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| | |
|---|---|
| . | not available for any reference period |
| .. | not available for a specific reference period |
| ... | not applicable |
| p | preliminary |
| r | revised |
| x | confidential |
| E | use with caution |
| F | too unreliable to be published |

# Highlights

*In this issue*

## Labour inputs to non-profit organizations

- From 1997 to 2003, the gross domestic product of the non-profit sector grew at an annual rate of 6.4%, faster than the economy as a whole.
- The full-time equivalent distribution of labour in non-profit organizations is 36% volunteers and 64% employees and contractors.
- Of the total volunteer full-time equivalents, 77% are supplied by frequent volunteers.

## Trends and seasonality in absenteeism

- The weekly number of employees missing work because of an illness or disability increased from 431,000 in 1997 to 758,000 in 2006—from 3.8% to 5.4% of total employees.
- Full-week absences increased by about one-third, but part-week absences more than doubled between 1997 and 2006.
- Illness-related absences peak in the winter months (December to February). Most of the peak is due to part-week absences.

## Working at home: An update

- The estimated number of teleworkers climbed from just over 600,000 in 1991 to 1.4 million in 2000.
- Since 2000, telework has seen virtually no growth, except among older employees and those with lower levels of education.

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# Labour inputs to non-profit organizations

*Leroy Stone and Hasheem Nouroz*

Non-profit institutions (NPIs) constitute a significant and growing segment of the Canadian economy. From 1997 to 2003, the gross domestic product of the non-profit sector grew at an annual rate of 6.4%, faster than the economy as a whole (Hamdad et al. 2006). In 2003, the sector accounted for 7% of GDP, and more than 160,000 non-profit and voluntary organizations provided employment for about two million persons (Hall et al. 2004). Close to 20% of non-government employees worked for NPIs in that year, according to the Workplace and Employee Survey.

But the importance of NPIs extends beyond their share of GDP or their contribution to job creation. Non-profit organizations assume a wide variety of forms and deliver goods and services in many areas of society. This article classifies NPIs into 12 groups: arts and culture; sports and recreation; education and research; health and hospitals; social services; environment; housing and development; law and advocacy; grant-making, fundraising and voluntarism promotion; international; religion; and professional associations.[1]

In the face of major challenges in the field of human resources management and planning, leaders of NPIs need to be well informed about the composition of their human resources. For example, an aging of the labour force and a slowdown in the pace of labour force growth are leading to increased competition for good workers among organizations—NPIs included. And this in an era when operational financing is becoming more difficult (Hall et al. 2003).

So far, analysts have tended to quantify human-resource inputs merely in terms of the numbers of volunteers, employees and contractors. Unfortunately, simply adding the numbers for these three classes is rarely useful. Even among employees, adding the number of full-time and part-time employees has very limited usefulness for analysis and planning. Moreover, some employees work in two or more establishments, and thus risk being double-counted. This problem seems to be even worse with volunteers.

Instead of counting workers, it is better to use a unit of measurement such as hours of work per week, collected for every type of labour. The National Survey of Non-profit and Voluntary Organizations (NSNVO) of 2003 has gone a long way toward providing hours-of-work information for multiple kinds of labour inputs to NPIs. However, its handling of hours of work varies among the sources of labour. As a result, assumptions are required to integrate its hours-of-work data. These assumptions emerged from the Labour Inputs to Non-Profit Organizations Project, which aims to develop a procedure for

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### Key concepts

Both the volume and composition of the labour inputs to NPIs are important. 'Composition of labour inputs' means the percentages of different types of labour. Seven types have been identified for this study: full-time employees, part-time employees, full-time contractors, part-time contractors, board members, frequent (more than twice a year) volunteers, and infrequent (only once or twice a year) volunteers.

To compute this percentage distribution, a standard unit of measure—the full-time equivalent (FTE) is used. The FTE is based on an arbitrary but widely accepted convention: a full-time employee working for one week represents one FTE, which is often considered to represent 40 hours of work. (This number is assumed to be the usual average weekly hours for full-time employees.) No other class of worker has an FTE value greater than 1, and the other classes' typical FTEs (also called 'standard labour units') are expressed as fractions of 1. For example, a typical part-time employee usually working an average of 20 hours would have an FTE of 0.5. To prepare the estimates in this paper, typical FTEs were established for each of the seven kinds of labour. (For further details see Nouroz and Stone 2007, Appendix A.)

comprehensive estimation of the use of human resources by non-profit organizations (see Nouroz and Stone 2007 for technical details).

This article provides some of the project's results concerning the composition of labour inputs to NPIs (see *Key concepts*). The project represents a key, even if small step toward filling a major information gap. According to a Conference Board vice-president: "The 21st century will belong to human resources and to organizational capabilities, leading management guru Dave Ulrich assured The Conference Board of Canada. And the Board agrees." (Benimadhu 2006).

## Labour inputs in various organizations

For-profit and non-profit sectors are alike in one notable respect: Close to 40% of organizations are very small—over 60% of establishments have less than 10 employees (Table 1). However, more non-profit organizations have 50 or more employees (11% versus 5%).

Consequently, employees in the non-profit sector are more likely to work in large establishments. According to the Workplace and Employee Survey, 82% work in establishments of 50 or more employees, compared with only 46% in the for-profit sector. In the NSNVO, with a different universe and different questions, the corresponding percentage is 78%.[2] This reflects the pre-eminence of educational and health institutions in the total volume of paid labour supplied to NPIs. However, even when these institutions are excluded, NPI employees still tend to have a greater concentration in large establishments than do business employees.

