal. 1996. "Editorial: Overwork can Kill." *British Medical Journal*. 312:921-922. Available from <http://www.bmj.com>. Accessed May 31, 2002.
- Broad, Dave. 2000. *Hollow Work, Hollow Society? Globalization and the Casual Labour Problem in Canada*. Fernwood Publishing. Halifax.
- Broadcasting Culture Research Institute. 1994. *Cross National Comparison of Japanese Time Use*. Broadcasting Culture Research Institute. Tokyo.
- Brown, Phillip and Richard Scase, eds. 1991. *Poor Work: Disadvantage and the Division of Labour*. Open University Press. Philadelphia.
- Bureau of Labor Statistics. 2002. *Workers on Flexible and Shift Schedules in 2001 Summary*. U.S. Department of Labor. Washington. Available from <http://www.bls.gov/news.release/flex.nr0.htm>. Accessed October 24, 2002.
- Business and Economic Roundtable on Mental Health. 2000. *The Unheralded Business Crisis in Canada: Depression at Work. An Information Paper for Business*. GPC Canada. Toronto.
- Canada Safety Council. *Fatigue*. Available from <http://www.safety-council.org/info/OSH/fatigue.htm>.
- Canadian Association of Food Banks. 2002. *Hunger Count 2002*. Available from http://www.cafb-acba.ca/public_e.cfm. Accessed May 6, 2003.
- Canadian Cardiovascular Society. 1998. *Psychosocial Risks and Cardiovascular Disease*. Available from <http://www.ccs.ca/society/conferences/archives>. Accessed November 8, 2002.
- Canadian Centre for Policy Alternatives. Press Release for *Rags and Riches* report. December 12, 2002. Available from <http://www.policyalternatives.ca>. Accessed December 29, 2002.
- Canadian Federation of Independent Business. Press Release. February 21, 2003. Available from <http://www.cfib.ca/legis/novascot/5106.asp>. Accessed July 14, 2003.
- Canadian Federation of Independent Business. 2003. *Nova Scotia Firms do their Part to Address Shortage of Skilled Labour*. Press Release. Available from <http://www.cfib.ca/legis/novascot/skills/asp>. Accessed July 14, 2003.
- Canadian Labour and Business Centre. 2000. *National Seminar on the Changing Workplace*. Available from <http://www.clbc.ca>. Accessed December 9, 2002.
- Canadian Labour and Business Centre. 2000a. *Midwest Health District Job-sharing Initiative*. Available from <http://www.clbc.ca/engdocs/articles/saskatchewan-01.htm>. Accessed December 9, 2002.
- Canadian Labour Congress. 1997. *Women's Work*. CLC. Ottawa.

Canadian Labour Congress. 1997a. *The Future of Jobs – A Labour Perspective*. Available from <http://www.clc-ctc.ca/policy/jobs/futurejo.html>. Accessed May 17, 2002.

Canadian Labour Congress. 1999. *Unemployment Insurance Bulletin*. Canadian Labour Congress. Vol. 2, no. 1. Ottawa.

Canadian Labour Congress. 2002. *Women and Unemployment Insurance*. Available from: <http://action.web.ca/home/>. Accessed October 24, 2002.

Canadian Labour Congress. 2003. *Falling Unemployment Insurance Protection for Canada's Unemployed*. Canadian Labour Congress. Ottawa. Available from <http://www.unemployed.ca/>. Accessed October 23, 2003.

Canadian Labour Congress. 2003a. *Let's Make Unemployment Insurance Work for Everyone*. CLC. Ottawa. Available from <http://www.unemployed.ca/>. Accessed October 23, 2003.

Canadian Mental Health Association. 1984. *Work and Well-being. The Changing Realities of Employment*. CMHA. Toronto.

Canadian Mental Health Association. *Workplace Dangers*. Press Release. May 1, 2000. Edmonton.

Canadian Policy Research Networks. 2001. *Networknews*. No. 16. CPRN. Ottawa.

Canadian Press. "Burnout is an Injury – Ruling." *The Montreal Gazette*. Wednesday June 5, 1985. Montreal. p. B6.

Canadian Public Health Association. 1996. *Discussion Paper. The Health Impact of Unemployment*. CPHA. Ottawa. Available from: <http://www.cpha.ca/english/policy/pstatem/unempl/htm>. Accessed December 29, 2002.

Canadian Public Health Association. 1997. *Health Impacts of Social and Economic Conditions*. CPHA. Ottawa

Caplan, Robert D, Sydney Cobb, John R. P French Jr., R. Van Harrison, and S.R Pinneau Jr. 1980. *Job Demands and Worker Health. Main Effects of Occupational Differences*. Institute for Social Research, University of Michigan. Ann Arbor.

Carvel, John. August 30, 2002. "Overtime Culture gets Worse." *The Guardian*. Available from <http://www.guardian.co.uk>. Accessed October 7, 2002.

Cayley, David. 1998. *The Expanding Prison. The Crisis of Crime and Punishment and the Search for Alternatives*. Anansi Press. Toronto.

CBC Radio. *Workology: Workplace Stress*. November 4, 2002. Toronto.

CBC Radio. *Ideas: Simone Weil*. January 7, 2003. Toronto.

CBC. *Michelin Appeals Decision that Man was Injured in Shift work*. December 3, 2002. Available from http://www.cbc.ca/stories/2002/12/03/insomnia_appeal021203. Accessed May 9, 2003.

CBC. *The Fifth Estate: A Toxic Company. The McWane Story*. January 8, 2003. Available from <http://www.cbc.ca/fifth/pipes/mcwane.html>. Accessed March 14, 2003.

CBC. *New Poverty Indicator shows 1 in 8 Canadians Poor*. May 27, 2003. Available from http://www.cbc.ca/cgi-bin/templates/print.cgi?/2003/05/27/poverty_basket030527. Accessed May 28, 2003.

CBC. *Personal Debt at Record Level in Canada: Study*. November 3, 2003. Available from http://www.cbc.ca/cgi-bin/templates/print.cgi?/2003/11/03/ccsd_report031103. Accessed November 4, 2003.

Central West Health Planning Information Network. 2002. *Exploring the Relationship between Cardiovascular Disease and Socioeconomic Status in Ontario*. Hamilton.

Centre for Research on Youth at Risk. *Fact Sheets*. Available from <http://www.stthomasu.ca/research/youth/risk.htm>. Accessed October 10, 2002.

Chakrapani, C. 1995. *Unemployment Stress: A Study of Educated Unemployed*. Vikas Publishing House. New Delhi.

Chamberlain, Art. "Is Productivity all it's cracked up to be? Technology has let to greater efficiency in the United States, but that means fewer people are needed to do the job." *The Globe and Mail*. September 17, 2003. Toronto. p. C6.

Charerette, Dan. 1995. "Hours of Working Couples." *Perspectives*. Catalogue no. 75-001E. Statistics Canada. Minister of Industry. Ottawa.

Clark, Warren. 2000. "Traffic Report: Weekday Commuting Patterns." *Canadian Social Trends*. Spring. Catalogue no. 11-008. Statistics Canada. Minister of Industry. Ottawa.

CNN. *Lack of Sleep America's top health problem, doctors say*. Available from <http://www.cnn.com/HEALTH/9703/17/nfm/sleep.deprivation/>.

Cobb, Clifford, Ted Halstead, and Jonathan Rowe. 1995. "If the GDP is Up, Why is America Down?" *The Atlantic Monthly*. Available from www.theatlantic.com/atlantic/election/connection/ecbig/gdp.htm.

Cobb, Clifford, Mark Glickman, and Craig Cheslog. *The Genuine Progress Indicator, 2000 Update*. Redefining Progress Issue Brief. December, 2001. Available from http://www.redefiningprogress.org/publications/2000_gpi_update.pdf. Accessed August 24 and 25, 2003.

Cohen, Gary L. 1994. "Ever More Moonlighters." *Perspectives*. Statistics Canada. Catalogue no. 75-001E. Minister of Industry. Ottawa.

Colman, Ronald. 1998. *The Economic Value of Unpaid Housework and Child Care in Nova Scotia*. Genuine Progress Index Atlantic. Halifax.

Colman, Ronald. 1998a. *Costs of Commuting and Telecommuting in Nova Scotia*. Prepared for the N.S. Department of Transportation. Genuine Progress Index Atlantic. Halifax.

Colman, Ronald and Anders Hayden. 1999. *Work Time Reduction in the Nova Scotia Civil Service. Recommendations to the NS Government and Public Sector Unions based on Successful Work Time Reduction Experiments in Europe and North America*. Genuine Progress Index Atlantic. Halifax.

Colman, Ronald. 1999a. *If the Economy is Up, Why are Canadians Down? Impact of Job Casualization on Canadian Workers*. Genuine Progress Index Atlantic. Halifax.

Colman, Ronald. 2000. *Women's Health in Atlantic Canada. A Statistical Portrait. Volume I*. Genuine Progress Index (GPI) Atlantic. Halifax.

Colman, Ronald. 2002. *The Cost of Physical Inactivity in Nova Scotia*. GPI Atlantic. Halifax.

Colman, Ronald. 2002a. *The Cost of Chronic Disease in Nova Scotia*. GPI Atlantic. Halifax.

