

ASSIGNING ECONOMIC VALUE TO VOLUNTEER ACTIVITY: Eight Tools for Efficient Program Management

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Assigning Economic Value to Volunteer Activity

Introduction

Many organizations benefit substantially from the unpaid activity of volunteers. Managers of volunteer resources¹ are, however, often uncertain about the extent or economic value of these contributions.

This resource manual was created as part of the International Year of Volunteers Research Program to provide Canadian voluntary organizations with a systematic method for assigning an economic value to the activity of volunteers. It introduces eight measures you can use to demonstrate:

- how much volunteers contribute to your organization in terms of the amount of time they give and their out-of-pocket expenses;
- how much your organization invests in its volunteers (e.g., salaries for volunteer program staff, training expenses, and recruitment expenses);
- the extent to which volunteers increase the human resource capacity of your organization; and,
- the return on your organization's investment in its volunteer program.

How your volunteer program can benefit from more efficient program management

- An improved volunteer information management system will allow you to identify key information gaps and accurately determine the costs and contributions of your volunteer program.
- A more accurate understanding of the costs and benefits of volunteer activities will allow you to engage in strategic planning for future volunteer initiatives.
- Increased knowledge of your volunteers will allow you to improve recruitment and retention by developing more appealing volunteer opportunities, and improving volunteer training, support and recognition.

Organizations that have used this approach have gained new perspectives on their volunteer programs. They have been able to use the results in their public relations, to inform volunteers, to develop their volunteer program, to increase internal and external accountability, and for funding and contract negotiations (Gasken, 1999).

¹ There are many titles assigned to individuals who are responsible for the organization and engagement of volunteer resources, including: manager of volunteer resources, manager of volunteer services, administrator, or coordinator. In this manual, the term manager of volunteer resources will be used as a general title for all individuals who occupy this type of position.

Why Measure the Economic Value of Volunteer Contributions?

Both volunteer programs and voluntary organizations as a whole can benefit from better information about volunteer contributions and the economic value of volunteer activity (Seidman, 2000).

You can help all stakeholders understand the vital contributions of volunteers by including value-based measures in your annual reports, budgets and financial statements, and funding proposals (McCurley, 2001).

Annual reports

Annual reports are an important place to include the dollar value of volunteer contributions. For example, Kansas City reports on its volunteer program using volunteer hours and estimates of the value of volunteering.² You can also promote value-based measures by producing a Volunteer Annual Report which outlines the number of hours volunteers contributed to each of your programs, the dollar value of these contributions, and the names and activities of award-winning volunteers.³

Budgets and financial statements

You can include volunteer time as an item in your operating budget. You can also include volunteer contributions and the value of volunteer activities as a line item in either the operating expenses or revenues section of your financial statements (see Table 1 and 2 for examples).

If you don't want to include this information in your financial statement, you could instead describe what volunteers do and what this contribution is worth in dollars. The Indianapolis-Marion County Public Library does this in their publication, "Operating Fund 1000."⁴ Another example is the U.S. Bureau of Land Management, which uses text and photographs to help justify their budget.⁵

Funding proposals

Grant applications are another vehicle for communicating your message. Some funders recognize a link between supporting volunteer programs and enhancing community development. More and more funders are assessing community support by asking organizations to show the total number of volunteers within their organization.⁶ Other funders require applicants to submit a cost benefit analysis with their applications. These funders understand that their support can help voluntary organizations serve their clients more efficiently. You

² See "Status of Promises in Kansas City" at www.americaspromise.org.

³ See U.S. Bureau of Land Management, at www.blm.gov/volunteer/news/annreport/index.html.

⁴ Available at www.imcpl.org/bgt00_ser.htm.

⁵ Available at www.blm.gov:80/nhp/info/stratplan/AR00.pdf.

⁶ See the Wild Rose Foundation, www.cd.gov.ab.ca/building-communities/volunteer_community/funding/quarterly-grant/index.asp.

Table 1

Sample Financial Statement #1

Operating Expenses:

<i>Salaries and benefits</i>	
Total full-time salaries	\$ 48,000
Total part-time salaries	\$ 27,000
Total volunteer time *	\$ 50,687

* Volunteer value has been calculated using the True Value Added to Personnel (TVAP).

Table 2

Sample Financial Statement #2

Revenues:

Fees and Charges	\$ 107,000
Government Sector Payment	\$ 580,250
Grants and Donations	
Individual donations	\$ 56,000
Donated time *	\$ 50,687
Private foundation grants	\$ 125,562

* We have included in-kind donations by volunteers, calculated as True Value Added to Personnel (TVAP).

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can describe how your organization addresses their concern for fiscal responsibility by:

- using the human resource productivity measures to describe how volunteers extend your personnel resources;
- using volunteer program efficiency measures to monitor and evaluate how well volunteer program resources are being used; or,
- using the community support measures to demonstrate the extent of community support for your organization.

Eight Measures — An Overview

The eight measures presented in this manual are categorized into three strategic areas: human resource productivity measures, volunteer program efficiency measures, and community support measures.

Human resource productivity measures

These measures describe how volunteers extend your organization's personnel resources beyond your existing budget.

