

# **How To Estimate the Economic Contribution of Volunteer Work**

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# How to Estimate the Economic Contribution of Volunteer Work

## **Introduction**

It is sometimes very useful for a voluntary organization to be able to calculate the value of volunteer time donated to it or to the voluntary sector as a whole.

Such calculations can gain public good will by showing the hard dollar value of the voluntary sector's contribution to the community.

They can also help potential contributors and funding agencies appreciate the cash value of the non-money resources contributed to a project by the local community.

We have prepared this booklet to help you calculate the value of volunteer time in your community.

## Comparing volunteer hours to full-time jobs

One way to demonstrate the economic value of volunteer work is to calculate the number of full-time, year-round positions (person-years) which the volunteer hours would equal.

To estimate this, we have worked out the weekly and yearly hours of workers in the paid labour force who have jobs comparable to those performed by volunteer workers. The estimates are given in Table 1. For a discussion of how these figures have been calculated, see the Technical Appendix.

To determine the number of full-time year-round equivalent jobs volunteer workers in your organization represent:

- 1 Estimate the total number of volunteer hours donated to your organization over the past 12 months.
- 2 Divide this number by the figure for your province in Table 1.

The figure you arrive at is the number of full-time year-round jobs your organization provides to the community on a volunteer basis.

**Example: The Vernon, Ontario Recreational Association has 33 volunteers who work an average of 5 hours a week flooding, ploughing and coaching on the town's two hockey rinks during 16 weeks of winter; 6 volunteers work 3 1/2 hours a day during the 8-week summer day camp program; and a bookkeeper and an office manager each work 5 hours a week year round in the office.**

**33 people x 5 hours x 16 weeks = 2640 hours**

**6 people x 3.5 hours x 8 weeks = 168 hours**

**2 people x 5 hours x 52 weeks = 520 hours**

**2640 + 168 + 520 = 3328 hours total volunteer time**

**3328 + 1675.2 = 1.99 person years**

**The Vernon Recreation Association provides Vernon with services equivalent to two full time employees.**

**Table 1** Average working year for workers in community, business, and personal services, by province.

	Number of Hours in One Full-time Year-round Job
Canada	1651.2
Newfoundland	1579.2
Prince Edward Island	1785.6
Nova Scotia	1656.0
New Brunswick	1684.8
Quebec	1579.2
Ontario	1675.2
Manitoba	1708.8
Saskatchewan	1670.4
Alberta	1689.6
British Columbia	1656.0

Source: Prepared by the Centre for International Statistics using *Statistics Canada, Employment Earnings and hours June 1993* Ottawa: Minister of Industry, Science and Technology, 1993, catalogue no 72 002.

(NB - Because of small sample sizes the Centre was unable to provide a statistically accurate average number of hours for the Yukon and Northwest Territories. It is recommended that residents of the Territories use the figure shown here for Alberta.)

# The dollar value of volunteer labour

A second way to estimate the economic value of volunteer labour is to determine how much it would cost to pay for the same amount of work in the paid labour force

For this purpose, we have worked out the average hourly wages of comparable workers in the paid labour force. These are shown in Table 2. (Again, a discussion of how these figures have been calculated is presented in the Technical Appendix.)

To estimate the total dollar value of volunteer work in your organization:

1. Estimate the total number of volunteer hours donated to your organization over the past 12 months.
2. Multiply this number by the figure for your province shown in Table 2.

The resulting number represents the dollar value of volunteer labour (*ie*, how much it would have cost to pay for that amount of work in the paid labour force).

**Example: Take the number of hours of volunteer time worked as we calculated it for the Vernon, Ontario Recreational Association in the last example, and multiply by the average hourly wage for Ontario:**

$$3328 \text{ hours} \times \$17.38 = \$57,840.64$$

**The VRA volunteers have contributed nearly \$58,000 worth of time to their community's recreational resources.**

**Table 2** Average hourly wage in community, business, and personal services by province

Canada and Provinces	Average Hourly Wage
Canada	16.49
Newfoundland	14.51
Prince-Edward-Island	13.37
Nova Scotia	14.11
New Brunswick	14.79
Quebec	16.41
Ontario	17.38
Manitoba	14.23
Saskatchewan	14.90
Alberta	14.93
British Columbia	17.11
Yukon	17.49
North West Territories	20.21

Source: Prepared by the Community Partnerships Program using *Statistics Canada Employment, Earnings and Hours July 1997*, Ottawa: Minister of Industry, Science and Technology, 1997, catalogue no 72-002.