Colman, Ronald. 2003. *Women's Health in Atlantic Canada: 2003 Update. Volume I: Social Determinants of Health*. GPI Atlantic and Atlantic Centre of Excellence for Women's Health. Halifax.

Colman, Ronald. 2003a. *A Statistical Profile of Women's Health in Canada*. GPI Atlantic. Halifax. Prepared for the Women's Health Bureau. Health Canada. Ottawa.

Commission of Inquiry into Part-time Work. 1983. *Part-time Work in Canada*. Ministry of Labour. Ottawa.

Communications, Energy and Paperworkers Union of Canada. 1999. *Working Less for More Jobs. A Study of Hours of Work and Job Creation in the B.C Pulp and Paper Industry*. CEP. Ottawa.

Communications, Energy and Paperworkers Union of Canada. 2003. *CEP Shorter Work*. Available from http://www.cep.ca/swtime_e.html. Accessed June 20, 2003.

- Cooper, Cary L. and Roy Payne (eds). 1980. *Current Concerns in Occupational Stress*. John Wiley and Sons. New York.
- Cooper, Cary L. and Roy Payne (eds). 1988. *Causes, Coping and Consequences of Stress at Work*. John Wiley and Sons. New York.
- Cooper, Cary L., Paula Liukkonen, and Susan Cartwright. 1996. *Stress Prevention in the Workplace: Assessing the costs and Benefits to Organizations*. European Foundation for the Improvement of Living and Working Conditions. Dublin.
- Correctional Service of Canada. 2002. *Statistical Overview*. Research Branch. Ottawa. Available from http://www.csc-scc.gc.ca/text/faits/facts08-02_e.shtml. Accessed March 25, 2003.
- Cosby, David. 1997. "A Genuine Progress Indicator for Canada: An Alternative to Growth as a Measure of Progress." *Alternative Federal Budget Papers*. Canadian Centre for Policy Alternatives. Ottawa.
- Costanza, R., d'Arge, R., de Groot, R., Farber, S., Grasso, M., Hannon, B., Limburg, K., Naeem, S., O'Neill, R.V., Paruelo, J., Raskin, R.G., Sutton, P., and van den Belt, M. 1997. "The Value of the World's Ecosystem Services and Natural Capital." *Nature*. 387, 253-260.
- Crittenden, Ann. 2001. *The Price of Motherhood*. Henry Holt and Company. New York.
- Crompton, Susan. 1995. "Tired Workers." *Perspectives*. Catalogue no. 75-001E. Statistics Canada. Minister of Industry. Ottawa.
- Cross, Gary. 1989. *A Quest for Time. The Reduction of Work in Britain and France, 1840-1940*. University of California Press. London.
- Crow, Iain, Paul Richardson, Carol Riddington, and Frances Simon. 1989. *Unemployment, Crime, and Offenders*. Routledge. London.
- Crowley, Brian Lee. "Growth, not Government, Best Friend of the Poor." *The Chronicle-Herald*. March 14, 2001. Halifax. p. C2.
- Curson, Chris (ed). 1986. *Flexible Patterns of Work*. Institute of Personnel Management. London.
- Cuvillier, Rolande. 1984. *The Reduction of Working Time*. International Labour Organization. Geneva.
- Department of Justice Canada. 2002. *Youth Sentences*. Available from <http://www.canada.justice.gc.ca/en/ps/yj/repository/2overvw/2010001g.html>. Accessed October 10, 2002.

Dillon, Jo. "Overworking is the new British Disease." *The Independent*. January 19, 2003. Available from <http://news.independent.co.uk/health/story.jsp?story=370702>. Accessed January 20, 2003.

Dobbin, Murray. 1998. *The Myth of the good Corporate Citizen. Democracy Under the Rule of Big Business*. Stoddart. Toronto.

Doctor's Guide to Medical and Other News. 1999. *Depression Linked to Death in Heart Failure Patients*. Press Release. November 1, 1999. Available from <http://www.docguide.com>. Accessed November 8, 2002.

Dodds, Colin and Ronald Colman. 1999. *The Cost of Crime in Nova Scotia*. Genuine Progress Index (GPI) Atlantic. Halifax.

Dodds, Colin and Ronald Colman. 2001. *Income Distribution in Nova Scotia*. GPI Atlantic. Halifax.

Donner, Arthur. 1996. "Why it's Important to Promote Work-sharing." *The Globe and Mail*. May 6, 1996. Toronto.

Donner, Arthur. Economic consultant and chair of both the Federal Advisory Group on Working Time and Distribution of Work, and the Ontario Government's Task Force on Hours of Work and Overtime. Reviewer comments. August 19, 2003 and Augusts 21, 2003.

Douthitt, Robin. 1993. "The Inclusion of Time Availability in Canadian Poverty Measures." In *Time Use Methodology: Toward Consensus*. Istituto Nazionale di Statistica. Rome.

Drolet, Marie and Rene Morissette. 1997. "Working More? Less? What do Workers prefer?" *Perspectives*. Statistics Canada. Catalogue no. 75-001-XPE. Ottawa.

Duchesne, Doreen. 1997. "Working Overtime in Today's Labour Market." *Perspectives*. Statistics Canada. Catalogue no. 75-001-XPE. Minister of Industry. Ottawa.

Duxbury, Linda and Chris Higgins. 2002. *The 2001 National Work-Life Conflict Study*. Health Canada. Ottawa.

Eckenrode, John and Susan Gore (eds). 1990. *Stress Between Work and Family*. Plenum Press. New York.

Economic Policy Institute. 2001. *NAFTA at Seven. The Impact on Workers in all three Nations*. Washington. Available from <http://epinet.org>. Accessed January 25, 2003.

Economic Policy Institute World Almanac. Cited in *The Timesizing Wire*. Available from <http://www.timesizing.com/1vacatns.htm>.

Ehrenberg, Ronald G. and Paul L. Schumann. 1982. *Longer Hours or More Jobs? An Investigation of Amending Hours Legislation to Create Employment*. New York State School of Industrial Labor Relations. New York.

Ehrenreich, Barbara. 1989. *Fear of Falling. The Inner Life of the Middle Class*. Pantheon Books. New York.

Ehrenreich, Barbara. 2001. *Nickel and Dimed. On (Not) Getting by in America*. Henry Holt and Company. New York.

Epstein, Randi Hutter. "Linking Children's Health to Family Meals: Study shows families who eat together have better eating habits." *The New York Times*. Reprinted in *The Chronicle-Herald*. March 29, 2000. Halifax.

European Foundation for the Improvement of Living and Working Conditions. 1993. *European Conference on Stress at Work. A Call for Action: Proceedings*. European Foundation for the Improvement of Living and Working Conditions. Dublin.

European Foundation for the Improvement of Living and Working Conditions. 1998. *Precarious Employment and Working Conditions in European Union*. Dublin.

European Industrial Relations Observatory (EIRO). 1998. *Churches Rally Against the 24-hour Economy*. Available from <http://www.eiro.eurofound.ie/1998/07/feature/n19807189f.html>. Accessed January 19, 2004.

European Industrial Relations Observatory (EIRO). 1998a. *1998 Annual Review for Denmark*. Available from <http://www.eiro.eurofound.ie/1998/12/feature/dk9812107f.html>. Accessed January 19, 2004.

European Industrial Relations Observatory (EIRO). 1999. *10,000 New Jobs Created in Non-profit Care Sector*. Available from <http://www.eiro.eurofound.ie/1999/feature/BE9804233F.html>. Accessed June 16, 2003.

European Industrial Relations Observatory (EIRO). 2002. *Government Issues Assessment of 35-hour week Legislation*. Available from <http://www.eiro.eurofound.ie/2002/10/feature/FR0210106F.html>. Accessed June 16, 2003.

European Industrial Relations Observatory (EIRO). 2003. *Working Time Developments – 2002*. Available from <http://www.eiro.eurofound.ie/2003/03/Update/TN0303103U.html>. Accessed June 16, 2003.

European Industrial Relations Observatory (EIRO). 2003a. *Changeover from Career Breaks to Time Credits Proves Complex*. Available from <http://www.eiro.eurofound.ie/2003/08/feature/BE0108360F.html>. Accessed June 16, 2003.