Estimates of the Value of Volunteer Activity (EVVA)

Document the economic (dollar) value of the time your volunteers contribute by assigning a wage rate to each hour of volunteer activity. Depending on your reporting requirements, you can calculate volunteer economic value monthly, quarterly, biannually, or annually.

True Value Added to Personnel (TVAP)

Calculate the true economic value of volunteer contributions by assigning wage rates and benefits to each hour of volunteer activity.

Full-time Year-round Job Equivalent (FYJE)

Convert your organization's total number of volunteer hours to the equivalent number of full-time positions.

Percent Personnel Value Extended (PPVE)

Demonstrate the degree to which volunteers extend the value of your organization's personnel.

Volunteer program efficiency measures

These measures provide a context for explaining the value of your volunteer program.

Organization Volunteer Investment Ratio (OVIR)

Find out your organization's return on the money it invests in its volunteer program.

Volunteers to Paid Staff Ratio (VPSR)

Shed light on the volunteer management structure of your program by comparing the number of volunteers to the number of paid staff in your volunteer program.

Community support measures

These measures describe volunteer contributions as a form of community support.

Volunteer Capital Contribution (VCC)

Calculate the out-of-pocket expenses that volunteers incur and do not claim as an "in-kind" donation to your organization.

Community Investment Ratio (CIR)

Compare the amount your organization invests in your volunteer program to the investment volunteers make in terms of their time.

Getting Started

To measure the value of volunteer activity, you will need information about your volunteers, your volunteer program, and your organization. More specifically, you will need to:

- set up a volunteer activity management structure;
- assign value to volunteer positions; and,
- collect information on volunteer and organization expenditures.

Once you have completed these steps, you will have the information you need to calculate any of the eight value-based measures this manual describes.

Set up a volunteer activity management structure

To create a volunteer activity management structure, you need to:

- create volunteer position descriptions;
- set up a system to keep track of volunteer hours; and,
- manage the information you collect.

Creating volunteer position descriptions

In order to assign value to the activities your volunteers perform, their various tasks have to be organized into more formalized position descriptions.

To create volunteer position descriptions, assign volunteers to positions with clearly identified functions and tasks (see Table 3 for an example).

Setting up a system to keep track of volunteer hours

The system should record the time volunteers give for each program and position they hold. The system can

⁷ Before you set up an information database about volunteers, make sure you are familiar with privacy legislation in your province or territory. This information is available online at www.privcom.gc.ca/legislation/index_e.asp.

take many forms. It may be as basic as a single activity sheet (see Table 4). Other ways you could gather volunteer hours include:

- internal spreadsheets into which each volunteer inputs his or her own hours; or,
- an Internet-based volunteer manager (for an example, see www.hospiceaid.com/volmanage.asp).

Managing the volunteer information you collect

If you do not already have an automated system for tracking volunteer activities, budget allocations, and volunteer program expenditures, you may want to consider using a software program to help you collect and analyze this information. Volunteer management software gives managers of volunteer resources ready access to information and may enhance the efficiency of volunteer programs.⁷

Assign value to volunteer positions

In order to assign an economic value to volunteer positions, you will need to:

- find a suitable source of wage rate information;
- assign equivalent job classifications to your volunteer positions; and,
- assign dollar values to volunteer positions.

You can also include the value of benefits paid to your employees, but this is optional.

Table 3		
Volunteer position descriptions		
	Position	Position description
1.	Display	Creates health related information displays and conducts clinical workshops at events.
2.	Administration	Processes mail, stuffs envelopes, rolls coins, makes follow-up calls.

Assigning Economic Value to Volunteer Activity

Finding wage information

Wage information may be obtained from either Statistics Canada or Human Resources Development Canada (HRDC). Both sources offer wage data at national and provincial levels. You may want obtain wage rate information specific to your province since there is considerable variation in wage rates across the country.

Statistics Canada's wage information is usually based on national surveys or census data. HRDC offers wage data created by Statistics Canada, as well as regional wage data based on information obtained from Records of Employment (ROE) or their internal Job Opportunity Survey.

A general estimate of average weekly earnings for Canada and the provinces may be obtained free from the economic indicators page on the Statistics Canada Web site.⁸ If you want more accurate estimates of average hourly earnings for Canada and the provinces, you can purchase them from Statistics Canada. Their monthly publication, *Employment, Earnings and Hours*, contains national, provincial, and territorial data.⁹ Wage data for a particular month or year can also be ordered online from CANSIM II, Statistics Canada's socioeconomic database. CANSIM II allows users to order a series of tables containing hourly or weekly wage data at a provincial, territorial or national level.¹⁰

The wage rates reported by HRDC for some occupational positions tend to be lower than those reported by Statistics Canada.¹¹ This is because Statistics Canada's wage information reflects only the

wages of employed Canadians, while some of HRDC's wage information reflects the wages of both employed and unemployed Canadians. Some users may feel that these lower wage rates are more appropriate for calculating the value of volunteer activities.

Assigning job classifications to your volunteer positions

The next step is to identify salaried job classifications that correspond to your volunteer positions. Begin with the volunteer position descriptions you developed. Then, using your knowledge of the tasks, duties and responsibilities for each position, find equivalent job classifications.