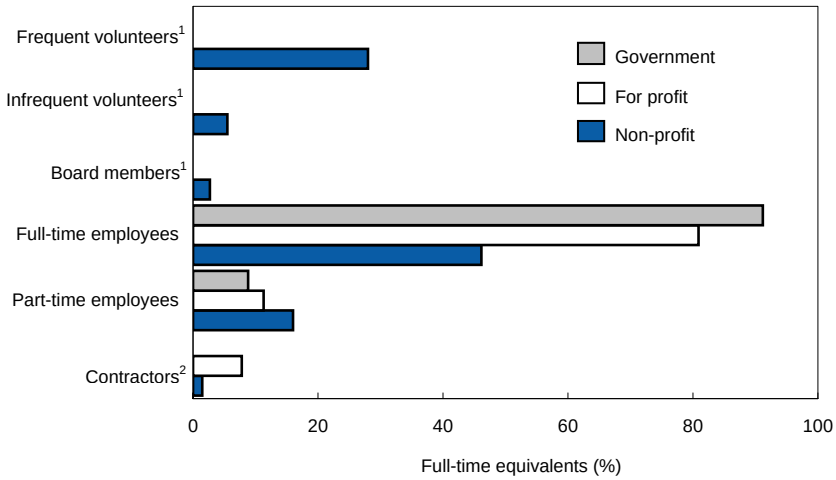
A distinctive feature of non-profit organizations is that they rely heavily on volunteers—the percentages of volunteers in government and business organizations are probably much smaller[3] (Chart A). Moreover, recruiting and retaining volunteers has become a major challenge and source of worry for a large proportion of NPI leaders. Most reported declines in the availability of volunteers, and many were concerned about their over-dependence on a small core of volunteers (Hall 2003). And many of these volunteers work for more than one organization, helping to deliver programs, fundraising, campaigning or serving as board members.

**Table 1 Employees and organizations by size-class of organization and sector**

| | | Employees in organization | | | | |
|---|---|---|---|---|---|---|
| | Total | 1-4 | 5-9 | 10-19 | 20-49 | 50 or more |
| | '000 | | | % | | |
| **Employees** | | | | | | |
| For profit | 9,704 | 7.3 | 11.9 | 14.6 | 20.0 | 46.2 |
| Not for profit (NPI) | 2,417 | 2.1 | 3.8 | 4.4 | 7.4 | 82.2 |
| **Employers** | | | | | | |
| For profit | 667 | 43.2 | 26.7 | 16.0 | 9.6 | 4.5 |
| Not for profit (NPI) | 57 | 40.4 | 24.6 | 14.0 | 10.5 | 10.5 |

Source: Statistics Canada, Workplace and Employee Survey, 2003

**Chart A The non-profit sector relies heavily on frequent volunteers**




1 Data for board members and volunteers in business and government are not available in the sources.
2 Data for government contractors are not available in the source (Labour Force Survey).
Sources: Statistics Canada, Labour Force Survey; National Survey of Non-profit and Voluntary Organizations; Workplace and Employee Survey, 2003

NPIs also seem to rely much more on part-time employees. Thus, among the three sectors, NPIs are least reliant on full-time employees. And, NPIs use contractors much less than business. The data source for government does not allow measurement of its reliance on contractors, but the percentage is also probably much less than 1%. The full-time equivalent (FTE) distribution of labour in NPIs is 36% volunteers and 64% employees and contractors (Table 2). In the business sector, volunteers are probably less than 1% of the workforce.

## Labour inputs to the non-profit sector

The use of different forms of labour input among NPIs is influenced by the type of organization (based on major field of activity and outputs), geographic location, and size and age of the organization, among other factors. Full-time employees are the most common labour input for the non-profit sector as a whole (46% of total FTEs), followed by frequent volunteers at 28% (Table 3). The FTE contribution from part-time employees amounts to 16%. The contributions of board members and infrequent volunteers are similar (around 5%), while contractors add just 1%.[4]

FTEs arising from frequent volunteers vastly outnumber those attributable to infrequent ones. Of the total volunteer FTEs, 77% are attributable to frequent volunteers. The shares for infrequent volunteers and board members are 15% and 8% respectively.

Of the total FTEs from employees and contractors, the contribution of full-time employees is of preeminent importance, as expected. Full-time employees contribute 72% of the FTEs arising from paid employees. Part-time employees make a much larger contribution than contractors.

## Labour input in quasi-governmental and core non-profit organizations

Within the non-profit sector, a major division exists between organizations that deliver health and educational services largely funded by taxes and borrowing, and organizations more heavily reliant on revenues from non-government sources. Sales are the largest revenue source for the latter group of NPIs (Nouroz and Stone 2007, Table 1). (The literature refers to these two classes as 'quasi-governmental' and 'core' NPI organizations.)

The labour profiles of core non-profit and quasi-governmental organizations are distinct (Chart B). Core non-profits rely much more on volunteers. Just less than half of their aggregate FTEs arise from volunteers. In contrast, quasi-governmental organizations derive around one-sixth of aggregate FTEs from volunteers and over 80% from employees. The greater reliance of core NPIs on volunteers also applies to FTEs contributed by board members—about 4% of total FTEs in core NPIs versus 1% in quasi-governmental NPIs.

Another aspect of the greater use of volunteers by core NPIs is their heavy reliance on frequent volunteers. Almost 40% of their total FTEs are attributable to frequent volunteers, more than twice that for quasi-governmental NPIs. In core NPIs, close to 10% of total FTEs arise from infrequent volunteers, compared with well below 5% among their quasi-governmental

**Table 2 Aggregate FTEs supplied to non-profit organizations**

| | Organizations | Volunteers | Paid labour |
|---|---|---|---|
| | | % | |
| **Total** | **12,682** | **36** | **64** |
| **Quasi-governmental** | 1,484 | 15 | 85 |
| Education and research | 779 | 26 | 74 |
| Health and hospitals | 705 | 10 | 90 |
| **Core NPI** | 11,198 | 48 | 52 |
| Arts and culture | 1,369 | 38 | 62 |
| Environment | 471 | 70 | 30 |
| Grant-making, fundraising and voluntarism promotion | 1,427 | 77 | 23 |
| Housing and development | 658 | 8 | 92 |
| International | 150 | 65 | 35 |
| Law and advocacy | 411 | 58 | 42 |
| Professional associations | 963 | 32 | 68 |
| Religion | 1,527 | 53 | 47 |
| Social services | 1,783 | 40 | 60 |
| Sports and recreation | 2,439 | 73 | 27 |

Source: Statistics Canada, National Survey of Non-profit and Voluntary Organizations, 2003