- EIRO. 2003b. *2002 Annual Review for the Netherlands*. Available from <http://www.eiro.eurofound.ie/2003/01/feature/NL0301105F.html>. Accessed June 16, 2003
- EIRO. 2003c. *2002 Annual Review for France*. Available from <http://www.eiro.eurofound.ie/2003/01/Feature/FR0301108F.html>. Accessed June 16, 2003.
- Evans, Archibald A. 1975. *Hours of Work in Industrialized Countries*. International Labour Organization. Geneva.
- Fast, Janet, Judith Frederick, Nancy Zukewich and Sandra Franke. 2001. "The Time of our Lives." *Canadian Social Trends*. Statistics Canada. Catalogue no. 11-008. Ottawa.
- Feather, Norman T. 1990. *The Psychological Impact of Unemployment*. Springer-Verlag. New York.
- Fineman, Stephen, ed. 1987. *Unemployment. Personal and Social Consequences*. Tavistock Publications. London.
- Finer, Catherine Jones and Mike Nellis (eds). 1998. *Crime and Social Exclusion*. Blackwell Publishers. Oxford.
- Forbes, Rosalind. 1979. *Corporate Stress*. Doubleday and Company, Inc. New York.
- Frederick, Judith A. 1995. *As Time Goes by... Time use of Canadians. General Social Survey*. Catalogue no. 89-544E. Statistics Canada. Minister of Industry. Ottawa.
- French, John R.P. Jr., Robert D. Caplan, and R. Van Harrison. 1982. *The Mechanisms of Job Stress and Strain*. John Wiley & Sons. New York.
- Galarneau, Diane and Cecile Dumas. 1993. "About Productivity." *Perspectives*. Statistics Canada. Catalogue no. 75-001E. Minister of Industry. Ottawa.
- Galarneau, Diane. 1997. "The Redistribution of Overtime Hours." *Perspectives*. Statistics Canada. Catalogue no. 75-001-XPE. Minister of Industry. Ottawa.
- Galarneau, Diane, Howard Krebs, Rene Morissette and Xuelin Zhang. 2001. *The Quest for Workers: A New Portrait of Job Vacancies in Canada*. Statistics Canada and HRDC. Catalogue no. 71-584-MPE no. 2. Minister of Industry. Ottawa.
- Galarneau, D. and L. Stratyckuk. 2002. "After the Layoff." *Canadian Economic Observer*. Statistics Canada. Catalogue no. 11-010-XPB. Minister of Industry. Ottawa.
- Galbraith, James K. 1998. *Created Unequal: The Crisis in American Pay*. The Free Press. New York.
- Galbraith, John K. 1967. *The New Industrial State*. Signet Books. Toronto.

Gallup Management Journal. *Gallup Study Indicates Actively Disengaged Workers Cost the U.S. Hundreds of Billions Each Year*. Press Release, March 19, 2001. Available from http://gmj.gallup.com/press_room/release. Accessed October 24, 2002.

Garwin, Laura and Ehsan Masood. 1998. "The Worth of the Earth." *Nature*. Available from <http://www.nature.com/nsu/981008/981008-3.html>. Accessed August, 14, 2003.

Genuine Progress Index Atlantic. Employment/Underemployment Questionnaire for Glace Bay. GPI Atlantic. Halifax. Available from <http://www.gpiatlantic.org>.

Geotzel, Ron (ed). "The Financial Impact of Health Promotion." *American Journal of Health Promotion*. 15(5), May/June, 2001.

German Embassy, Washington D.C. "*Questions and Answers about Germany*." Available from <http://www.germany-info.org>.

Gibb-Clark, Margot. "Royal Bank Scores with Flexible Work Programs." *The Globe and Mail*. May 15, 1998. Toronto.

Gillis, Charlie. "Work-at-home Plan Targets Gas Emissions." *The National Post*. October 28, 2002. Toronto. p. A6.

Golden, Lonnie and Helene Jorgensen. 2002. *Time after Time. Mandatory Overtime in the U.S. Economy*. Briefing Paper. Economic Policy Institute. Washington.

Golembiewski, Robert T., and Robert F. Munzenrider. 1988. *Phases of Burnout: Developments in Concepts and Applications*. Praeger Publishers. New York.

Goetz, Andre. 1988. *Critique of Economic Reason*. Verso. London.

Gregg, Allan R. "Aging is as Aging Does. Don't Expect the Baby Boomers to Slip Submissively into Old Age." *McLean's*. Vol. 116, no. 32. August 11, 2003. Toronto.

Guthman, Edwin O., C. Richard Allen, Robert F. Kennedy. 1993. *RFK: Collected Speeches*. Viking Press. New York.

Hachey, Leanne. Policy Analyst. Canadian Federation of Independent Business. Halifax. Personal communication. May 30, 2003.

Haiven, Larry and Jane Mullen. Forthcoming. *A Review of the Nova Scotia Labour Standards Code* (provisional title). Canadian Centre for Policy Alternatives. Halifax.

Haiven, Larry. Associate Professor, Department of Management. Saint Mary's University. Personal communication. February 13, 2003.

Hall, Karen. 1999. "Hours Polarization at the end of the 1990s." *Perspectives*. Statistics Canada. Catalogue no. 75-001-XPE. Ottawa.

Hann, Tom. Acting Director of Communications. Department of Fisheries and Aquaculture. Government of Newfoundland and Labrador. Personal communication. June 25, 2003.

Hansen, Fay. "Longer Hours lead to Lawsuits over Pay." *Christian Science Monitor*. July 1, 2002. Available from <http://www.swt.org>. Accessed July 4, 2002.

Harding, Katherine and Virginia Galt. "Job Market Prospects Chill Young Adults." *The Globe and Mail*. December 14, 2002. Toronto. p. B1.

Harnden, Emond. 2003. *Labour and Employment Law for Employers. Controversial Nova Scotia Workers' Compensation Insomnia decision Overturned on Appeal*. Labour and Employment Law for Employers. Available from <http://www.emond-harnden.com/jan03/shiftwork/html>. Accessed May 9, 2003.

Harriman, Ann. 1982. *The Work/Leisure Trade Off. Reduced Work Time for Managers and Professionals*. Praeger Publishers. New York.

Hart, R. A. 1984. *Shorter Working Time. A Dilemma for Collective Bargaining*. International Institute of Management. OECD. Berlin.

Harvey, Andrew S. Professor of Economics and Director of Time Use Research Program, St. Marys University, Halifax. Personal communication. February 13, 2003.

Harvey, Andrew S. Professor of Economics and Director of Time Use Research Program, Saint Mary's University, Halifax. Personal communication. August 6, 2003.

Harvey, Andrew S. Professor of Economics and Director of Time Use Research Program, Saint Mary's University, Halifax. Reviewer comments. August 20, 2003.

Harvey, Andrew S. 1992. *Working Paper #8. Time Use Module of the General Social Survey*. Statistics Canada. Ottawa.

Harvey, Andrew S. 1995. "Canadian Time Use in a Cross-National Perspective." *Statistics in Transition*. Vol. 2, no. 4.

Harvey, Andrew S. 2002. "All You Need is...Time-use Research Lessons from an International Socio-Economic Perspective." In *New Technologies in Survey Research Applications for Time-Use Studies*. Manfred, Ehling and Joachim Merz (eds). University of Luneburg Research Institute on Professions and Federal Statistical Office. Vol. 14. p. 129-154. Nomos Verlagsgesellschaft. Baden-Baden.

Haworth, John T. 1997. *Work, Leisure and Well-being*. Routledge. New York.

Hayden, Anders. 1998. *A Shorter Work Week? An Answer for the Overworked and Unemployed*. Available from <file://A:\swt2\anders shorter workwk.htm>. Accessed July 12, 1999.

Hayden, Anders. 1998a. *Europe's New Movement for Work Time Reduction*. 32 HOURS: Action for Full Employment. Toronto.

Hayden, Anders. 1999. *Sharing the Work, Sparing the Planet. Work time, Consumption and Ecology*. Between the Lines. Toronto.

Hayden, Anders. 2003. "Europe's Work-Time Alternatives." *Take Back Your Time: Fighting Overwork and Time Poverty In America*. Berrett-Koehler. San Francisco. pp. 202-210.

Hayden, Anders. Forthcoming. *France's 35-Hour Week: Win-Win-Win Reform or a Betrayal of Disadvantaged Workers?* Draft made available to GPI Atlantic.

Hayden, Anders. Author of book *Sparing the Work, Sharing the Planet*. Personal communication. June 30, 2003 and October 25, 2003.

Hayden, Anders. Author of book *Sharing the Work, Sparing the Planet*. Reviewer comments. August 25 and 26, 2003.

Health Canada. 1999. *Statistical Report on the Health of Canadians*. Federal, Provincial and Territorial Advisory Committee on Population Health for Meeting of Ministers of Health. Ottawa.

Health Canada. 2002. *Economic Burden and Illness in Canada, 1998*. Policy Research Division. Population and Public Health Branch. Ottawa.

Heisz, Andrew, A. Jackson, and G. Picot. 2002. *Winners and Losers in the Labour Market of the 1990s*. Statistics Canada. Catalogue no. 11F0019, no. 184. Ottawa.

Heisz, Andrew. 2002. *The Evolution of Job Stability in Canada: Trends and Comparisons to U.S. Results*. Analytical Studies Branch Series. no. 162. Statistics Canada. Minister of Industry. Ottawa

Heisz, Andrew. Senior Research Economist, Business and Labour Market Analysis Division, Statistics Canada. Personal communication. March 26, 2003.

Heisz, Andrew. Senior Research Economist, Business and Labour Market Analysis Division, Statistics Canada. Reviewer comments. Received October 23, 2003.

Helliwell, John F. (ed). 2001. *The Contribution of Human and Social Capital to Sustained Economic Growth and Well-Being. International Symposium Report*. Human Resources Development Canada. Ottawa.

Henley, Jon. "Paris Dispatch. A Mixed Blessing." *The Guardian*. October 10, 2003. Available from www.guardian.co.uk/elsewhere/journalist/story/0,7792,1060305,00.html. Accessed October 25, 2003.

Hennebury, Bruce. Executive Director of Fiscal and Economic Policy Branch, Nova Scotia Department of Finance. Personal communication. April 11, 2003.

Hetrick, Ron L. 2000. "Analyzing the Recent Upward Surge in Overtime Hours." *Monthly Labour Review*. Bureau of Labor Statistics. Washington DC.