Statistics Canada uses the National Classification for Statistics (NOC-S) 2001 to organize occupational groups. The NOC-S is an updated version of the Standard Occupation Classification (SOC) 1991. The NOC-S is very similar to the SOC, but includes additional occupational groups in newer areas such as information technology. While NOC-S has replaced the SOC, wage rate information for NOC-S groupings will not be available until the spring of 2003.

⁸ See www.statcan.ca/english/econoind/indic.htm

⁹ You can preview, purchase and download *Employment, Earnings and Hours* information from www.statcan.ca/english/preview/72-002-XIB/P0010272-002-XIB.pdf. You can also contact this office directly. Their toll free general inquiries line is 1 866 873-8788.

¹⁰ For more information about CANSIM II, go to www.statcan.ca/english/ads/cansimII/index.htm.

¹¹ Regional wage rate information can be obtained from HRDC's local labour market information site at www.on.hrdc-drhc.gc.ca/english/lmi/welcome_e.shtml

Table 4

Volunteer activity sheet

Organization:

Time Period: January to March

Volunteer Name:

Program	Activity / Event	Position	Date	Hours
1. Outreach	Information Booths	Display	Jan. 15	3
2. Office Management	Mail-out	Administration	Feb. 1	2

Comments:

There are several free resources that can assist you in this process. Statistics Canada maintains the both the NOC-S and SOC manuals online.¹² You can also use their online search tool to match volunteer positions and activities to standard occupation titles.¹³

Assigning hourly wage rates to volunteer positions

Once you have matched your organization’s volunteer positions to a particular occupation, apply the wage rate to each volunteer position. It may help you to create a chart like the one in Table 5.

Collect information on volunteer and organization expenditures

Volunteer out-of-pocket expenses

Volunteers may incur a variety of out-of-pocket expenses as a result of participating in volunteer activities. Sometimes these are reimbursed, but if they are not they represent a form of in-kind contribution to your organization. If you do not have a volunteer

information management system that collects this information, you should ask volunteers to fill out a volunteer expenditure summary form like the one in Table 6.¹⁴

Volunteer program expenses

Organizations often incur a variety of expenses as a result of running their volunteer programs. You should keep track of this information. Table 7 provides an example of a form you can use to summarize this information.

¹² Available online at www.statcan.ca/english/concepts/occupation.htm.

¹³ This tool is available at <http://stds.statcan.ca/english/occupation/search-nocs-base.htm>.

¹⁴ This form is designed to be filled out once a year, but you can adapt it so that you can collect the information monthly or for a specific event.

¹⁵ Source: Statistics Canada, Survey of Employment, Payrolls and Hours (SEPH), Custom Table of average hourly earnings (excluding overtime), Industrial Aggregate NAICS:11-91N For more information: labour@statcan.ca

Table 5					
Volunteer position wage rate chart					
Volunteer position	Number of volunteers in the position	Estimate of the total number of hours volunteers gave to each position in the past year	Standard Occupational Classification (SOC) Code	Standard Occupational Classification (SOC) Title	Dollar value from Statistics Canada 1996 ¹⁵
Display	6	126 hours	F024.5124	Professional Occupations in Public Relations and Communications	\$22.00
Administration	3	1,032 hours	B511.1411	General Office Clerks	\$15.00

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Table 6

Volunteer expenditure summary form

Types of Expenses	Did you pay for this expense in the past year?	If yes, how much?	Did you claim all or part of this expense?	If yes, how much did you get back?
Advertising and recruiting materials (e.g., photocopying, printing)	<input type="checkbox"/> Yes <input type="checkbox"/> No	→ \$	<input type="checkbox"/> Yes <input type="checkbox"/> No	→ \$
Training and orientation materials, external trainers, course fees, and support costs	<input type="checkbox"/> Yes <input type="checkbox"/> No	→ \$	<input type="checkbox"/> Yes <input type="checkbox"/> No	→ \$
Supplies, equipment, and materials (e.g., office set up, computer, Internet time)	<input type="checkbox"/> Yes <input type="checkbox"/> No	→ \$	<input type="checkbox"/> Yes <input type="checkbox"/> No	→ \$
Travel and transportation related expenses (e.g., gas, bus fare, train fares, parking, etc.)	<input type="checkbox"/> Yes <input type="checkbox"/> No	→ \$	<input type="checkbox"/> Yes <input type="checkbox"/> No	→ \$
Daycare or babysitting expenses	<input type="checkbox"/> Yes <input type="checkbox"/> No	→ \$	<input type="checkbox"/> Yes <input type="checkbox"/> No	→ \$
Clothing (e.g., activity-specific clothing, equipment, volunteer uniform, etc.)	<input type="checkbox"/> Yes <input type="checkbox"/> No	→ \$	<input type="checkbox"/> Yes <input type="checkbox"/> No	→ \$
Costs of complying with health regulations (e.g., paying for a TB test)	<input type="checkbox"/> Yes <input type="checkbox"/> No	→ \$	<input type="checkbox"/> Yes <input type="checkbox"/> No	→ \$
Rent, building costs, and expenses (e.g., telephone, gas, electricity)	<input type="checkbox"/> Yes <input type="checkbox"/> No	→ \$	<input type="checkbox"/> Yes <input type="checkbox"/> No	→ \$
Miscellaneous expenses (e.g., postage, telephone calls)	<input type="checkbox"/> Yes <input type="checkbox"/> No	→ \$	<input type="checkbox"/> Yes <input type="checkbox"/> No	→ \$
Other expenses, please describe:	<input type="checkbox"/> Yes <input type="checkbox"/> No	→ \$	<input type="checkbox"/> Yes <input type="checkbox"/> No	→ \$
Did you donate any of the money you received back to our organization in the past year?	<input type="checkbox"/> Yes <input type="checkbox"/> No		How much did you donate?	→ \$