**Table 3 FTEs by type of labour input for non-profit organizations**

| | Volunteers | | | Employees | | Contractors | |
|---|---|---|---|---|---|---|---|
| | Frequent | Infrequent | Board members | Full-time | Part-time | Full-time | Part-time |
| | | | | % | | | |
| **Total** | **28** | **5** | **3** | **46** | **16** | **1** | **0** |
| **Quasi-governmental** | 13 | 2 | 1 | 59 | 25 | 1 | 0 |
| Education and research | 22 | 2 | 1 | 49 | 24 | 2 | 0 |
| Health and hospitals | 8 | 2 | 1 | 64 | 25 | 1 | 0 |
| **Core NPI** | 36 | 8 | 4 | 39 | 11 | 2 | 0 |
| Arts and culture | 25 | 8 | 5 | 39 | 13 | 9 | 1 |
| Environment | 50 | 17 | 4 | 25 | 3 | 1 | 0 |
| Grant-making, fundraising and voluntarism promotion | 53 | 18 | 6 | 17 | 5 | 1 | 0 |
| Housing and development | 4 | 1 | 2 | 87 | 4 | 1 | 0 |
| International | 53 | 8 | 4 | 29 | 3 | 2 | 0 |
| Law and advocacy | 42 | 10 | 7 | 32 | 7 | 2 | 0 |
| Professional associations | 25 | 4 | 3 | 39 | 28 | 1 | 0 |
| Religion | 41 | 6 | 6 | 37 | 9 | 1 | 0 |
| Social services | 29 | 9 | 2 | 44 | 15 | 2 | 0 |
| Sports and recreation | 61 | 8 | 4 | 18 | 8 | 1 | 0 |

Source: Statistics Canada, National Survey of Non-profit and Voluntary Organizations, 2003; estimates developed by authors

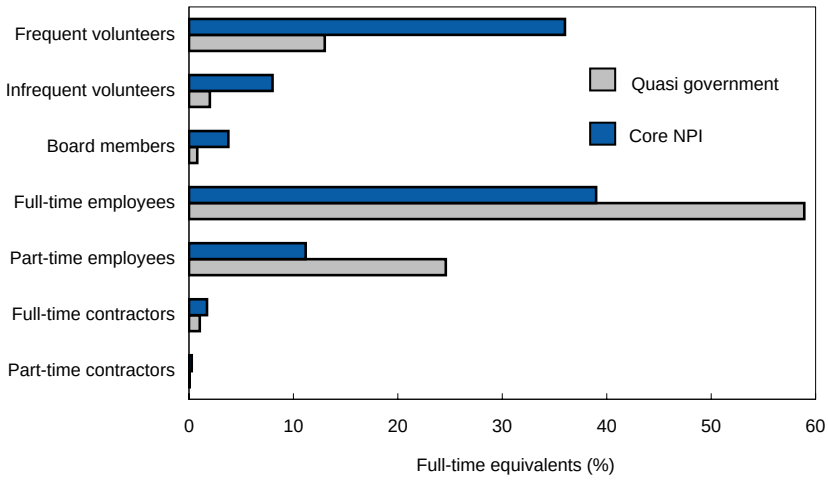
counterparts. The ratio of infrequent to frequent volunteers is also greater for core NPIs.

The greater reliance of quasi-governmental NPIs on employees is true for both full-time and part-time employees—accounting for 59% and 25% of FTEs respectively. In contrast, among core NPIs, the corresponding shares are 39% and 11%. In both kinds of NPI organizations, full-time contractors contribute at most 2% of total FTEs.

## Variations within the two classes of NPIs

Among quasi-governmental health organizations and hospitals, the ratio of employees to volunteers is much higher than in education and

**Chart B Quasi-governmental non-profit organizations are much more reliant on paid employees**




Source: Statistics Canada, National Survey of Non-profit and Voluntary Organizations, 2003

research (Chart C). The ratio of full- to part-time employees is also higher. In consequence, education and research rely more on frequent volunteers.

The greatest reliance on frequent volunteers is found in the sports and recreation group. This is closely followed by international, fundraising and voluntarism promotion, environment, religion, and law and advocacy. Distinctly lower reliance is found in the remaining four groups of core NPIs.

The greatest reliance on infrequent volunteers is found in the fundraising and voluntarism promotion, and environment groups—over 15% of aggregate FTEs. The least reliance is found among housing, religion and professional associations.

Core NPIs can also be compared in terms of the degree of balance between the major sources of labour inputs. Social service has the closest to equal weight for infrequent volunteers, frequent volunteers, full-time employees, and part-time employees in its total FTEs. Next are professional associations, and arts and culture. Professional associations are also notable in having the greatest reliance on part-time employees.

The proportion of FTEs accounted for by board members varies widely among the NPIs. At the top of the ranking are religion; law and advocacy; arts and culture; and fundraising and voluntarism promotion. At the bottom are social services, housing and development, professional associations, environment, international, and sports and recreation.

## Summary

Non-profit organizations have a greater-than-average reliance on part-time employees, and especially on volunteers. They rely more on part-time employees than either government or business, and they use contractors much less than does business. However, full-time employees and frequent volunteers are the most common labour inputs for the non-profit sector as a whole—the heavy reliance on full-time employees arises largely from health and educational organizations (the quasi-governmental subsector).

The greatest reliance on frequent volunteers is in sports and recreation; international; fundraising and voluntarism promotion; and environment. At the other extreme, housing and development relies very little on volunteers of any kind.

Infrequent volunteers are much more likely to be found in core NPIs than in the quasi-governmental ones. The highest percentages for infrequent volunteers are in the fundraising and voluntarism promotion, and the environment groups.

The social services group had the closest approach to equal weight among infrequent volunteers, frequent volunteers, full-time employees and part-time employees. Professional associations and arts and culture followed, but were well behind.

Boards of directors can be expected to contribute very small shares of total FTEs to organizations, but the percentage varies widely among core NPIs. At the top are religion; law and advocacy; fundraising and voluntarism promotion; and arts and culture.