Hewitt Associates. 2001. *Summer Vacation Highlights Global Differences in Paid Time off*. Available from <http://www.hewitt.com/hewitt/resource/newsroom/pressre/2001/06-06-01.htm>. Accessed October 24, 2002.

Hewitt, Patricia. "UK Working Hours Rise Sharply." *BBC News*. August 29, 2002. Available from <http://news.bbc.co.uk/2/low/business/2223653.stm>. Accessed October 18, 2002.

Higgins, Christopher, Linda Duxbury, and Catherine Lee. 1992. *Balancing Work and Family: A Study of Canadian Private Sector Employees*. Carleton University. Ottawa.

Higgins, Christopher, Linda Duxbury. 2002. *The 2001 National Work-Life Conflict Study: Report One*. Health Canada. Ottawa. Available from <http://www.hc-sc.gc.ca/pphb-dgspsp/publicat/work-travail/>. Accessed September 3, 2002.

Hinrichs, Karl, William Roche, and Carmen Sirianni (eds). 1991. *Working Time in Transition: The Political Economy of Working Hours in Industrial Nations*. Temple University Press. Philadelphia.

Hodder, Mary. *MHA Pleased with Tentative Agreement*. Press Release. March 3, 2003. Available from http://www.liberal.nf.net/NewsReleases/March3_2003_MaryHodder.htm. Accessed June 19, 2003.

Horning, Karl H., Anette Gerhard, and Matthias Michailow. 1995. *Time Pioneers. Flexible Working Time and New Lifestyles*. Polity Press. Cambridge, UK.

Houston Chronicle. *Profiting from Death? Lawsuit filed in Wal-Mart Life Insurance Case*. April 15, 2002. Available from <http://www.walmartwatch.com>. Accessed December 12, 2002.

Howard, John, David Cunningham, and Peter Rechnitzer. 1978. *Rusting Out, Burning Out, Bowing Out. Stress and Survival on the Job*. Financial Post/Macmillan Book. Toronto.

Hughs, Susan. "Shorter Work Week Could Save Lives – Study." *The Chronicle Herald*. November 18, 1999. Halifax.

Human Resources Development Canada. 1997. *Evaluation of Federal Labour Standards. Phase I. Final Report*. Available from <http://wwwII.hrdc-drhc.gc.ca/pls/edd/FEDLABSTAN/html>. Accessed January 15, 2003.

Human Resources Development Canada. 1998. *An Analysis of Employment Insurance Benefit Coverage*. W-98-35E. Applied Research Branch. HRDC. Ottawa.

Human Resources Development Canada. 2003. *The Market Basket Measure? Constructing a New Measure of Poverty*. HRDC. Ottawa.

Human Resources Development Canada. Available from <http://www.pe.hrdc-drhc.gc.ca/common/lmr/jan02.shtml>.

Hunnicutt, Benjamin Kline. 1996. *Kellogg's Six-Hour Day*. Temple University Press. Philadelphia.

International Labour Organization. 1999. *Americans Work Longest Hours among Industrialized Countries, Japanese Second Longest*. Press Release. September 6, 1999. Available from <http://www.ilo.org/public/english/bureau/inf/pr/1999/29.htm>. Accessed July 4, 2002.

International Labour Organization. 2000. *Costs of Workplace Stress are Rising with Depression increasingly common*. Press Release. October 10, 2000. Available from <http://www.ilo.org/public/english/bureau/inf/pr/2000/37.htm>. Accessed July 4, 2002.

International Labour Organization. 2001. *ILO Study finds Forced Labour and Human Trafficking on the Rise. Migrants, Women and Children are Especially Vulnerable*. Press Release. May 25, 2001. Geneva.

International Labour Organization. 2002. *Key Indicators of the Labour Market*. Table 6b. Available from <http://www.ilo.org/public/english/employment/strat/kilm/table.htm>. Accessed July 4, 2002.

International Labour Organization. 2003. *Global Employment Trends*. ILO. Geneva.

International Labour Organization. 2003a. *New ILO Study Highlights Labour Trends Worldwide: US productivity up, Europe Improves Ability to Create Jobs*. Press Release. September 1, 2003. ILO. Geneva. Available from <http://www.ilo.org/public/english/bureau/inf/pr/2003/40.htm>. Accessed October 25, 2003.

Jackson, Andrew and Pradeep Kumar. 1998. *Measuring and Monitoring the Quality of Jobs and the Work Environment in Canada*. Centre for the Study of Living Standards. Ottawa.

Jackson, Andrew. 1997. *The Future of Jobs: A Labour Perspective. Research Paper #4*. Canadian Labour Congress. Ottawa.

- Jackson, Andrew and David Robinson. 2000. *Falling Behind. The State of Working Canada, 2000*. Canadian Centre for Policy Alternatives. Ottawa.
- Jacobson, Louis, Robert LaLonde, and Daniel Sullivan. 1993. *The Costs of Worker Dislocation*. W.E Upjohn Institute for Employment Research. Kalamazoo, Michigan.
- Jensen, Derrick. 2002. "The Disenchanted Kingdom: George Ritzer on the Disappearance of Authentic American Culture." *The Sun*. Available from <http://www.derrickjensen.org/ritzer.html>. Accessed December 16, 2002.
- Jin, R.L., C.P. Shah, and T.J. Svoboda. 1995. "The Impact of Unemployment on Health: A Review of the Evidence." *Canadian Medical Association Journal*. September 1, 1995. Vol. 153, no. 5. p. 529-540. Toronto.
- Johnson, Laura C. 1994. *Changing Families, Changing Workplaces. Case Studies of Policies and Programs in Canadian Workplaces*. Human Resources Development Canada. Ottawa.
- Joint Economic Committee. 1980. *The Social Costs of Unemployment*. Hearing before the Joint Economic Committee. Congress of the United States. October 31, 1979. U.S. Government Printing Office. Washington.
- Junankar, P.N. 1986. *Programme of Research and Actions on the Development of the Labour Market. Costs of Unemployment. Main Report*. Commission of the European Communities. Luxembourg.
- Junger, Jamie. 2002. *Telepathetic*. Compact Disc. Chester, Nova Scotia.
- Kahn, Robert L. 1981. *Work and Health*. John Wiley and Sons Inc. New York.
- Kaplan, David. "Shopping for jobs at Wal-Mart." *The Houston Chronicle*. May 16, 2002. Available from <http://www.chron.com/cs/CDA/story.hts/special/chron10002/1410558>. Accessed October 21, 2003.
- Kay, Cathy. Program Analyst. Nova Scotia Department of Community Services. Personal communication. April 9, 2003.
- Kemeny, Anna. 2002. "Driven to Excel: A Portrait of Canada's Workaholics." *Canadian Social Trends*. Statistics Canada. Catalogue no. 11-008. Minister of Industry. Ottawa.
- Kephart, George, Vince Salazar Thomas, and David MacLean. 1998. "Socioeconomic Differences in the Use of Physician Services in Nova Scotia." *American Journal of Public Health*. 88 (5): 800-803.
- Kerstetter, Steve. 2002. *Rags and Riches: Wealth Inequality in Canada*. Canadian Centre for Policy Alternatives. Ottawa.

- Kirsh, Sharon. 1983. *Unemployment. Its Impact on Body and Soul*. Canadian Mental Health Association. Toronto.
- Kompier, Michiel and Lennart Levi. 1993. *Stress at Work: Causes, Effects and Prevention*. European Foundation for the Improvement of Living and Working Conditions. Dublin.
- Kray, Aart, and David Dollar. 2000. *Growth is Good for the Poor*. World Bank. Available from <http://www.worldbank.org/research/growth/>. Accessed September 3, 2003.
- Landon, Laura and Linda Pannozzo. 2001. *Crude Costs: A Framework for a Full-cost Accounting Analysis of Oil and Gas Exploration off Cape Breton, Nova Scotia*. Save our Seas and Shores Coalition. Halifax.
- Landon, Laura. 2002. "The Unmeasured Costs of Deteriorating Mental Health." *Reality Check*. Vol. 2, no. 3. The Atkinson Charitable Foundation and GPI Atlantic. Halifax.
- Lawless, Paul, Ron Martin, and Sally Hardy (eds). 1998. *Unemployment and Social Exclusion. Landscapes of Labour Inequality*. Jessica Kingsley Publishers. London.
- Lee, Marc. 1999. *A Primer on Canadian Productivity*. Canadian Centre for Policy Alternatives. Ottawa.
- Lethbridge, Lynn, Martha MacDonald and Shelly Phipps. 2003. *Women's Work and Stress on the Rise*. Press Release. April 15, 2003. Nova Scotia Advisory Council on the Status of Women. Available from <http://www.gov.ns.ca/news/details.asp?id=20030415004>. Accessed April 15, 2003.
- Levesque, Marc. Labour analyst. Statistics Canada. Personal communication. April 1, 2003.
- Levi, Lennart and Per Lunde-Jensen. 1996. *A Model for Assessing the Costs of Stressors at the National Level: Socioeconomic costs of work stress in two EU Member States*. European Foundation for the Improvement of Living and Working Conditions. Dublin.
- Lightman, Alan. 2002. "Prisoners of the Wired World." *Globetechnology*. March 16, 2002. Available from <http://www.globetechnology.com>. Accessed March 17, 2002.
- Lin, Zhengxi, Garnett Picot and Janice Yates. 1999. *The Entry and Exit Dynamics of Self-Employment in Canada*. Research Paper Series. Analytical Studies Branch. Statistics Canada. No. 134. Minister of Industry. Ottawa.
- Lin, Zhengxi. 2000. "Payroll Taxes – Recent Trends." *Perspectives*. Catalogue no. 75-001-XPE. Statistics Canada. Minister of Industry. Ottawa.
- Lind, Michael. 1995. "To Have and Have Not. Notes on the Progress of the American Class War." *Harpers Magazine*. June. New York.