Table 7

Volunteer program expenses

Categories of volunteer expenditures	Cost incurred?	How much?	Where to find this information *
Volunteer advertisement and recruitment Advertisements, recruitment materials, and recruitment campaigns	<input type="checkbox"/> Yes → <input type="checkbox"/> No	\$	<ul style="list-style-type: none"> ■ use advertisement and/or recruitment budget figure ■ estimate true cost based on receipts
Training and orientation Training and induction materials, external trainers, course fees, and support costs	<input type="checkbox"/> Yes → <input type="checkbox"/> No	\$	<ul style="list-style-type: none"> ■ use training budget figure ■ estimate the cost of volunteer training sessions
Supplies and equipment Clothing, materials, supplies and equipment (e.g., office set up, capital costs such as computers)	<input type="checkbox"/> Yes → <input type="checkbox"/> No	\$	<ul style="list-style-type: none"> ■ use volunteer supplies and equipment budget figure ■ estimate true cost of discounted or free items given to volunteers
Travel expenses All transportation-related expenses (e.g., gas, bus fare, train fares)	<input type="checkbox"/> Yes → <input type="checkbox"/> No	\$	<ul style="list-style-type: none"> ■ use volunteer program travel expense from budget ■ estimate true cost based on receipts
Accommodation and food Housing, temporary accommodation, food, and food vouchers	<input type="checkbox"/> Yes → <input type="checkbox"/> No	\$	<ul style="list-style-type: none"> ■ use accommodation and food figure from the budget ■ estimate true cost based on receipts
Daycare or babysitting expenses	<input type="checkbox"/> Yes → <input type="checkbox"/> No	\$	<ul style="list-style-type: none"> ■ use total of expense claim ■ estimate true cost based on receipts
Volunteer administration Expenses other than staff time (e.g., postage, volunteer newsletter or magazine, certificates, awards, volunteer meetings and celebrations)	<input type="checkbox"/> Yes → <input type="checkbox"/> No	\$	<ul style="list-style-type: none"> ■ use figure from budget ■ estimate true cost based on receipts
Management staff time The salaries and benefits (including professional development) of staff with volunteer management and supervision responsibilities	<input type="checkbox"/> Yes → <input type="checkbox"/> No	\$	<ul style="list-style-type: none"> ■ calculate from total salary figure ■ identify all staff that manage volunteers; use all or a percentage of their salaries based on the time spent managing or supervising volunteers ■ estimate volunteer staff supervision and assign a wage rate to this time
Insurance Insurance policies that cover volunteers (percentage of overall policy cost applicable to volunteers)	<input type="checkbox"/> Yes → <input type="checkbox"/> No	\$	<ul style="list-style-type: none"> ■ use figure from budget ■ estimate true cost
Building costs and expenses Rent, telephone, gas, and electricity costs applicable specifically to volunteers (e.g., the cost of complying with health and tax regulations)	<input type="checkbox"/> Yes → <input type="checkbox"/> No	\$	<ul style="list-style-type: none"> ■ use figure from budget ■ estimate true cost
Other expenses please describe:	<input type="checkbox"/> Yes → <input type="checkbox"/> No	\$	
Total volunteer program expenses		\$	

* Adapted from Gaskin (1999).

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Human Resource Productivity Measures

Estimate of the Value of Volunteer Activity (EVVA)

EVVA provides you with a way of calculating the dollar value of volunteer activities performed over a specific time period. You can calculate the value monthly, quarterly, biannually, annually, or for any time period you choose. The calculation is based on the hourly wage that comparable staff would be paid. It does not include the cost of benefits.

You will need to calculate EVVA as a first step before calculating several of the other value-based measures in this manual (e.g., Percent Personnel Value Extended, Organization Volunteer Investment Ratio, Community Investment Ratio).

To calculate EVVA, you will need:

- the total volunteer hours for each volunteer position for a specific period of time; and,
- the hourly wage rates for comparable full-time positions.

To calculate EVVA:

- Calculate the dollar value of volunteer activity for each volunteer position within your organization by multiplying the total number of hours volunteers gave by the hourly wage rate assigned to each position.
- Sum the products of these calculations to obtain EVVA.

EVVA can also be used to provide you with a quick global estimate of the value of volunteer activity in your organization. Instead of using hourly wage rates applied to specific positions, simply multiply your total volunteer hours by industrial aggregate average hourly

earnings (excluding overtime) for Canada as provided by the Survey of Employment, Payrolls and Hours.