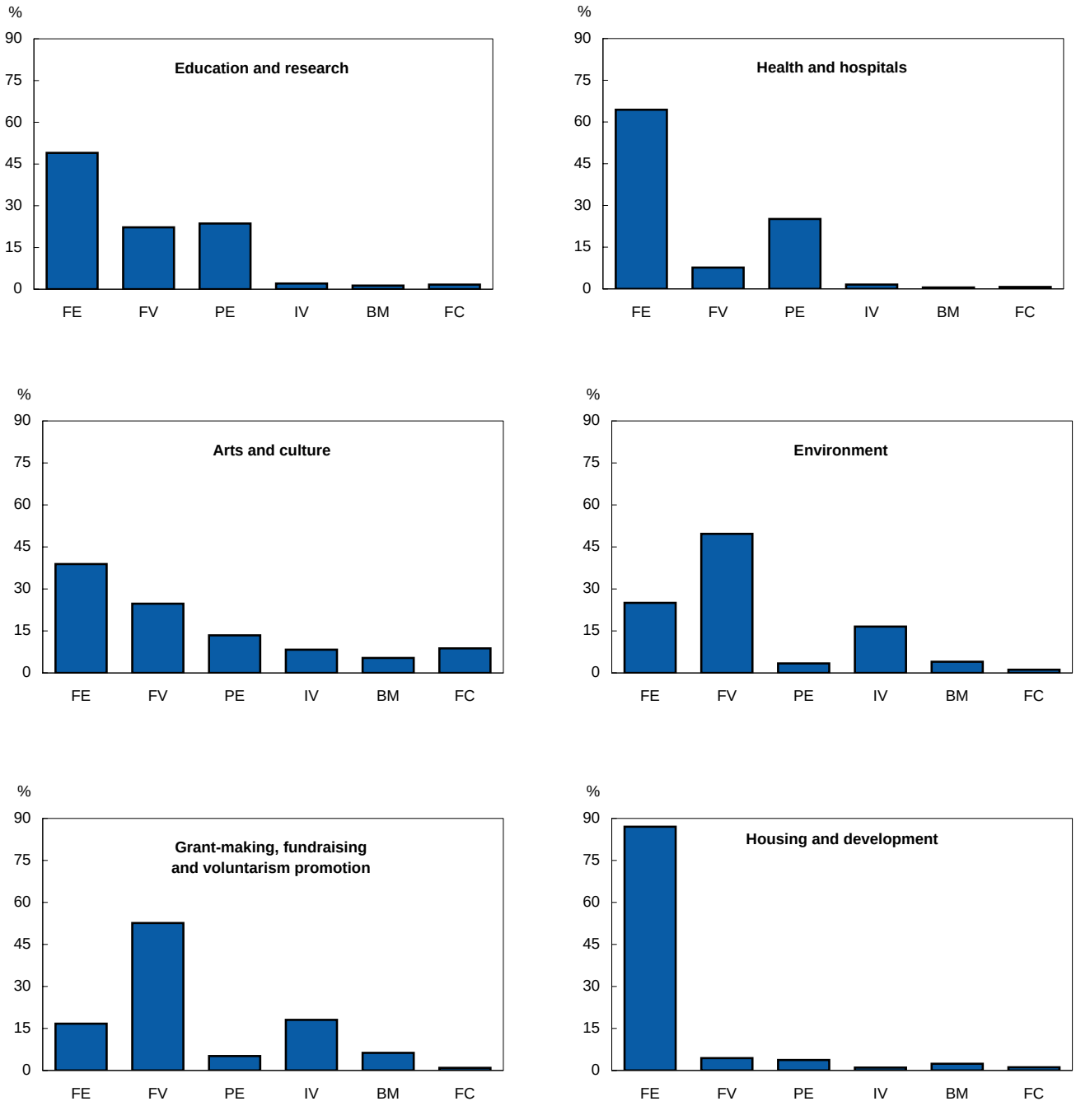
External changes, such as decreased funding for hiring paid staff, fewer volunteers in general, or shortages of certain kinds of volunteers are among the factors that have preoccupied NPI leaders (Hall et al. 2003; McMullen and Schellenberg 2003). An immediate concern in the presence of such changes is to monitor their consequences for the overall structure (or profile) of the labour supply to help pinpoint key vulnerabilities and review possible adjustments.

Its profile of labour inputs may be a key aspect of an organization's resilience and adaptability (McMullen and Brisbois 2003). While the size and stability of revenues are critical, the mix of human resources available to the organization (even after taking size and funding into account) is also important.

Despite the many advantages of largeness, size and adaptability may not be meaningfully correlated (very large size may inhibit adaptability). At more modest sizes, the exposure of paid staff or volunteers to a variety of other kinds of co-workers may be a powerful factor in promoting adaptability—thus the need to analyze the linkages between organizational adaptability and resilience and the composition of total human resources.