- Litman, Todd. 2002. *Transportation Cost Analysis: Techniques, Estimates and Implications*. Victoria Transport Policy Institute. Victoria, British Columbia.
- Little, Bruce. "Leisure often Responsible for GDP Gaps." *The Globe and Mail*. July 8, 2002. Toronto. p. B8.
- Little, Bruce. "Economy Pumps out Jobs. Big fall in full-time hires is a concern." *The Globe and Mail*. November 9, 2002. Toronto. p. B1.
- London Hazards Centre. 1994. *Hard Labour. Stress, Ill-health and Hazardous Employment Practices*. London Hazards Centre Trust Ltd. London.
- Lowe, Graham S., and Herbert C. Northcott. 1986 *Under Pressure: A Study of Job Stress*. Garamond Press. Toronto.
- Lowe, Graham S. 1989. *Background Paper. Women, Paid/Unpaid work, and Stress: New Directions for Research*. Canadian Advisory Council on the Status of Women. Ottawa.
- Lu, Vanessa. "Retirement Plan Aids Workers of All Ages." *The Toronto Star*. December 7, 1998. Toronto. p. B1-B4.
- Lucas, Chad. "Seniors Push for end to Mandatory Retirement." *The Chronicle-Herald*. July 12, 2003. Halifax. p. A7.
- Lynn, Barry. 2002. "Unmade in America. The True Cost of a Global Assembly Line." *Harpers Magazine*. Vol. 304, no. 1825. New York.
- MacArthur, John R. "Democrats have Nobody to Blame but Themselves." *The Globe and Mail*. November 8, 2002. Toronto.
- Manser, Marilyn E. and Garnett Picot. 1999. "Self-employment in Canada and the United States." *Perspectives*. Vol. 11. No. 3. Statistics Canada. Catalogue no. 75-001-XPE. Minister of Industry. Ottawa.
- Marchant, Valerie. "In the Deep of the Night the New Economy is Making more Companies Confront the Challenges of Unorthodox Hours." *Time Magazine*. November 11, 1999. New York.
- Marmot, Michael and Richard Wilkinson (eds). 1998. *Social Determinants of Health: The Solid Facts*. World Health Organization, Regional Office for Europe. Copenhagen.
- Marshall, Katherine. 1997. "Job Sharing." *Perspectives*. Statistics Canada. Catalogue no. 75-001-XPE. Ottawa.
- Marshall, Katherine. 1999. "Seasonality in Employment." *Perspectives*. Statistics Canada. Catalogue no. 75-001-XPE. Minister of Industry. Ottawa.

- Marshall, Katherine. 2000. "Part-time by Choice." *Perspectives*. Statistics Canada. Catalogue no. 75-001-XPE. Minister of Industry. Ottawa.
- Marshall, Katherine. 2001. "Working with Computers." *Perspectives*. Statistics Canada. Catalogue no. 75-001. Minister of Industry. Ottawa.
- Maxwell, Judith. 2002. *Smart Social Policy – Making Work Pay*. Submitted to the TD Forum on Canada's Standard of Living. Canadian Policy Research Networks. Ottawa.
- Maxwell, Judith. 2002a. "No Way up the Pay Scale." *The Globe and Mail*. October 8, 2002. Toronto. p. A21.
- McCarthy, Eugene and William McGaughey. 1989. *Nonfinancial Economics. The Case for Shorter Hours of Work*. Praeger Publishers. New York.
- McCarthy, Maureen E. and Gail S. Rosenberg. 1981. *Work Sharing Case studies*. W.E Upjohn Institute for Employment Research. Kalamazoo, Michigan.
- McCracken, Mike and Goeff Bromfield. 1994. *Reduction of Working Time: Macroeconomic Issues. Background Study prepared for Advisory Group on Working Time and the Distribution of Work*. Study kindly provided by M. McCracken. June 24, 2003.
- McCracken, Mike. Informetrica Limited. Personal communication. June 29, 2003.
- McInnis, Mary. Certified General Accountant. Chester, Nova Scotia. Personal communication. April 9, 2003.
- McLean, Alan A. 1979. *Work Stress*. IBM Corporation and Cornell University Medical College. Addison-Wesley Publishing Company. Reading, Massachusetts.
- McLean, Bethany. "A Bitter Pill." *Fortune*. July 24, 2001. Available from <http://www.fortune.com/fortune/investing/articles/0,15114,371450,00.html>. Accessed August 23, 2003.
- McKnight, John. 1995. *Careless Society. Community and its Counterfeits*. Basic Books. New York.
- McQuaig, Linda. 1995. *Shooting the Hippo: Death by Deficit and other Canadian Myths*. Viking. Toronto.
- McQuaig, Linda. 1998. *The Cult of Impotence. Selling the Myth of Powerlessness in the Global Economy*. Viking. Toronto.
- Meltz, Noah M., Frank Reid, and Gerald S. Swartz. 1981. *Sharing the Work. An Analysis of the Issues in Worksharing and Jobsharing*. University of Toronto Press. Toronto.

- Menzies, Heather. 1996. *Whose Brave New World? The Information Highway and the New Economy*. Between the Lines. Toronto.
- Messinger, Hans. Statistics Canada. Personal communication. December 12, 2003.
- Mitchell, Debbie. Intervention Officer. Department of Environment and Labour, Labour Standards. Personal communication. March 19, 2003.
- Molitoris, Jolene. 1998. *Fatigue in Rail and Truck Operations*. Congressional Testimony. Washington. Available from <http://www.elibrary.ca>. Accessed November 24, 2002.
- Moore, Michael. 1996. *Downsize This!* Crown Publishers, Inc. New York.
- Moore, Michael. 2001. *Stupid White Men*. Regan Books. New York.
- Morissette, Rene and Deborah Sunter. 1994. *What is Happening to Weekly Hours Worked in Canada?* Statistics Canada, Household Surveys Division. Analytical Research Branch. Ottawa.
- Morissette, Rene, Xuelin Zhang and Marie Drolet. 2002. "Are Families Getting Richer?" *Canadian Social Trends*. Statistics Canada. Catalogue no. 11-008. Ottawa.
- Morissette, Rene, Xuelin Zhang, and Marie Drolet. 2002a. *The Evolution of Wealth Inequality in Canada, 1984-1999*. Catalogue no. 11F0019, no. 187. Table 4. Minister of Industry. Ottawa.
- Multinational Time Use Study. 1965. *Technical Details of Time Use Studies*. Available from <http://www.iser.essex.ac.uk/mtus/studies/usa-1965.php>. Accessed July 29, 2003.
- Myles, John and Garnett Picot. 2000. *Social Transfers, Earnings and Low Income Intensity among Canadian Children, 1981-1996*. Analytical Studies Branch Research Paper Series. no. 144. Statistics Canada. Minister of Industry. Ottawa.
- National Forum on Family Security. 1993. *Family Security in Insecure Times*. Canadian Council on Social Development. Ottawa.
- National Centre for Health Statistics. 2001. *National Vital Statistics Reports*. Vol. 49, no. 6. Available from <http://www.cdc.gov/nchs/>. Accessed April 3, 2003.
- Nearing, Lori. Manager of Employment Support Services. Nova Scotia Department of Community Services. Personal communication. April 9, 2003.
- Negrey, Cynthia. 1993. *Gender, Time, and Reduced Work*. State University of New York Press. New York.
- Newfoundland and Labrador Federation of Labour. 2002. *Submission to the All-Party Committee on the FPI Act*. Fortune.

Newman, Katherine S. 1993. *Declining Fortunes: The Withering of the American Dream*. Basic Books. New York.

New York Times. "Unemployment Statistics High. More Jobless Americans Giving up the Hunt for Work." *New York Times*. April 29, 2003. New York.

Nixon, Sherrill. "Desire for Shorter Hours Surges." *Sydney Morning Herald*. July 21, 2003. Sydney.

Noreau, Nathalie. 1994. "Involuntary Part-timers." *Perspectives*. Statistics Canada. Catalogue no. 75-001E. Minister of Industry. Ottawa.

NovaKnowledge. 2002. *Knowledge Economy Report Card 2002*. Halifax.

Nova Scotia Department of Environment and Labour. *Guide to the Labour Standards Code of Nova Scotia*. Available from www.gov.ns.ca/enla/labstand/lstcode/. Accessed December 2, 2002.

Nova Scotia Department of Environment and Labour. *Minimum Wage Order*. Available from www.gov.ns.ca/just/regulations/regs/lscmwgen.htm. Accessed March 19, 2003.

Nova Scotia Department of Environment and Labour. *New Regulations to Clarify Overtime Provision*. Press Release. November 28, 2003. Available from <http://www.gov.ns.ca/news/details.asp?id=20031128002>. Accessed November 30, 2003.

Nova Scotia Department of Finance. 2000. *Statistical Review*. Statistics Division. Halifax.