EVVA can be recorded as a line item under salaries (see Table 8) with an explanatory note. Because EVVA can be viewed as a type of in-kind contribution from the community, you can also include it as a line item in the revenues section of your financial statement (see Table 9).

Table 8

Sample budget #1 (EVVA)

Operating Expenses:

Salaries	
Total full-time salaries	\$435,281
Total part-time salaries	\$132,111
Total volunteer time *	\$66,854
Benefits	
Pay related benefits	\$ 80,395

** We have calculated the total value of volunteer activity and included it as a salary line item.*

Table 9

Sample budget #2 (EVVA)

Revenues:

Fees and Charges	\$1,186,988
Government Sector Payment	\$ 13,165
Grants and Donations	
Individual donations	\$ 54,654
Donated time (explanatory note)	\$ 66,854
Private foundation grants	\$ 21,000
Corporate donations	\$ 10,034

** We have calculated the total value of the activity volunteers contributed to our organization and included it as a donated time line item under grants and donations.*

True Value Added to Personnel (TVAP)

TVAP allows you to assign a more complete value to the contribution made by volunteers.¹⁶ TVAP is based on the assumption that since employees are paid salaries and benefits, the value of volunteer contributions should include both salaries and benefits.

¹⁶The TVAP calculation is loosely based on Karn's equivalency model 1983a, 1983b.

This can increase the value of volunteer activity substantially, but if your goal is to provide an estimate of the true amount volunteers extend personnel resources, you can use the TVAP figure.

To calculate TVAP, you will need:

- the total dollar value of your staff salaries;
- the total dollar value of your staff benefits;
- the total number of hours of volunteer activity; and,
- the dollar value of volunteer activity for an equivalent occupation. This should be an hourly wage rate.

To calculate TVAP:

- Add the total dollar value of all benefits your organization pays to staff (e.g., health, pension, paid leave and vacation). A standard benefits percentage of 15% may also be used as an estimate.
- Add the annual salaries of all organization staff.
- Divide the total dollar value of benefits by the total dollar value of staff salaries to obtain the benefits percentage.
- Multiply the benefits percentage by the total dollar value of volunteer activity (EVVA) to obtain the total dollar value of volunteer benefits.
- Add the total dollar value of volunteer activity (EVVA) to the total dollar value of volunteer benefits to obtain TVAP.

When recording TVAP as a line item, you must split the total amount into salaries and benefits, with an explanatory note (see Table 10).

Full-time Year-round Job Equivalent (FYJE)

FYJE allows you to calculate how many full-time, year-round positions would equal the number of hours contributed by your volunteers.

You may want to use the Statistics Canada standard definition of full-time year-round jobs for the purposes of comparing your results with other organizations. This definition assumes each individual works 40 hours per week for 48 weeks each year. If your organization uses a different definition of full-time, you may want to use that definition so you can translate your volunteer hours into full-time year round jobs as defined by your organization.

To calculate FYJE, you will need:

- the total volunteer hours for a specific period of time; and,
- a definition of full-time employment.

To calculate FYJE:

- Add the total number of unpaid hours contributed by volunteers to your organization over 12 months.
- Divide this number by the number of hours worked in one week at a full-time, year-round job.
- Divide this number by the number of weeks worked each year.
- Round the number to the nearest half. This will ensure that your FYJE reflects the number of full-time jobs.

Table 10

Sample budget (TVAP)

Operating Expenses:

Salaries	
Total full-time salaries	\$435,281
Total part-time salaries	\$132,111
Total volunteer time *	\$66,854
Benefits	
Pay related benefits	\$80,395
Volunteer benefits †	\$10,029

* We have calculated the total value of volunteer activity and included it as a salary line item.

† We have calculated the total value of benefits that would be associated with the value of volunteer activity and included it as a volunteer benefits line item.

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Percent Personnel Value Extended (PPVE)

PPVE allows you to calculate how much volunteer contributions extend the overall value of personnel within your organization. You can use this figure to demonstrate the degree to which volunteers extend the value of your organization's personnel.

To calculate PPVE, you will need:

- the total dollar value of full-time and part-time salaries within your organization; and,

- the total dollar value of volunteer contributions (use either EVVA or TVAP).

To calculate PPVE:

- Add the total dollar value of volunteer contributions and the total dollar value of salaries for all full-time and part-time staff within your organization.
- Divide this number into the total value of volunteer contributions.
- Multiply the result by 100.

Volunteer Program Efficiency Measures

Organization Volunteer Investment Ratio (OVIR)

OVIR measures volunteer contributions relative to what your organization spends on volunteers.¹⁷ It compares the dollar value of volunteer contributions to the economic investment your organization makes in your volunteer program. The result is a ratio that represents your organization's return on the financial investment it makes in its volunteer program.

To calculate OVIR, you will need:

- the total amount that your organization spends on your volunteer program. This may be calculated annually or for any other interval that is meaningful for the purposes of program management; and,
- the total dollar value of volunteer activity (use either EVVA or TVAP).

To calculate OVIR:

- Divide the total dollar value of volunteer activity (EVVA or TVAP) by the amount your organization spends on your volunteer program.
- Express the result as a ratio.