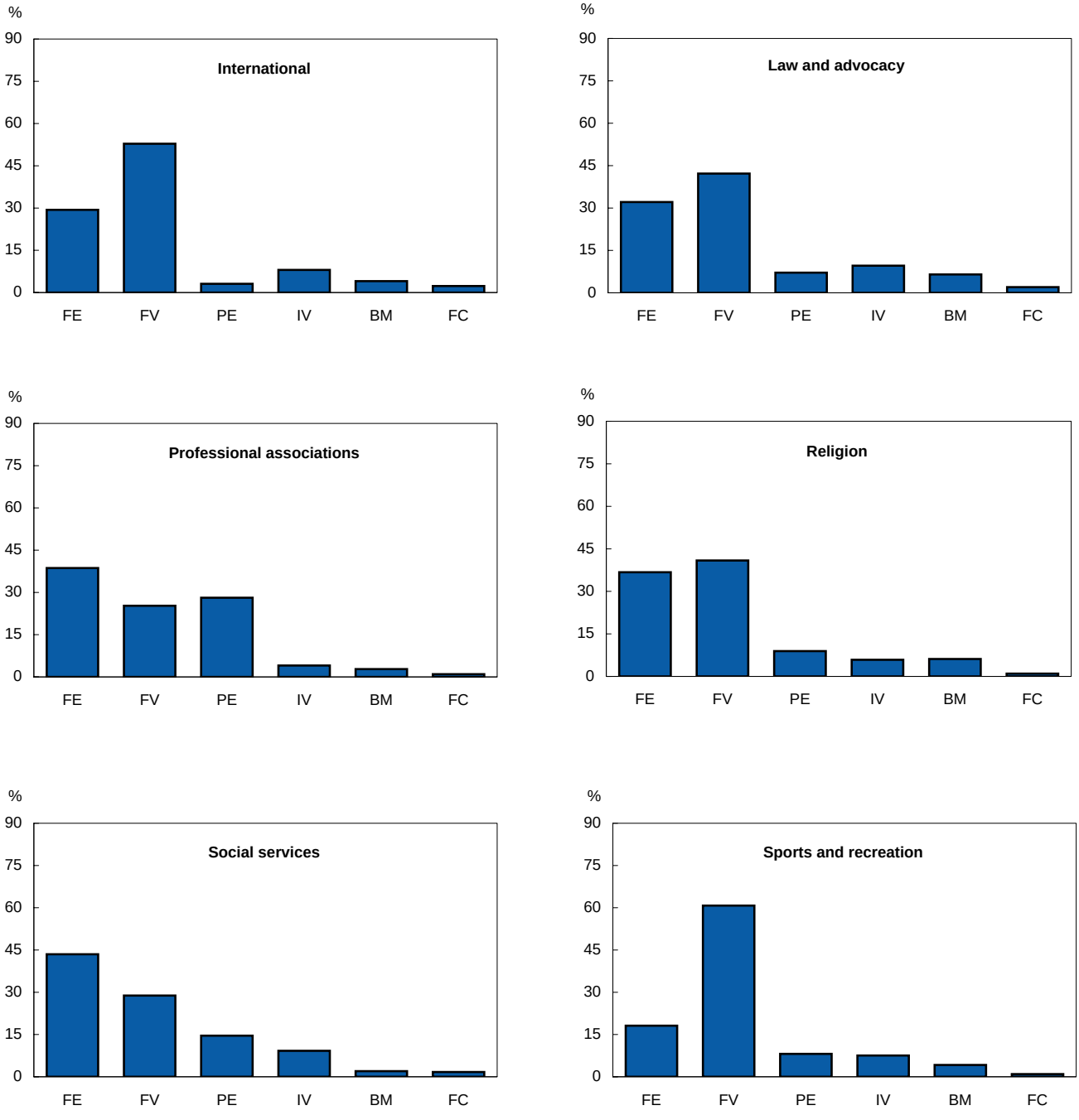
A large segment of the workforce wants part-time employment—and this may become more prevalent as baby boomers phasing into retirement seek to remain connected to the labour market to some degree. This development would provide an opportunity for NPIs to strengthen their performance through greater reliance on paid part-time employees

**Chart C The use of human resources (based on FTEs) varies considerably among non-profit organizations**




FE Full-time employees
FV Frequent volunteers
PE Part-time employees
IV Infrequent volunteers
BM Board members
FC Full-time contractors

**Chart C The use of human resources (based on FTEs) varies considerably among non-profit organizations** (concluded)




Source: Statistics Canada, National Survey of Non-profit and Voluntary Organizations, 2003

with much labour-market experience, assuming the necessary financing is available. However, they will be competing with businesses that also seek to use part-timers more intensively. In getting ready to meet this competition, NPI leaders would do well to pay increased attention to analyzing the composition of their human-resource inputs.

Perspectives

## Notes

1 This is based on the International Classification of Nonprofit Organizations, as modified by Hall et al. 2004.

2 It is important to keep in mind that the reference here is to paid workers. A very different picture emerges when the volunteer workforce is taken into account.

3 The sources used for this paper provide no information about volunteers in businesses and government. The number of volunteers in these sectors may exceed 100,000 in one year; however the relative size of their labour input to government and to businesses would need to be measured in terms of a standard unit such as the FTE.

4 Frequent volunteers contribute their time more than twice a year; infrequent volunteers only once or twice a year. These volunteers have been termed 'systematic' and 'occasional' respectively by Brunnetti and Moreschi (2000). In the NSNVO, board members are separated from other kinds of volunteers, and this separation is maintained here.

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# Trends and seasonality in absenteeism

*Ernest B. Akyeampong*

Employee absences from work because of an illness or disability are of constant interest. These absences can be for either part or all of a week (see *Data sources and definitions*).[1] Past studies have examined in detail trends and differences among various work groups with respect to overall illness-related work absences—full- and part-week combined. (Akyeampong 1988, 1992, 1995, 1999).[2] Until now, no work has been done on the two separately, even though part-week absences are more likely to be unannounced and so may be relatively more disruptive to managers for planning and production purposes, and to co-workers. This note examines not only separate trends for the two types of absences, but also their seasonality over the decade 1997 to 2006—namely, since the latest Labour Force Survey redesign.

## Rising trend in part-week absences during past decade

The weekly number of employees failing to report for work because of an illness or disability has increased steadily over the past 10 years—from 431,000 in 1997 to 758,000 in 2006. Controlling for employment growth does not change the picture (Table and Chart A); the incidence rose consistently, climbing from 3.8% in 1997 to 5.4% in 2006. Contributing factors include the aging of the workforce and improvements in sick-leave entitlements.[3]

The trend for each type of illness-related absence has been generally upward, but much more pronounced for part-week absences. For example, while the number of employees reporting a full-week absence rose by almost one-third (from 199,000 in 1997 to 262,000 in 2006), part-week absences more than doubled (from 232,000 to 496,000). Similarly, the incidence

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### Data source and definitions

The **Labour Force Survey** collects information each month on labour market activity during the survey reference week from the civilian, non-institutionalized population 15 years of age and over. The territories are excluded from the national total, as are persons living on Indian reserves. The survey samples approximately 53,000 households, with each remaining in the sample for six consecutive months.

Among other things, the Labour Force Survey asks respondents if they were absent from work during the reference week, and if so the reason for the absence. If they reported an absence because of their own illness or disability, they are further asked the hours they missed as a result. The full-week and part-week absence designations are assigned by comparing usual weekly hours with hours lost as a result of the illness or disability.

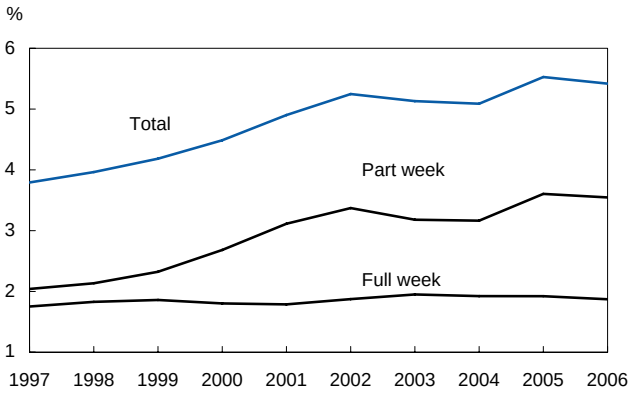
To simplify the analysis, seasonality in this note is based on the four seasons, rather than each month—Winter (December to February), Spring (March to May), Summer (June to August), and Fall (September to November). The seasonal index was constructed with the annual average data being 1.00.