Nova Scotia Department of Finance. 2001. *Statistical Review*. Statistics Division. Halifax.

Nova Scotia Department of Finance. 2002. *Statistical Review*. Statistics Division. Halifax.

Nova Scotia Department of Finance. Available from <http://www.gov.ns.ca/finance/statistics/agency/index.asp?p=4>. Accessed March 20, 2004.

O'Hara, Bruce. 1993. *Working Harder isn't Working*. New Star Books. Vancouver.

O'Hara, Bruce. 2000. *The Case for Shorter Work Time*. Available from <http://www.vcn.bc.ca/timework/share.htm>. Accessed November 17, 2002.

O'Hara, Bruce. *Full Employment: What Governments Can do*. Available from <http://www.swt.org/policy.htm>. Accessed July 17, 2002.

Ontario Task Force on Hours of Work and Overtime. 1987. *Working Times: The Report of the Ontario Task Force on Hours of Work and Overtime*. Ministry of Labour. Toronto.

Ontario Task Force on Hours of Work and Overtime. 1987a. *Working Times: Phase II. The Report of the Ontario Task Force on Hours of Work and Overtime*. Ministry of Labour. Toronto.

Organization for Economic Co-operation and Development. 1995. *Flexible Working Time: Collective Bargaining and Government Intervention*. OECD. Paris.

Organization for Economic Co-operation and Development (OECD). 1996. *Employment Outlook*. OECD. Paris.

Organization for Economic Co-operation and Development (OECD). 1998. *Employment Outlook*. OECD. Paris.

OECD. 1998a. *Annual Hours of Work: Definitional and Comparability Issues*. Organization for Economic Co-operation and Development. Paris.

OECD. 2002. *OECD Employment Outlook*. OECD. Paris.

Osberb, Lars, Fred Wien, Jan Grude. 1995. *Vanishing Jobs. Canada's Changing Workplaces*. James Lorimer and Company. Toronto.

Osberg, Lars. 2002. "Economic and Social Aspects of Productivity: Linkages and Policy Implications." In *Productivity Issues in Canada*. Someshwar Rao and Andrew Sharpe (eds). pp. 759-788. University of Calgary Press. Calgary.

Owen, Glen. "Daily Grunt of Families Who Don't Know How to Chat." *Times Online*. January 17, 2003.. Available from <http://www.timesonline.co.uk/article/0,2-537234,00.html>. Accessed January 17, 2003.

Owen, John D. 1979. *Working Hours: An Economic Analysis*. Lexington Books. Massachusetts.

Pannozzo, Linda and Minga O'Brien. 2001. *The Forest Accounts. A Way Forward*. Vol. 2. GPI Atlantic. Halifax.

Pennock, Mike. (forthcoming 2004). "Employment and health: Some results from the Community GPI surveys in Kings County and Glace Bay." GPI Atlantic, Halifax.

Philp, Margaret. "Mother and Girls Enjoy Better Times." *The Globe and Mail*. November 26, 2002. Toronto. p. A1.

Philp, Margaret. "Welfare Recipients becoming Poorer, report says." *The Globe and Mail*. April 11, 2003. Toronto. p. A9.

Picot, Garnett and Zhengxi Lin. 1997. *Are Canadians More Likely to Lose their Jobs in the 1990s?* Research Paper Series. Analytical Studies Branch Series. no. 96. Statistics Canada. Minister of Industry. Ottawa.

Picot, Garnett, Zhengxi, Lin, and Wendy Pyper. 1997. *Permanent Layoffs in Canada: Overview and Longitudinal Analysis*. Analytical Studies Branch Series. no. 103. Statistics Canada. Minister of Industry. Ottawa.

Picot, Garnett. 1998. "What is Happening to Earnings Inequality and Youth Wages in the 1990s?" *Canadian Economic Observer*. Catalogue no. 11-010-XPB. Statistics Canada. Ottawa.

Pold, Henry. 2001. "Trends in Part-time Work." *Perspectives*. Statistics Canada. Catalogue no. 75-001-XPE. Minister of Industry. Ottawa.

Prevention Dividend Project. *Worksite Health Promotion: Are Worksite Health Promotion Programs Cost-effective?* Available from <http://prevention-dividend.com> Accessed November 5, 2002.

Quick, James C. and Jonathan D. Quick. 1984. *Organizational Stress and Preventive Management*. McGraw Hill Book Company. New York.

Quick, James C., Rabi S. Bhagat, James E. Dalton, and Jonathan D. Quick (eds). 1987. *Work Stress: Health Care Systems in the Workplace*. Praeger Publishers. New York.

Quick, James Campbell, Lawrence R. Murphy, and Joseph J. Hurrell Jr. (eds). 1992. *Stress and Well-Being at Work. Assessments and Interventions for Occupational Mental Health*. American Psychological Association. Washington.

Rao, Rama K. 1986. *Unemployment, stress and suicide: An Annotated Bibliography*. Vance Bibliographies. Pittsburgh.

Raven, Pauline, and Lesley Frank. 2003. *Promises to Keep: The Nova Scotia Child Poverty Report Card, 1989-2001*. The Canadian Centre for Policy Alternatives – Nova Scotia. Halifax.

RBC Financial Group. 2003. *Diversity: Work Life Solutions*. Available from <http://www.rbc.com/uniquecareers/diversity/solutions.html>. Accessed June 20, 2003.

Redefining Progress. *Why Bigger isn't Better – The Genuine Progress Indicator: 1999 Update*. Available from <http://www.rprogress.org/projects/gpi/updates/gpi1999.html>. Accessed August 24, 2003.

Redefining Progress. *The Genuine Progress Indicator – 2000 Update*. Available from http://www.rprogress.org/publications/2000_gpi_update.pdf. Accessed August 24, 2003.

Redefining Progress. 2000. *Eroding Economic Security: Genuine Progress Indicator uncovers Dangers Hidden Behind Last Year's Economic Boom*. Press Release. Available from www.rprogress.org/media/releases/00125gpi.html. Accessed January 9, 2003.

Rees, William E. 1995. "More Jobs, Less Damage. A Framework for Sustainability, Growth and Employment." *Alternatives Magazine*. Vol. 21, no. 4. Waterloo, Ontario.

Reid, Frank and Morley Gunderson. Forthcoming. *Worksharing and Working Time Issues in Canada*. Institute for Research in Public Policy. Montreal.

- Reiss, Matthew. 2002. "American Karoshi." *The New Internationalist*. No. 343. Oxford.
- Rifkin, Jeremy. 1987. *Time Wars*. Henry Holt. New York.
- Rifkin, Jeremy. 1995. *The End of Work. The Decline of the Global Labor Force and the Dawn of the Post-market Era*. G.P Putnam's Sons. New York.
- Robinson, John P. and Geoffrey Godbey. 1997. *Time for Life. The Surprising Ways Americans Use Their Time*. The Pennsylvania University Press. Pennsylvania.
- Robinson, Joe. "The Shrinking American Vacation." *The Washington Post*. July 27, 2003. p. B01.
- Romanow, Roy. 2003. "Connecting the Dots: From Health Care to Illness and Wellbeing," A Speech Delivered on the Occasion of Receiving The International Foundation's Public Service Award. Ottawa. May 8, 2003. Reprinted in *Reality Check: The Canadian Review of Wellbeing*. Volume 3, no. 2. July, 2003. p. 3. Available from <http://www.gpiatlantic.org>.
- Roszak, Theodore. 1979. *Person Planet. The Creative Disintegration of Industrial Society*. Anchor Press. New York.
- Rowe, Geoff, Huan Nguyen, and Michael Wolfson. *Is the Time Crunch Real?* Presented at the International Time Use Conference on Time Pressure, Work-Family Interface, and Parent-Child Relationships. March 21-23, 2002. Unpublished. Statistics Canada. Ottawa.
- Russell, Bertrand. 1935. *In Praise of Idleness*. George Allen and Unwin Ltd. London.
- Sarlo, Christopher. 2001. *Measuring Poverty in Canada*. The Fraser Institute. Available from http://www.oldfraser.lexi.net/publications/critical_issues/2001/poverty/. Accessed September 3, 2003.
- Saskatchewan Labour. *Rights and Responsibilities Guide. Benefits for Part-time Employees*. Available from <http://www.labour.gov.sk.ca/standards/guide/benefits.htm>. Accessed January 21, 2004.
- Saul, John Ralston. 1994. *The Doubter's Companion. A Dictionary of Aggressive Common Sense*. Viking. Toronto.
- Scenic Valley School Division. Available from <http://www.scenicvalley.com>. Accessed June 19, 2003.
- Schissel, Bernard. 1997. *Blaming Children. Youth Crime, Moral Panics and the Politics of Hate*. Fernwood Publishing. Halifax.
- Schlein, Lisa. "Mental ill-health puts many out of work." *Canadian Press*. November 5, 2002.