Volunteer to Paid Staff Ratio (VPSR)

VPSR compares the number of volunteers to the number of paid staff who work in the volunteer program. VPSR reflects the management structure of the volunteer program and can be used to show how efficiently an organization uses its volunteer resources. Organizations with a small number of staff and hundreds of volunteers may have a high VPSR.

To calculate VPSR, you will need:

- the total number of volunteers who participate in your organization; and,
- the total number of full-time and part-time staff in the volunteer program.

To calculate VPSR:

- Divide the total number of volunteers by the total number of full-time and part-time staff in your volunteer program.
- Express the result as a ratio.

¹⁷The OVIR calculation is based on work done by Karn (1983a and 1983b) and Gaskin (1999).

Community Support Measures

Volunteer Capital Contribution (VCC)

Volunteers may incur a variety of out-of-pocket expenses as a result of participating in volunteer activities. If these are not reimbursed, they may be considered a type of financial contribution to the organization. VCC calculates the value of this contribution.¹⁸

To calculate VCC, you will need:

- the total amount of money spent by volunteers while participating in the program, including money spent on supplies and equipment, travel expenses, accommodation and food, and daycare or babysitting;
- the total amount volunteers were reimbursed for expenses; and,
- the total amount of reimbursements donated back to the organization.

VCC may be included as a line item in the revenues section of an organization's financial statements. It should be accompanied by an explanatory note describing the expenses volunteers incurred, and why

they are being considered as a type of in-kind contribution (see Table 11).

You can use a volunteer expense form like the one shown in Table 12 to collect the information you will need from volunteers in order to calculate VCC.

To calculate VCC:

- Subtract the total amount volunteers were reimbursed from the total amount of out-of-pocket expenses they incurred.
- Add the total amount that volunteers donated back to the organization.

Table 11

Sample budget (VCC)

Revenues:	
Fees and Charges	\$1,186,988
Government	\$13,165
Grants and Donations	
Individual donations	\$54,654
Volunteer Capital Contribution*	\$4,301
Private foundation grants	\$21,000
Corporate donations	\$10,034

** Volunteers were reimbursed for travel and food expenses they incurred as a result of participating in the volunteer program. We have included the total amount of reimbursed funds volunteers donated back to the organization.*

¹⁸The VCC calculation is based on work done by Ross (1994).

Table 12

Volunteer expense form

Name: _____ Time period: _____

Date	Volunteer position	Program/Event	Out-of-pocket expenses	Amount	Total Amount*
Sept. 25, 2002	Display	Youth Volunteer Recruitment Day	- posters for booth - pens for sign-up sheet - 2 bus tickets	\$5.00 \$1.05 \$4.50	\$10.55
Sept. 2002	Fundraising	Community Canvass	- 10 bus tickets	\$22.50	\$22.50
Total Expenses					\$33.05

** Total amount of out-of-pocket expenses the volunteer gave to your organization for the specified date or time period.*

Assigning Economic Value to Volunteer Activity

Community Investment Ratio (CIR)

CIR compares the amount of money your organization or an external funder invests in your volunteer program or event to the dollar value the community invests in your organization in the form of unpaid volunteer activity.

CIR may be used in grant proposals and other materials to reflect community support for your organization's mandate relative to the support a particular funding source may contribute.

To calculate CIR, you will need:

- the total dollar value a particular funder has contributed or may contribute to your volunteer program or a specific event; and,
- the total dollar value of volunteer activity (use either EVVA or TVAP).

To calculate CIR:

- divide the total dollar value of volunteer activity (EVVA or TVAP) by the total funder dollars for a volunteer program or event; and,
- express the result as a ratio.

Formulas for the Eight Measures

Human resource productivity measures

Estimate of the Value of Volunteer Activity (EVVA)	=	$\frac{\text{Total number of volunteer hours}}{\text{Hourly wage rate}}$
True Value Added to Personnel (TVAP)	=	$\frac{\text{Total number of volunteer hours}}{\text{True hourly value (wage rate + benefits)}}$
Full-time Year-round Job Equivalent (FYJE)	=	$\frac{\text{Total number of volunteer hours} \div 40 \text{ hours per week}}{48 \text{ weeks}}$
Percent Personnel Value Extended (PPVE)	=	$\frac{\text{Total dollar value of volunteer activity (EVVA or TVAP)}}{\text{Total staff salaries} + \text{Total dollar value of volunteer activity (EVVA or TVAP)}} \times 100$

Volunteer program efficiency measures

Organization Volunteer Investment Ratio (OVIR)	=	$\frac{\text{Total dollar value of volunteer activity (EVVA or TVAP)}}{\text{Organization's total financial investment in volunteer program}} \times 100$
Volunteer to Paid Staff Ratio (VPSR)	=	$\frac{\text{Total number of volunteers}}{\text{Total number of paid volunteer program staff}}$

Community support measures

Volunteer Capital Contribution (VCC)	=	$(\text{Total volunteer out-of-pocket expenses} - \text{Total amount reimbursed}) + \text{Total amount donated by volunteers}$
Community Investment Ratio (CIR)	=	$\frac{\text{Total dollar value of volunteer activity (EVVA or TVAP)}}{\text{Total volunteer program budget}}$

Assigning Economic Value to Volunteer Activity

Appendix A: Examples of How to Apply the Eight Measures

Estimate of the Value of Volunteer Activity (EVVA)

The 217 volunteers at Canada Cares About Health (CCAH), a fictional organization, contributed a total of 4,662 hours last year. Volunteers occupied 11 positions within the organization. These positions have been assigned corresponding Standard Occupational Classifications and wage rates in the example below. Once wage rates are determined, they multiplied by the total number of volunteer hours and summed to produce EVVA. In the example below, the 4,662 hours volunteers contributed to CCAH have an economic value of \$66,854.

