2018 General Social Survey

Cycle 33:
Giving, Volunteering and Participating

Public Use Microdata File
User Guide

Statistics Canada Statistique Canada

Canada

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1. Introduction

This guide was prepared for users of the public use microdata file (PUMF) of the 2018 General Social Survey on Giving, Volunteering and Participating (2018 GSS GVP). Its objectives are to provide context and background information, to familiarize users with the content of the survey and to describe procedures and concepts related to collection, processing, methodology and analysis.

The 2018 GSS GVP PUMF includes a subset of variables from the analytical file. To avoid the possibility of disclosure, some variables were suppressed, capped or categories were collapsed. These steps allow the publication of certain respondent and household member characteristics without compromising confidentiality.

The 2018 GSS GVP interviewed individuals 15 years and over in Canada's ten provinces[1] and was conducted from September to December 2018. Respondents were given the option to complete the questionnaire online for the first time (this collection method is referred to as rEQ – i.e., respondent completed electronic questionnaire). As in past iterations, they also had the option to complete the questionnaire via the telephone (iEQ – i.e., interviewer assisted electronic questionnaire). Data are subject to both sampling and non-sampling errors. These topics are discussed in detail in this guide.

The information in the following sections should be used to ensure a clear understanding of the basic concepts that define the data provided in the 2018 GSS GVP PUMF, the underlying methodology of the survey and the key aspects of data quality. This information will provide a better understanding of the strengths and limitations of the data, and how they can be effectively used and analyzed. The information may be of particular importance when making comparisons with data from other surveys or sources of information, and in drawing conclusions regarding change over time, or differences between sub-groups of the target population.

1.1 Background

Statistics Canada collected data on the topic of giving, volunteering and participating for the seventh time in 2018. Data were previously collected by the:

- National Survey of Giving, Volunteering and Participating (NSGVP), in 1997 and 2000;
- Canada Survey of Giving, Volunteering and Participating (CSGVP), in 2004, 2007 and 2010;
- General Social Survey on Giving, Volunteering and Participating (GSS GVP) in 2013.

In 1997, the National Survey of Giving, Volunteering and Participating (NSGVP) provided the first comprehensive look at the contributions that Canadians make to one another through their gifts of time and money. This survey was conducted again in 2000 as part of the federal government's Voluntary Sector Initiative (VSI). In 2001, the federal government provided funding to establish a permanent survey program at Statistics Canada on charitable giving, volunteering and participating. The survey was renamed the Canada Survey of Giving, Volunteering and Participating (CSGVP) to distinguish it from surveys in other countries. Following the 2010 CSGVP, the survey became part of Statistics Canada's General Social Survey (GSS) program.

The NSGVP was developed through a unique partnership of federal government departments and non-profit and voluntary organizations that included the Canadian Centre for Philanthropy (now operating under the name of Imagine Canada), Human Resources and Skills Development Canada (now Employment and Social Development Canada (ESDC)), Canadian Heritage, Health Canada, Statistics Canada and Volunteer Canada. These original partners continue to be active members of the GSS GVP steering committee, joined more recently by Finance Canada, the Canada Revenue Agency and the University of Ottawa.

[1]The survey excludes residents of the Yukon, Northwest Territories and Nunavut, as well as full-time residents of institutions.

2. Objectives of the General Social Survey

The GSS program, established in 1985, conducts surveys across the ten provinces. The GSS is recognized for its regular collection of cross-sectional data that allows for trend analysis, and its capacity to test and develop new concepts that address current or emerging issues.

The two primary objectives of the General Social Survey are:
a) To gather data on social trends in order to monitor changes in the living conditions and well-being of Canadians over time; and
b) To provide information on specific social policy issues of current or emerging interest.

To meet these objectives, the data collected by the GSS comprise two components: core and classification content. Core content – giving, volunteering and participating in the case of the 2018 GSS GVP – measures changes in society related to living conditions and well-being, and supplies data to inform specific policy issues. Classification variables (such as age, gender, education, and income) help delineate population groups for use in the analysis of the core data.

The 2018 GSS GVP also provides data to the Canadian System of National Accounts[2] and informs the charitable and voluntary sector in program decisions that relate to the sector.

3. Content and special features of the 2018 GSS GVP

3.1 Content

This section outlines the content of the 2018 GSS GVP questionnaire.

Getting Started: Introduction, respondent selection and household roster
The purpose of this section is to introduce the survey, select a respondent and collect key demographic information.