- Schor, Juliet B. 1991. *The Overworked American: The Unexpected Decline of Leisure*. Harper Collins. New York.
- Schor, Juliet B. 1998. *The Overspent American: Upscaling, Downshifting and the New Consumer*. Basic Books. New York.
- Schor, Juliet B. 2000. *Working Hours and Time Pressure: The Controversy About Trends in Time Use*. In *International Trends, Theory, and Policy Perspectives*. Golden, Lonnie and Deb Figart (eds). Routledge. New York.
- Schor, Juliet B. [Forthcoming]. "The (Even more) Overworked American." In *Take Back Your Time*. John deGraaf (ed). Berrett-Koehler. San Francisco. Article made available to GPI Atlantic by J. Schor, May 29, 2003.
- Schor, Juliet B. Economist. Harvard University. Personal communication. May 29, 2003.
- Schor, Juliet B. Economist. Harvard University. Personal communication. October 27, 2003.
- Schumacher, E.F. 1979. *Good Work*. Harper & Row Publishers. New York.
- Sheridan, Mike, Deborah Sunter and Brent Diverty. 1996. "The Changing Workweek: Trends in Weekly Hours of Work." *Canadian Economic Observer*. Statistics Canada. Catalogue no. 11-010-XPB. Ottawa.
- Shields, Margot. 1999. "Long Working Hours and Health." *Health Reports*. Autumn 1999. Vol. 11 no. 2. Statistics Canada. Ottawa.
- Shields, Margot. 2002. "Shift Work and Health." *Health Reports*. Statistics Canada. Catalogue no. 82-003. Minister of Industry. Ottawa.
- Shillington, Richard. "What do we Mean by Poverty, or HRDC Reduces our Obligations to Poor Children." January 15, 1999. Available from <http://www.shillington.ca/poverty/mbm.htm>. Accessed September 3, 2003.
- Shillington, Richard. "Newspeak on Poverty." *Straight Goods*. May 28, 2003. Available from <http://www.straightgoods.com/Analyze/010305.asp>. Accessed May 28, 2003.
- Silver, Cynthia and Susan Crompton. 2002. "No Time to Relax? How Full-time Workers Spend the Weekend." *Canadian Social Trends*. Catalogue no. 11-008. Statistics Canada. Ottawa.
- Silverstein, Pam and Jozetta H. Srb. 1979. *Flexitime: Where, When, and How?* New York State School of Industrial and Labour Relations. New York.
- Sinclair, Gabe. 2000. *The Four-Hour Day*. The Four-Hour Day Foundation, Inc. Baltimore.

Singh, Surendar. 1991. "A Note on the Work Sharing Program." *Perspectives*. Statistics Canada. Minister of Industry. Ottawa.

Smith, Amy. "NDP buys amended Sunday shopping bill. Law includes improvements to labour code." *The Chronicle-Herald*. October 25, 2003. Halifax. p. A1.

Smith, Paul K. Policy, Planning and Research Division. N.S. Department of Justice. Personal communication. May 1, 2003.

Stanford, Jim. 1999. *Paper Boom. Why Real Prosperity requires a new approach to Canada's Economy*. CCPA and James Lorimer and Co. Ltd. Ottawa.

Stanford, Jim. 1999a. *Upside Down Economics: Unemployment Used to be Bad, but Now it's Good for Business*. In *The CCPA Monitor*. December. Canadian Centre for Policy Alternatives. Ottawa.

Statistics Canada. 1985. *Survey of Work Reduction*. Catalogue no. 71M0008XDB. Minister of Industry. Ottawa.

Statistics Canada. 1991. *Canadian Social Trends*. Autumn. Catalogue no. 11-008-XPE. Minister of Industry. Ottawa.

Statistics Canada. 1994. "Highlights." *Perspectives*. Catalogue no. 75-001E. Minister of Industry. Ottawa.

Statistics Canada. 1995. *Survey of Work Arrangements*. Minister of Industry. Ottawa.

Statistics Canada. 1997. *Labour Force Update. Hours of Work*. Vol. 1, no. 2 Catalogue no. 71-005-XPB. Minister of Industry. Ottawa.

Statistics Canada. 1997a. "Earning Characteristics of Two-Partner Families." *The Daily*. August 26, 1997. Available from <http://www.statcan.ca/Daily/English/970826/d970826.htm>. Accessed June 8, 2003.

Statistics Canada. 1997b. *On Poverty and Low Income*. Available from <http://www.statcan.ca/English/concepts/poverty/pauv.htm>. Accessed December 9, 2002.

Statistics Canada. 1998. *Work Arrangements in the 1990s*. Catalogue no. 71-534, no. 8. Minister of Industry. Ottawa.

Statistics Canada. 1998a. *The General Social Survey 1998, Cycle 12 –Time Use Survey, Appendix L. 1998 Activity Classification Structure*. Minister of Industry. Ottawa.

Statistics Canada. 1999. *Overview of the Time Use of Canadians in 1998*. General Social Survey. Catalogue no. 12F0080X1E. Minister of Industry. Ottawa.

Statistics Canada. 1999a. *Income Trends in Canada 1980-1997*. Catalogue no. 13F0022XCB. Minister of Industry. Ottawa.

Statistics Canada. 1999b. "General Social Survey: Time Use." *The Daily*. November 9, 1999. Available from <http://www.statcan.ca/Daily/English/>. Accessed April 30, 2003.

Statistics Canada. 1999c. *General Social Survey: Overview of the Time Use of Canadians*. Table 1: Canada, regions and provinces: Special tabulations for GPI Atlantic.

Statistics Canada. 1999d. *Health Statistics*. CD-ROM. Table 00060139.IVT: "Levels of Stress." Minister of Industry. Ottawa.

Statistics Canada. 1999e. "Income Inequality and Mortality among working-age people in Canada and the U.S." *Health Reports*. Catalogue no. 82-003. Ottawa.

Statistics Canada. 1999f. "Supplementary measures of unemployment." *Labour Force Update*. Catalogue no 71-005-XPB. Vol. 3, no. 3. Summer

Statistics Canada. 2000. *The Daily*. Thursday September 28, 2000. Available from <http://www.statcan.ca/Daily/English/000928/d000928b.htm>. Accessed April 3, 2003.

Statistics Canada. 2000a. "Family Income." *The Daily*. October 30, 2002. Available from <http://statcan.ca/Daily/English/021030/d021030a.htm>. Accessed December 9, 2002.

Statistics Canada. 2000b. *Human Activity and the Environment*. Minister of Industry. Catalogue no. 11-509-XPE. Ottawa.

Statistics Canada. 2000c. *Spending Patterns in Canada*. Catalogue no. 62-202. Table 1 and 2. Minister of Industry. Ottawa.

Statistics Canada. 2000d. *Income in Canada, 1989-1998*. Catalogue no. 75-202-XIE, Table 7.2. Minister of Industry. Ottawa.

Statistics Canada. 2001. *General Social Survey. An Overview*. Catalogue no. 89F0115X1E. Minister of Industry. Ottawa.

Statistics Canada. 2001a. *Low Income Cut-offs (LICOs)*. Available from <http://www.statcan.ca/english/census2001/dict/fam021.htm>. Accessed May 7, 2003.

Statistics Canada. 2001b. *User Guide. Survey of Household Spending, 2000*. Income Statistics Division. Statistics Canada. Minister of Industry. Ottawa.

Statistics Canada. 2002. *Labour Force Historical Review 2001*. Catalogue no. 71F0004XCB. Minister of Industry. Ottawa.

Statistics Canada. 2002a. *Guide to the Labour Force Survey*. Catalogue no. 71-543-G1E. Minister of Industry. Ottawa.

Statistics Canada. 2002b. *Income in Canada, 2000*. Catalogue no. 75-202-X1E. Minister of Industry. Ottawa.

Statistics Canada. 2002c. *Women in Canada: Work Chapter Updates*. Catalogue no. 89F0133-XIE. Minister of Industry. Ottawa.

Statistics Canada. *The Daily*. February 22, 2002. Minister of Industry. Ottawa.

Statistics Canada. *Incidence of Low Income among the Population Living in Private Households, Provinces and Territories*. Census Tables. Available from <http://www.statcan.ca/english/Pgdb/famil60a.htm>. Accessed December 9, 2002 and November 3, 2003.

Statistics Canada. 2003. *Average Weekly Employment Insurance Benefits*. CANSIM II, Table 276-0016. Available from <http://www.statcan.ca/english/Pgdb/labor17.htm>. Accessed April 8, 2003.

Statistics Canada. 2003a. *Labour Force Survey, 1976-2002*. Unpublished Data. Table V0603_16. Minister of Industry. Ottawa.

Statistics Canada. 2003b. *Survey of Employment, Payrolls and Hours*. Table 281-0031. Minister of Industry. Ottawa.

Statistics Canada. 2003c. *Family Income, 2001*. *The Daily*. June 25, 2003. Available from <http://www.statcan.ca/Daily/English/030625/d030625b.htm>. Accessed November 11, 2003.

Statistics Canada. 2003d. *Commuting Distance, 2001 Census*. Available from <http://www12.statcan.ca/english/census01/products/>. Accessed November 25, 2003.

Statistics Canada. 2003e. *Income Trends in Canada, 1980-2001*. Catalogue no. 13F0022XCB. Minister of Industry. Ottawa.

Statistics Canada. 2003f. *Income in Canada, 2001*. Catalogue no. 75-202-XIE. Minister of Industry. Ottawa.

Statistics Canada. "Non-wage Job Benefits, 2000." *The Daily*. May 21, 2003. Available from <http://www.statcan.ca/Daily/English/030521/d030521c.htm>. Accessed December 8, 2003.