**Table Employees absent from work each week due to own illness or disability**

| | Total | | Full week | | Part week | |
|---|---|---|---|---|---|---|
| | '000 | % | '000 | % | '000 | % |
| 1997 | 430.7 | 3.8 | 199.0 | 1.8 | 231.8 | 2.0 |
| 1998 | 461.4 | 4.0 | 212.9 | 1.8 | 248.5 | 2.1 |
| 1999 | 501.0 | 4.2 | 222.7 | 1.9 | 278.3 | 2.3 |
| 2000 | 555.9 | 4.5 | 223.5 | 1.8 | 332.4 | 2.7 |
| 2001 | 620.9 | 4.9 | 226.4 | 1.8 | 394.5 | 3.1 |
| 2002 | 681.9 | 5.2 | 243.6 | 1.9 | 438.3 | 3.4 |
| 2003 | 680.9 | 5.1 | 258.9 | 2.0 | 422.1 | 3.2 |
| 2004 | 686.5 | 5.1 | 259.5 | 1.9 | 427.0 | 3.2 |
| 2005 | 754.8 | 5.5 | 262.5 | 1.9 | 492.3 | 3.6 |
| 2006 | 757.9 | 5.4 | 261.8 | 1.9 | 496.1 | 3.5 |

Source: Statistics Canada, Labour Force Survey

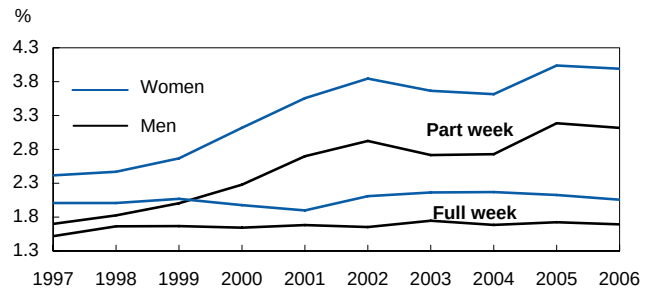
**Chart A Part-week absences increased by about half; full-week, virtually flat**




Source: Statistics Canada, Labour Force Survey

of full-week absences rose marginally from 1.8% to 1.9% between 1997 and 2006, while that of part-week absences jumped from 2.0% to 3.5%. Simply stated, part-week absences have been the major driving force for the increase in overall work absences due to illness or disability during the past decade. Throughout the period, women showed a higher incidence of both full- and part-week illness-related absences than men (Chart B). For both women and men, though, the incidence of full-week absences remained little changed over the period, while that of part-week absences rose rapidly.

**Chart B Whether full or part week, women's absence rates are higher**




Source: Statistics Canada, Labour Force Survey

## Seasonality a factor in part-week absences

Perhaps not unexpectedly, illness-related absences are highly seasonal, reaching a peak during the winter months (December to February) and a trough during the summer (June to August) (Chart C). The high incidence in winter is likely related to the prevalence of communicable diseases at that time, especially colds and influenza. The low incidence during the summer may be partly because many employees take their vacation during these months. Because of survey design, those who fall ill during vacation will likely report 'vacation' rather than 'sickness or disability' as the main reason for being away from work.

Compared with the annual average, part-week absences are roughly 30% more prevalent in the winter months and almost 20% less so during the summer months. Seasonality is much less evident in full-week absences.

## Hours lost per absence remains steady

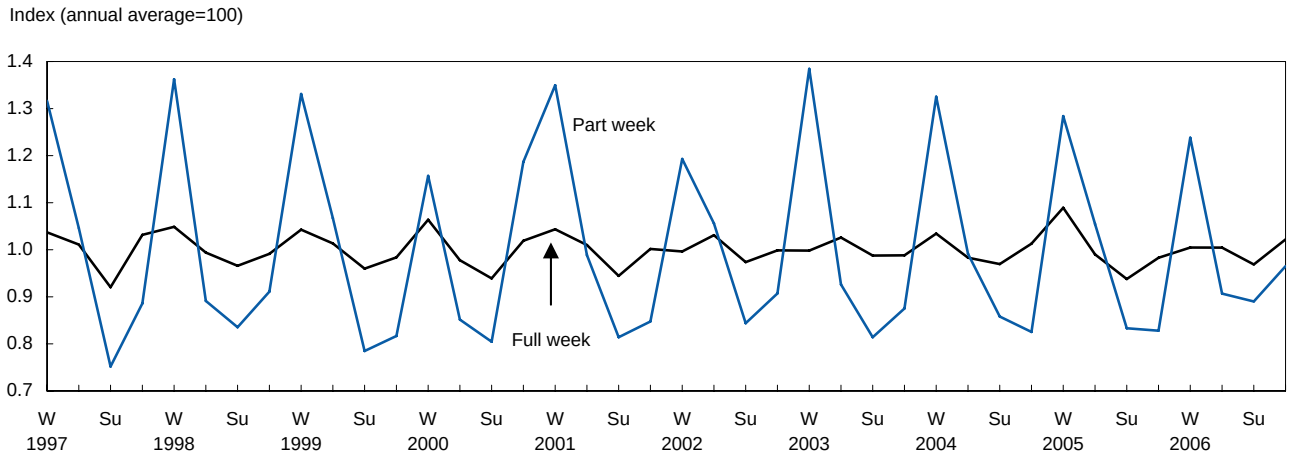
Hours lost for full-week illness absences by definition reflect average usual hours worked—about 37 between 1997 and 2006. Similarly, time lost for part-week absences has been concentrated around 11 hours (roughly a day and a half).

## Summary

The number and proportion of employees absent from work for all or part of a week due to own illness or disability have risen over the past 10 years. The growth has been much greater for part-week absences. The number of employees absent for a full week rose from 199,000 in 1997 to 262,000 in 2006, and the incidence grew slightly from 1.8% to 1.9%. The corresponding increases for part-week absences were from 232,000 to 496,000, and from 2.0% to 3.5%.