The 2018 GSS GVP used a method, called age-order selection, to select a respondent. For a portion of the sample, a letter was mailed to the selected household and a household member was selected via the letter to complete the electronic questionnaire. The selected respondent was invited to complete the questionnaire on the Internet by accessing the online questionnaire and typing the security access code (SAC) provided in the letter. The age-order selection method was also used for the other portion of the sample. Initial contact with the household was made by telephone and the selection was completed with an interviewer.

A household roster was created to collect the age of each member of the household. Selected respondents were then asked for their birth date and confirmation of their age. They were also asked their marital status, sex, gender, and the sex and gender of their spouse, where applicable.

Age and marital status are used to determine if certain questions are asked later in the survey. Age, marital status, sex and gender of the respondent and spouse are used for certain derived variables. Date of birth is used to validate responses where ages are involved.

Relationship to selected respondent
This module collects the relationship of each household member to the selected respondent. This module is not called if there is only one person in the household. Relationship data are used for certain derived variables.

Volunteering
There are two main paths through the modules that make up the volunteering section of the questionnaire. All respondents are asked the screening questions that make up the **Formal Volunteering** (FV) module. Questions in this module act as prompts to help respondents identify the full span of their formal volunteering activities. They also determine whether a respondent was a formal volunteer during the preceding 12-month period.

[2] GVP survey data are provided to the Non-profit Institutions Serving Households (NPISH) sector account which is part of the Gross Domestic Product quarterly program of the Canadian System of National Accounts.

Volunteer path
After completing FV, volunteers are asked questions about **Volunteer Specifics** (VS1, VS2) and **Volunteer Details** (VD). Together, these modules collect information about frequency of unpaid activity, the names and types of organizations for which the respondent volunteered and hours volunteered. This information is collected for up to a maximum of 3 organizations.

Next volunteers, who report doing more than one type of volunteer activity in the past 12 months, are asked about the hours they volunteered by type of activity for the organization to which they volunteered the most hours (MV1)**.** Also with reference to their main organization, volunteers are asked about how they first became a volunteer for this organization and any recognition or benefits they may have received (MV2).

Volunteers, who report at least 4 hours of unpaid activity on behalf of organizations, flow to questions about **Reasons for Volunteering** (RV) and a new section on **Quality of the Volunteer Experience** (QVS). All volunteers are then asked about **Mandatory Unpaid Work** (MUW), **Volunteering in General** (GV), and **Reasons for Not Volunteering More** (NV).

Non-volunteer path
Non-volunteers who are screened into the survey are asked about their **History of Volunteering** (HV), prior to the 12 month-reference period and their **Reasons for Not Volunteering** (NV).

Informal Volunteering
After the modules about formal volunteering, all respondents are then asked about Informal Volunteer Activities, including questions about:

- helping people, who live outside their household, directly, without pay and not on behalf of a group or organization, and
- helping communities directly, without pay and not on behalf of a group or organization.

For the first time in 2018, questions were included about hours spent on informal volunteer activities. For those who help people outside their household directly, there was a question asking if any of this help was for relatives, and, if yes, how much.

Giving
There are two main paths through the modules that make up the giving section of the questionnaire. All survey respondents are asked the first module on **Financial Giving to Charitable Organizations** (FG1A). Questions in this module act as prompts to help respondents identify the full span of their financial giving to charitable and non-profit organizations. This module determines the giving status of a respondent based on their financial donations in the preceding 12 month period.

Giver path
For each “yes” response in the Financial Giving (FG1A) module, respondents are asked questions about the type of organization to which a donation was made and the value of the donation in the module on **Giving Specifics** (GSA). Questions in the giving specifics module are asked for up to a maximum of 7 donations for each method of donating.

After providing details about individual donations, respondents, who report giving at least $10 to charities in the past 12 months are asked questions about **Decisions on Giving** and their **Reasons for Giving**. Givers, regardless of the amount given, are then asked about their **Reasons for Not Giving more**.

Non-giver path
Respondents who answer “no” to all questions in the Financial Giving (FG1A) module are asked about whether they agree or disagree with two statements about reasons for not giving.

Other Giving
Following the Financial Giving section, all respondents are asked about **Other Giving** (OG), including:

- donations of food, clothing, toys or household goods to charitable organizations;
- promised future donations to organizations through a will or other financial planning product; and
- money given directly to people, not through an organization, which could include money given to a stranger on the street, someone’s personal-cause crowdfunding campaign, family members living outside the respondent’s household, or someone else.