Statistics Canada. *Average Market Income by Economic Family Types, Canada, 1981-2000*. Available from <http://www.statcan.ca/english/Pgdb/famil22d.htm>. Accessed June 5, 2003.

Statistics Canada. *"Life Stress, by sex, household population aged 18 and over, Canada, provinces, territories, health regions and peer groups, 2000/01."* Available from <http://www.statcan.ca/english/freepub/82-221-XIE/00502/tables/html/2336.htm>.

Statistics Canada. *Average Market Income by Selected Economic Family Types, Nova Scotia, 1981-2000.* CANSIM II. Table 202-0202. Minister of Industry, Ottawa.

Statistics Canada. *Average After-tax Income in 2001 Constant Dollars.* CANSIM II. Table 202-0603. Minister of Industry. Ottawa.

Statistics Canada. *Productivity Measures, Inputs and Outputs by Industry in Current and Constant Prices.* Available from: <http://www.statcan.ca/english/sdds/1402.htm>.

Statistics Canada. *The Daily*, July 10, 2003. Available from: <http://www.statcan.ca/Daily/English/030710/d030710a.htm>.

Statistics Canada. *Initial Data Release from the 1992 General Social Survey on Time Use.* Catalogue no. 11-612 #30, Table 1. Ottawa.

Statistics Canada. *ESTAT Database.*

Statistics Canada. *Canadian Economic Observer. Historical Statistical Supplement.* Catalogue no. 11-210-XPB. Ottawa.

Statistics Canada. *Unemployment Rate.* Available from <http://www.statcan.ca/start.html>. Accessed February 19, 2004.

Stevenson, Kathryn, Jennifer Tufts, Dianne Hendrick, and Melanie Kowalski. 1999. "Youth and Crime." *Canadian Social Trends*. Statistics Canada. Catalogue no. 11-008. Minister of Industry. Ottawa.

Stinson, Marian. "U.S. Work Force Still Shrinking." *The Globe and Mail*. August 2, 2003. Toronto. p. B1.

Sunter, Deborah and Rene Morissette. 1994. "The Hours People Work." *Canadian Economic Observer*. Statistics Canada. Catalogue no. 11-010. Ottawa.

Sussman, Deborah. 1998. "Moonlighting: A Growing Way of Life." *Perspectives*. Statistics Canada. Catalogue no. 75-001-XPE. Minister of Industry. Ottawa.

Suzuki, David. Public Presentation. Dalhousie University. May 14, 2003.

Sweetland, John. 1979. *Occupational Stress and Productivity*. Work in American Institute, Inc. New York.

Sykes, Barbara, Peter Faid, and Henry Dembicki. 1985. *Counting the Costs. A Literature Review of the Social and Psychological costs of unemployment*. Edmonton Social Planning Council. Edmonton.

Syrett, Michel. 1983. *Employing Job Sharers Part-time and Temporary Staff*. Institute of Personnel Management. London.

Tam, May. 1997. *Part-time Employment: A Bridge or a Trap?* Avebury. England.

Terkel, Studs. 1972. *Working. People Talk About What They Do All Day and How They Feel About What They Do*. Pantheon Books. New York.

The Atkinson Letter. 1999. *Are Canadians Working Too Many Hours? Parts 1 and 2*. Atkinson Charitable Foundation. Toronto.

The Associated Press. "Jury: Wal-Mart Forced Employees to Work Unpaid Overtime." *Newsday*. December 19, 2002. Available from <http://www.newsday.com/>. Accessed December 20, 2002.

The Bureau of National Affairs, Inc. 1987. *Stress in the Workplace. Costs, Liability and Prevention. A BNA special report*. Rockville, Maryland.

The Fraser Institute. 2001. *Fraser Forum*. Available from http://www.oldfraser.lexi.net/publications/forum/2001/10/section_07.html. Accessed September 3, 2003.

The Globe and Mail. "The Altered State." *The Globe and Mail*. June 7, 2003. Toronto. F7.

The Observer. "Too Tired for Fun or Sex." *The Observer*. June 29, 2003. Available from http://observer.guardian.co.uk/uk_news/story/0,6903,987105,00.html. Accessed June 30, 2003.

32 HOURS. "Study Finds Flex-work helps with Struggle to Juggle." *Better Times*. Issue no. 7. June, 1998. Toronto.

32 Hours. 1999. *Health Effects of Long Work Hours*. Available from <http://web.net/32Hours/Health%20Effects%20v2.htm#factors>. Accessed July 17, 2002.

THIS Magazine. "The New Work Order." *THIS Magazine*. July/August, 1998. Toronto.

Tilly, Chris. 1996. *Half a Job: Bad and Good Part-time Jobs in a Changing Labor Market*. Temple University Press. Philadelphia.

Trider, Theresa. Intervention Officer. Nova Scotia Department of Environment and Labour, Labour Standards. Personal communication. August 9, 2003.

- U.S. Bureau of Justice Statistics. *Prison Statistics*. Available from <http://www.ojp.usdoj.gov/bjs/prisons/htm>. Accessed November 25, 2003.
- U.S. Bureau of Justice Statistics. *Direct Expenditure by Criminal Justice Function, 1982-1999*. Available from <http://www.ojp.usdoj.gov/bjs/glance/expty.htm>. Accessed November 25, 2003.
- U.S. Bureau of Labor Statistics. *Workers on Flexible and Shift Schedules in 2001 Summary*. Available from <http://www.bls.gov/news.release/flex.nr0.htm>. Accessed October 24, 2002.
- U.S. Bureau of Labor Statistics. *Average Hourly Earnings of Production or Nonsupervisory workers on Private Nonfarm payrolls by Industry Sector and Selected Industry, Seasonally Adjusted*. Table B-4. Available from <http://www.bls.gov/news.release/empsit.t17.htm>. Accessed November 3, 2003.
- U.S. Bureau of Labor Statistics. *Unemployment Rate, 1980-2003*. Available from <http://data.bls.gov/servlet/SurveyOutputServlet>. Accessed November 20, 2003.
- U.S. Census Bureau. 2003. *2000 Census of Population and Housing. Technical Documentation*. Washington DC. Available from <http://www.census.gov/prod/cen2000/doc/sf3.pdf>. Accessed November 5, 2003.
- U.S. Congress Joint Economic Committee. 1980. *The Social Costs of Unemployment*. US Government Printing Office. Washington.
- U.S. Department of Labour. 2002. *BLS Handbook of Methods*. Available from http://www.bls.gov/pub/hom/homch1_a.htm. Accessed July 29, 2003.
- Walker, Tom. Shorter Work Time list serve swt-digest@swt.org. August 11, 2002.
- Wark, Bruce. 2002. "Deposits and Withdrawals." *The Coast*. December 26, 2002. Halifax.
- Washington County School District. *Four-Day Week*. Available from http://www.wash.k12.ut.us/policy/9000/9820_four-day_week.htm. Accessed December 19, 2000.
- Webber, Maryanne. 1989. "Moonlighters." *Perspectives*. Statistics Canada. Minister of Industry. Ottawa.
- Weil, Simone. 1952. *The Need for Roots. Prelude to a Declaration of Duties towards Mankind*. Routledge, London.
- Wheeler, Kenneth E., Richard Gurman, and Dale Tarnowieski. 1972. *The Four-Day Week*. American Management Association, Inc. New York.
- White, Julie. 2002. "A New Look at Shorter Hours of Work in the Communications, Energy, and Paperworkers Union." *Just Labour*. Vol. 1. p. 41-49. Toronto.

- White, Michael. 1987. *Working Hours. Assessing the Potential for Reduction*. International Labour Organization. Geneva.
- Williams, Cara. 2002. "Time or Money? How High and Low Income Canadians Spend their Time." *Canadian Social Trends*. Catalogue no. 11-008. Statistics Canada. Ottawa.
- Williams, Cara. 2003. "Sources of Workplace Stress." *Perspectives*. Catalogue no. 75-001-XPE. Statistics Canada. Minister of Industry. Ottawa.
- Willis, John. 1998. "The New Work Order. A Roundtable on the Future of Work." *THIS Magazine*. July/August. Toronto.
- Wilkerson, Bill. 1999. *Presentation to Kiwanis Club of Ottawa*. Canadian Business and Economic Round Table on Mental Health. Ottawa.
- Wilkerson, Bill. 2002. "The Business Case for Mental Health." *Benefits and Pensions Monitor*. Vol. 12, no. 6. Toronto.
- Wilkins, Kathryn and Marie P. Beaudet. 1998. "Work Stress and Health." *Health Reports*. Statistics Canada. Catalogue no. 82-003. Minister of Industry. Ottawa.
- Wilson, Jeff et al. 2001. *The Nova Scotia Ecological Footprint*. Genuine Progress Index Atlantic. Halifax.
- Wolf, Stewart and Albert J. Finestone (eds). 1986. *Occupational Stress. Health and Performance at Work*. PSG Publishing Company. Littleton, Massachusetts.
- Work in America Institute. 1981. *New Work Schedules for a Changing Society*. Work in America Institute, Inc. New York.
- Workman, W. Thom and John Jacobs. 2002. *Undermining Wages in Nova Scotia: The Minimum Wage from 1976-2002*. The Canadian Centre for Policy Alternatives – Nova Scotia. Halifax.
- Yates, Michael, D. 1994. *Longer Hours, Fewer Jobs. Employment and Unemployment in the United States*. Monthly Review Press. New York.