Global EVVA

The Global EVVA calculation is a quick way of calculating EVVA. Multiply your organization's total number of volunteer hours by the average hourly wage rate for Canada (or your province). Although this provides a quick estimate of EVVA it is not as accurate as the more detailed EVVA calculation. The global estimate of EVVA for CCAH is \$76,410.18 [4,662 hours x the average hourly wage rate for 2001 (\$16.39)].¹⁸

¹⁸ Source: Statistics Canada, 1996 Census Nation Series. Population 15 Years and Over with Employment Income by Work Activity and Detailed Occupation, Showing Number and Average Employment Income in Constant (1995) Dollars, for Canada.

Table A1

#	Volunteer position	Standard Occupational Classification (SOC)	Total number of volunteers in the past year	Average number of hours given by each volunteer in the past year	Total number of volunteer hours in the past year	SOC average hourly wage rate assigned to this job type in past year	Total volunteer hours x SOC average hourly wage rate
1	Board and/or committee member	Management occupations	16	32	512	\$27.00	\$13,824
2	Display	Professional occupations in public relations and communications	6	21	126	\$22.00	\$2,772
3	Resource centre	Library clerks	2	48	96	\$14.00	\$1,344
4	Administration	General office clerks	3	344	1,032	\$15.00	\$15,480
5	Registrar	Secretaries (except legal and medical)	1	140	140	\$14.00	\$1,960
6	Fundraising	General minimum wage (in Ontario)	122	15	1,830	\$6.85	\$12,536
7	Board and/or committee member	Other administrative services managers	37	7	259	\$28.00	\$7,252
8	Chair Human Resource committee	Administrative services managers	1	45	45	\$31.00	\$1,395
9	Treasurer	Financial Managers	2	20	40	\$32.00	\$1,280
10	Newsletter volunteers	Couriers, messengers and door-to-door distributors	15	10	150	\$14.00	\$2,100
11	Speakers bureau volunteers	Other instructors	12	36	432	\$16.00	\$6,912
			217		4,662		\$66,854

True Value Added to Personnel (TVAP)

The 217 volunteers at CCAH contributed a total of 4,662 hours last year.

TVAP answers the question, “What is the true value of how much volunteers extend the personnel resources of CCAH?”

First, calculate the Estimate of the Value of Volunteer Activity (EVVA) by adding the dollar value of each volunteer

position. Next, calculate the volunteer benefits by multiplying the total value of volunteer activity by the percentage value of the staff benefits package. For CCAH, the benefits package is worth 15%. Calculate TVAP by adding the total value of volunteer activity to the total value of volunteer benefits.

The true value that volunteers add to personnel at CCAH is \$76,883.

#	Volunteer position	Standard Occupational Classification (SOC)	Total number of volunteers hours in the past year	SOC average hourly wage rate assigned to this job type in past year	Total volunteer hours x SOC average hourly wage rate	Standard Benefits 15%	TVAP = EVVA + Benefits
1	Board and/or committee member	Management occupations	512	\$27.00	\$13,824	\$2,074	\$15,898
2	Display	Professional occupations in public relations and communications	126	\$22.00	\$2,772	\$416	\$3,188
3	Resource centre	Library clerks	96	\$14.00	\$1,344	\$202	\$1,546
4	Administration	General office clerks	1,032	\$15.00	\$15,480	\$2,322	\$17,802
5	Registrar	Secretaries (except legal and medical)	140	\$14.00	\$1,960	\$294	\$2,254
6	Fundraising	General minimum wage (in Ontario)	1,830	\$6.85	\$12,535	\$1,880	\$14,415
7	Board and/or committee member	Other administrative services managers	259	\$28.00	\$7,252	\$1,088	\$8,340
8	Chair human resource committee	Administrative services managers	45	\$31.00	\$1,395	\$209	\$1,604
9	Treasurer	Financial managers	40	\$32.00	\$1,280	\$192	\$1,472
10	Newsletter volunteers	Couriers, messengers and door-to-door distributors	150	\$14.00	\$2,100	\$315	\$2,415
11	Speakers bureau volunteers	Other instructors	432	\$16.00	\$6,912	\$1,037	\$7,949
			4,662		\$66,584	\$10,029	\$76,883

Assigning Economic Value to Volunteer Activity

Full-time Year-round Job Equivalent (FYJE)

Volunteers at CCAH contributed 4,662 hours during the past year. CCAH uses the Statistics Canada definition of full-time employment (40 hours per week and 48 weeks of full-time work).

FYJE answers the question, "How many full-time year-round positions would our volunteer contributions equal?"