Both men and women shared in the rising incidence, with rates for both full-week and part-week absences being higher for women. Reasons for the growing trends in both number and incidence include the aging of the workforce and improvements in sick-leave entitlements for employees. While full-week absences have shown minimal seasonal patterns, the same cannot be said for part-week absences. Compared with the annual average, part-week illness absences are roughly 30% more common in the winter months and 20% less so in the summer months.

**Chart C Illness-related absences tend to be at their peak during winter (W) months and at their trough in summer (Su) months**




Source: Statistics Canada, Labour Force Survey

## Notes

1 Whether an illness-related absence is designated as full- or part-week is dictated by the Labour Force Survey design. The survey results are based on labour market activity during a reference week, usually the week containing the 15th day of the month. As well, absences are snapshots within the reference week and do not necessarily mean completed spells of absence. Such information can only be obtained from a longitudinal survey such as the Survey of Labour and Income Dynamics.

2 In these previous studies, the focus of interest was absenteeism, and hence, in accordance with international practices, part-time employees, who normally have low absence rates, were excluded from the analyses. In this note however, the universe includes both full-time and part-time workers.

3 Studies have found that illness-related work absences increase with age (Statistics Canada 2007).

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# Working at home: An update

*Ernest B. Akyeampong*

Various Statistics Canada surveys have suggested strong growth in the number and proportion of employees doing some or all of their regularly scheduled work at home during the 1990s.[1] The estimated number (and incidence) of teleworkers rose from just a little over 600,000 (6%) in 1991 to 1 million (9%) in 1995, and to 1.4 million (10%) in 2000. With continuing growth in employment, growing computer use both at home and at work, advancements in information and telecommunications technology, and lobbying by telework advocacy groups, one would have expected the trend to continue into the 2000s.[2] Instead, virtually no increase has been seen. This note uses the 2000 and 2005 General Social Survey (see *Data source)* to examine changes in telework by sex, age, education, occupation, industry, and marital status. The focus is on employees because the self-employed have relatively more freedom with respect to workplace location. However, the decision to allow a telework arrangement rests on negotiations between employee and employer (see *Main reason for working at home*).

## Stall in telework numbers and incidence

The number and incidence of teleworkers appear to have levelled off in recent years—actually dipping from 1,426,000 (10.2%) in 2000 to 1,322,000 (9.8%) in 2005 (Table). The stall is surprising in light of past trends (see *Possible impediments to telework growth*).

With few exceptions, the fall-off in telework popularity between 2000 and 2005 was pervasive. It occurred for male and female employees alike, irrespective of marital status. However, employees aged 55 and over recorded a rise in incidence over the period, as did those without a high school diploma, and those with some college or university education but no diploma or degree.

### Data source

The information in this update is from the 2000 and 2005 **General Social Survey.** In 2000, a representative sample of 25,000 non-institutional respondents aged 15 and over in all provinces were surveyed about their use of computers and the Internet. Data were collected over 12 months from January to December 2000. In 2005, 20,000 respondents used a 24-hour diary to record the time they spent on various activities.

In most major industries, the incidence remained little changed or declined slightly. Notable declines occurred in business, building and other support, and in public administration.[3] In both 2000 and 2005, employees in professional, scientific and technical services, and in educational services recorded the highest incidence of telework—roughly one-quarter. Manufacturing had one of the lowest rates (about 6% in 2005).

The incidence in most of the major occupational groups also remained about the same or declined slightly. Just as in 2000, employees in social sciences and education had the highest incidence in 2005 (29%). Sales and service occupations registered a low incidence (6%).

### Main reason for working at home

When employees in 2005 were asked the main reason for working at home, approximately a quarter said it was a requirement of the job; one-fifth said conditions were better at home; one-sixth said the arrangement helped save money; and one-twelfth said it helped them in caring for children and other family members and in meeting personal obligations.

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**Table People working from home, by selected characteristics**