## Annual updates of the value of volunteer labour

Obviously, average wage rates in the economy do not remain the same from year to year.

To update the wage figures in Table 2 for your province in 1995 and later years:

- 1 Call the Employment, Earnings and Hours Branch of Statistics Canada. Their telephone number is (613) 951-4090.

(There are Statistics Canada Reference Centres located in all regions of the country. The telephone numbers for these centres are listed on the last page of this brochure. However, the Employment, Earnings and Hours Branch is the most used to dealing with requests for figures on weekly earnings.)

Ask for the “percentage increase in average weekly earnings for all employees over the past 12 months”.

- 2 Multiply the hourly wage in your province (Table 2) by this percentage increase, and add the resulting number to the hourly wage you started out with.

**Example: If you live in Alberta, and average weekly earnings increase by 2.4 per cent between 1994 and 1995:**

$$\text{Multiply: } \$14.76 \times 0.024 = \$ 0.35$$

$$\text{Add: } \$ 0.35 + \$14.76 = \$15.11$$

**and you have the 1994 average hourly wage.** (Note that this is an example only. You will do your own calculation.)

- 3 This new figure should be used in 1995 to estimate the economic value of volunteer labour.

# Technical Appendix

## **Appropriate industry sector comparison**

To estimate the economic contribution of volunteer labour, it was necessary to select an appropriate unit of comparison in the paid economy. Since most of the work in the voluntary sector involves performing a service, comparisons to the part of the paid economy most closely resembling the services provided by volunteers are most appropriate.

The "community, business and personal services industry", as defined by Statistics Canada, most closely resembles the spectrum of volunteer work. This industry includes such services as education, hospitals and welfare organizations, services to business management, food and beverage services, and amusement and recreation.

## **Volunteer hours as equivalent to full-time year-round positions**

To estimate the number of full-time year-round positions (person-years) to which the volunteer hours would correspond, the number of hours in the standard work week of full-time employees in community, business and personal services has been taken for each province. This number has been multiplied by 48 weeks to obtain the average yearly number of hours worked by full-time employees (See Table 1).

Since volunteer hours are all working hours, and do not include paid statutory holidays, sick leave and annual leave as the Statistics Canada employment data do, 20 days (4 weeks) were subtracted from the 52 weeks of employment put in by a year-round worker.

## **The dollar value of volunteer labour**

In order to translate volunteer hours into a dollar value, average wage rates in community, business and personal services were estimated.

A calculation problem faced in this estimation was the fact that wages in all job categories vary considerably between salaried and hourly paid employees. This required a decision as to the mix of salaried and hourly wage workers that would most closely resemble the hypothetical situation whereby voluntary labour is paid for.

A decision was made to apply the same proportion as prevailed in the community, business and personal service sector in each province (this represents about a 52/48 split on average in favour of hourly-paid workers).

Workers paid by piece-rate and commission were not included in the calculations because data on average earnings and hours worked were not available. Those workers represent approximately 5 per cent of the labour force in the community, business, and personal services sectors.

The provincial average wages shown in Table 2 are a weighted average of salaried and hourly wages.

## **Statistics Canada Regional Reference Centres**

St John's	1-800-565-7192
Halifax	426-5331
Montreal	283-5725
Ottawa	951-8116
Toronto	973-6586
Winnipeg	983-4020
Regina	780-5405
Edmonton	495-3027
Calgary	292-6717
Vancouver	666-3691

Toll-free access is provided in all Provinces and Territories for users who live outside the local dialing area of a Regional Reference Centre:

Newfoundland and Labrador New Brunswick Prince Edward Island and Nova Scotia	1-800-565-7192
Quebec	1-800-361-2831
Ontario	1-800-263-1136
Manitoba Saskatchewan Northwest Territories and Alberta	1-800-563-7828
British Columbia and Yukon	1-800-663-1551
Telecommunication Device for the Hearing Impaired (TDD)	1-800-363-7629