- 1) Divide the number of hours of volunteer time by the number of hours full-time staff work each week.

$$4,662 \div 40 = 116.55$$

- 2) Divide this number by the number of weeks full-time staff work each year.

$$116.55 \div 48 = 2.42$$

- 3) Round this number.

$$2.42 = 2.4 \text{ full-time employees}$$

You can also write this as a formula:

$$\text{FYJE} = \frac{(4,662 \text{ hours} \div 40 \text{ hours per week})}{48 \text{ weeks}}$$

$$= 2.4 \text{ full-time year-round jobs}$$

Percent Personnel Value Extended (PPVE)

Canada Cares About Health spent \$567,392 in full- and part-time salaries last year. The manager of volunteer resources has calculated that their EVVA is \$66,854.

PPVE answers the question, "How much do volunteers extend the value of CCAH personnel?"

- 1) Add the total salaries and the EVVA. This gives a total of the staff value and the volunteer value equal to \$634,246.

- 2) Divide the sum into the EVVA.

$$\frac{\$66,854}{\$634,246} = 0.10$$

- 3) To convert this number into a percentage, multiply by 100.

$$0.10 \times 100 = 10\%$$

You can also write this as a formula.

$$\text{PPVE} = \frac{\$66,854}{\$634,246} \times 100$$

$$= 10\%$$

Volunteers extended the value of Canada Cares About Health personnel by 10%.

Organization Volunteer Investment Ratio (OVIR)

CCAH spent \$48,961 last year on recruiting, supporting and developing volunteers. The EVVA for last year is \$66,584.

OVIR answers the question, "What is the economic value of the return CCAH receives on its investment in its volunteer program?"

- 1) Divide the total volunteer value by the amount spent on the volunteer program.
 $\$66,584 \div \$48,961 = 1.37$
- 2) Round this number.
 $1.37 = 1.4$
- 3) Express this number as a ratio.
 $1.4:1$

You can also write this as a formula.

$$\begin{aligned} \text{OVIR} &= \frac{\$66,584}{\$48,961} \\ &= 1.4 \end{aligned}$$

For every dollar CCAH invests in the volunteer program they receive a return valued at \$1.40 in unpaid volunteer activity.

Volunteer to Paid Staff Ratio (VPSR)

CCAH has 2 full and 2 part-time employees on staff in its volunteer program and 217 volunteers.

VPSR answers the question, "What is the ratio of volunteers to paid staff in the volunteer program?"

- 1) Divide the number of volunteers by the total number of volunteer program staff.
 $217 \div 3 = 72.3$
- 2) Round this number.
 $72.3 = 72$
- 3) Express this number as a ratio.
 $72:1$

You can also write this as a formula.

$$\begin{aligned} \text{VPSR} &= \frac{217}{3} \\ &= 72.3 \text{ or } 72 \\ &= 72:1 \end{aligned}$$

There are approximately 72 volunteers for every paid volunteer staff person in the volunteer program at CCAH.

Assigning Economic Value to Volunteer Activity

Volunteer Capital Contribution (VCC)

CCAH volunteers found that their volunteers had significant out-of-pocket expenses. The total expenses were: \$244 for advertisement and recruitment, \$296 for training and orientation, \$87 for supplies and equipment, \$3,396 for traveling, \$139 for miscellaneous, \$522 for other expenses. CCAH reimbursed volunteers \$285 for travel expenses and \$209 for other expenses. Volunteers donated \$111 in reimbursed expenses back to CCAH.

VCC answers the question, "What were the unreimbursed expenses volunteers incurred as a result of participating in CCAH voluntary activities?"

- 1) Add the total out-of-pocket expenses.
$$\begin{aligned} & \$244 + \$296 + \$87 + 3,396 + \$139 + \$522 \\ & = \$4,684 \end{aligned}$$
- 2) Subtract any amounts reimbursed.
$$\begin{aligned} & \$4,684 - (\$285 + \$209) \\ & \$4,684 - \$494 = \$4,190 \end{aligned}$$
- 3) Add the total amount of reimbursements which volunteers donated back to the organization.
$$\$4,190 + \$111 = \$4,301$$

Volunteers contributed \$4,301 in non-reimbursed expenses to CCAH.

Community Investment Ratio (CIR)

The total unpaid volunteer activity at CCAH over the past year is valued at \$66,584. The total volunteer program budget was approximately \$48,961.

CIR answers the question, "What is the community investment relative to CCAH's contribution to their volunteer program?"

- 1) Divide the total value of volunteer contributions by the total budget for the volunteer program.
$$\$66,584 \div \$48,961 = 1.37$$
- 2) Express this number as a ratio.
1.37:1

You can also write this as a formula.

$$\text{CIR} = \frac{\$66,584}{\$48,961}$$

$$\text{CIR} = 1.37$$

For every dollar CCAH invested in the volunteer program, it received a value of approximately \$1.37 in support from the community in the form of unpaid volunteer activity.

Appendix B: Project Contributors

Project Contributors

Participating Organizations

The *Measuring the Economic Value of Volunteer Activity and Voluntary Organization* research project would not have been possible without the contribution of the following twelve organizations and their volunteers who shared their thoughts and experiences by participating in this research project.

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