| | Employees | | | | Self-employed | | | |
|---|---|---|---|---|---|---|---|---|
| | 2000 | | 2005 | | 2000 | | 2005 | |
| | '000 | % | '000 | % | '000 | % | '000 | % |
| **Both sexes** | **1,426** | **10.2** | **1,322** | **9.8** | **1,369** | **49.5** | **1,554** | **54.6** |
| Men | 782 | 10.5 | 744 | 10.5 | 826 | 45.9 | 949 | 51.1 |
| Women | 644 | 9.8 | 578 | 9.1 | 544 | 56.2 | 605 | 61.3 |
| **Age** | | | | | | | | |
| 15 to 24 | 137 | 4.6 | 120 | 4.9 | 60 | 42.3 | 44[E] | 30.3[E] |
| 25 to 54 | 1,174 | 11.9 | 1,025 | 10.8 | 1,046 | 50.0 | 1,141 | 56.5 |
| 55 and over | 114 | 9.8 | 177 | 11.7 | 263 | 49.3 | 368 | 54.2 |
| **Education** | | | | | | | | |
| Some high school or less | 86 | 3.9 | 78 | 4.8 | 166 | 37.9 | 125 | 37.2 |
| High school diploma | 147 | 5.5 | 121 | 5.2 | 202 | 42.1 | 174 | 43.8 |
| Some postsecondary | 189 | 7.9 | 191 | 8.7 | 204 | 52.6 | 232 | 56.3 |
| Diploma or certificate | 347 | 9.3 | 254 | 6.8 | 368 | 53.3 | 478 | 59.2 |
| Bachelor's degree or more | 655 | 22.6 | 674 | 18.9 | 426 | 56.3 | 540 | 61.9 |
| **Marital status** | | | | | | | | |
| Married, common-law | 1,009 | 12.1 | 968 | 11.7 | 1,065 | 50.7 | 1,212 | 55.3 |
| Separated, divorced, widowed | 99 | 9.8 | 108 | 9.9 | 119 | 56.1 | 130 | 56.3 |
| Single (never married) | 304 | 7.0 | 247 | 6.1 | 159 | 39.8 | 212 | 50.1 |
| **Industry** | | | | | | | | |
| Agriculture | F | F | 26[E] | 24.1[E] | 166 | 65.0 | 151 | 66.5 |
| Forestry, fishing, mining, oil and gas | 28 | 9.6 | 34[E] | 12.3[E] | 27 | 35.5 | 19[E] | 45.2[E] |
| Utilities | F | F | 16[E] | 12.7[E] | F | F | F | F |
| Construction | 44 | 7.0 | 39[E] | 5.8[E] | 114 | 41.6 | 136 | 42.8 |
| Manufacturing | 164 | 7.4 | 99 | 5.8 | 70 | 47.2 | 61 | 44.9 |
| Trade | 149 | 7.1 | 162 | 7.8 | 141 | 43.1 | 156 | 49.7 |
| Transportation and warehousing | 50 | 8.2 | 41[E] | 6.5[E] | 36 | 22.8 | 32[E] | 26.7[E] |
| Finance, insurance, real estate and leasing | 107 | 14.0 | 90 | 11.3 | 105 | 61.9 | 164 | 67.8 |
| Professional, scientific and technical | 155 | 22.9 | 174 | 21.9 | 244 | 68.7 | 285 | 66.4 |
| Business, building and other support | 44 | 11.0 | 19[E] | 4.5[E] | 68 | 37.4 | 70 | 40.5 |
| Educational services | 242 | 23.4 | 239 | 23.2 | 33 | 53.7 | 44 | 63.8 |
| Health care and social assistance | 107 | 8.6 | 125 | 8.7 | 127 | 63.2 | 137 | 57.3 |
| Information, culture and recreation | 90 | 12.9 | 92 | 13.7 | 87 | 64.2 | 120 | 69.4 |
| Accommodation and food services | 36 | 3.6 | 22[E] | 2.4[E] | 35 | 36.1 | 36[E] | 41.4[E] |
| Other services | 62 | 12.9 | 69 | 13.4 | 77 | 35.1 | 94 | 46.5 |
| Public administration | 95 | 10.5 | 66[E] | 7.5[E] | F | F | F | F |
| **Occupation** | | | | | | | | |
| Management | 229 | 25.4 | 196 | 19.8 | 222 | 43.6 | 155 | 40.7 |
| Business, finance and administrative | 301 | 11.7 | 234 | 9.2 | 191 | 64.7 | 272 | 72.3 |
| Natural and applied sciences | 175 | 18.4 | 150 | 14.6 | 99 | 64.5 | 101 | 57.1 |
| Health | 28 | 4.5 | 35[E] | 4.5[E] | 40 | 39.2 | 55 | 42.3 |
| Social science, education | 271 | 26.4 | 305 | 28.5 | 76 | 70.0 | 83 | 58.9 |
| Art, culture, recreation and sport | 52 | 16.5 | 60[E] | 16.1[E] | 134 | 65.4 | 184 | 70.2 |
| Sales and service | 220 | 6.1 | 211 | 6.2 | 246 | 48.7 | 337 | 55.4 |
| Trades, transport and equipment operators | 74 | 4.0 | 64[E] | 3.7[E] | 110 | 29.7 | 127 | 34.3 |
| Unique to primary industry | 20 | 5.4 | 35[E] | 13.2[E] | 182 | 54.4 | 169 | 61.9 |
| Unique to processing, manufacturing and utilities | 35 | 2.9 | 23[E] | 2.6[E] | 32 | 38.8 | 36[E] | 54.5[E] |

Source: Statistics Canada, General Social Survey

### Possible impediments to telework growth

Several things could account for the stall in telework growth. An obvious possibility is that continuing re-evaluation of the advantages and disadvantages of telework may have lowered its attractiveness for both employees and employers (see *The pros and cons of working at home*). For example, growth in employer-assisted day-care programs (including on-site day-care centres) and improved transportation networks may have helped reduce the need to work at home. Also, the growing need for greater information security, especially after 9/11, as well as for closer communication among workers may make telework less desirable for employers. Another possibility is continuing advancements in information technology. The use of laptops, BlackBerries and mobile phones, and the growing proliferation of communication centres may facilitate work from many other places, such as cars, airports, railway and bus terminals, and satellite offices.

### Pros and cons of working at home

Working at home has both advantages and disadvantages. For the employee, this arrangement allows more flexibility to schedule activities; makes it easier to balance work and personal or family demands; reduces expenses for transportation, clothing and food; and cuts commuting time. On the negative side, working at home may reduce one's social circle, stifle career advancement, or even increase workload.

For the employer, a work-from-home arrangement may increase employee productivity, reduce expenses for work space, improve recruitment and retention of employees, and reduce absenteeism. Among the most commonly cited disadvantages are problems related to co-ordination and communication, lack of control over quality of work, and problems associated with information security.

## Teleworkers put in relatively few hours at home

The majority of teleworkers put in just a few hours of work (10 or less) at home each week, but the proportion doing so in 2005 was higher than in 2000 (71% versus 65%). In both years, only 3% of teleworkers put in over 40 hours. The average in 2005 was 17 hours.

## Summary

Contrary to expectation, the strong growth in telework during the 1990s was not sustained in the 2000s. Indeed, the number of employees doing some or all of their regularly scheduled work at home stalled at 1.3 to 1.4 million. The overall incidence remained unchanged at about 10%. The reasons for the stall, which was widespread, are unclear. It could have been partly caused by employees and employers re-evaluating the advantages, disadvantages and effectiveness of this type of work arrangement. In addition, continuing developments in information and telecommunications technology now permit many employees to work effectively from many places other than home.



## Notes

1 Estimates of the number of people working at home date back to the 1971 Census. Since then, the Survey of Work Arrangements (SWA), the Survey of Labour and Income Dynamics, the General Social Survey (GSS), and the Workplace and Employee Survey have all collected data on the subject. However, these surveys differ in question wording, reference period, and sample design. Indeed, for some surveys, such as the census, the questions were not identical in all years. As a result, no consistent time series exist, making it impossible to be precise on trends over the past three decades. Nevertheless, the SWA 1991 and 1995, and the GSS 2000 and 2005 are fairly comparable (see Akyeampong and Nadwodny 2001 for questions and estimates from the various surveys).

2 Among the better-known telework advocacy groups are the Canadian Telework Association, a non-profit, telework-promoting organization, and Innovations Canada, a telework and flexible-work consulting organization.

3 The decline of telework in public administration is particularly puzzling, since the federal Treasury Board actively supported this type of work arrangement in a policy statement dated December 6, 1999.

## Reference

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