Participating
Next, all respondents are asked about their **Youth Experiences** (EA) participating in organized team sports, belonging to a youth group, doing volunteer work, seeing someone they admired helping others, going door-to-door to raise money for a cause or organization, being active in student government, being active in a religious organization, having parents who volunteered in the community.

Other characteristics
All respondents are asked about **Education** (EDM), **School attendance** (ESC1), and **Highest degree** (EHG1). This is followed by a group of modules that collect data on **Labour market activities** (LMAM), **Labour force status** (LMA2), **Class of worker** (LMA3), **Industry** (LMA4), **Occupation** (LMA5), and **Usual hours of work** (LMA6). For employed respondents, there are a few questions about Employer Support for volunteer activities (ESM).

Next, information is collected on the **Birthplace of the respondent**, **Immigration status and Citizenship** (BPR), **Aboriginal identity** (AMB), **Self-rated health** (HM), and **Subjective well-being** (SLM). This is followed by a question that asks about the **Length of time a respondent has lived in his or her city or local community** (LRC). Next, there are modules on **Religion** (REE) and **Language of respondent** (LNR).

In 2018, GSS GVP respondents were also asked, for the first time, the disability screening questions (DSQ) and the Veteran Identifier (VET).

Questions about education, labour market, birth place of the respondent, immigration status, citizenship, aboriginal identity, self-rated health and religion represent Statistics Canada harmonized content.

3.2 Concepts and definitions

This section outlines concepts and definitions of interest to users.

Donor
A donor is a person who made at least one donation of money to a charitable or other non-profit organization in the 12-month reference period preceding the survey.

Employer support for volunteer activities
In the context of the 2018 GSS GVP, employer support for volunteer activities refers to an employer's provision of paid time off, or time to volunteer, during a person's regular working hours.

Financial donation
A financial donation is money given to a charitable or other non-profit organization during the 12-month reference period preceding the survey, regardless of whether or not the donation resulted in a tax credit. Money given to the same organization, on multiple occasions, in response to the same solicitation method, constitutes only one donation. For example, all money donated to a particular religious institution over the 12 months preceding the survey, through a collection at the place of worship, would be considered as a single donation.

Formal volunteer
This is a person who volunteered, that is, who performed a service without pay, on behalf of a charitable or other non-profit organization, at least once in the 12 month reference period preceding the survey. This includes any unpaid help provided to schools, religious organizations, sports or community associations. It includes mandatory and employer supported hours and amounts of less than one hour reported by organization. It excludes informal volunteering.

Industry and Occupation
The 2018 GSS GVP provides industry and occupation information for employed persons only (i.e., for the job which the individual occupied the week preceding the interview). Respondents with more than one job were asked about the job or business for which they usually worked the most hours. For industry, statistics have been provided based on the 2017 North American Industry Classification System (NAICS). For occupation, the 2016 National Occupation Classification (NOC) was used.

Informal volunteer
The 2018 GSS GVP defines an informal volunteer (or a direct helper) as a person who helped someone or their community on their own, that is, not on behalf of a group or organization, in the 12 month reference period preceding the survey. This includes help given directly to friends, neighbours, acquaintances, colleagues and relatives living outside the respondent's household; unpaid work to improve communities; and amounts of less than one hour reported by category. It excludes help given to anyone living in the respondent's household; signing a petition, if no further action was taken; and 'likes' on social media, if no further action was taken. Since informal volunteering occurs outside the structure of an organization, it is not included under the definition of formal volunteering.

In-kind donation
This is a non-monetary donation made to a charitable or other non-profit organization. Examples include donations of clothing or household items and donations of food.

Labour force status
Labour force status designates the status of the respondent vis-à-vis the labour market. For the 2018 GSS GVP, estimates of labour force status refer to all respondents, aged 15 and over[3].

The three categories of labour force status are "employed", "unemployed" and "not in the labour force". For the purposes of the 2018 GSS GVP, the three categories of labour force status are defined as follows:

Employed
Employed persons are those who, during the week preceding the interview:
a) did any work[4] at all at a job or business; or
b) had a job but were not at work due to factors such as own illness or disability, personal or family responsibilities, vacation, labour dispute or other reasons (excluding persons on layoff or between casual jobs).

Unemployed
Unemployed persons are those who, during the week preceding the interview:
a) were on temporary layoff (excluding full-time students); or
b) were without work and had actively looked for work in the past four weeks (excluding full-time students).

Not in the labour force
Persons not in the labour force are those who had not worked during the week preceding the interview and:
a) were permanently unable to work; or
b) were full-time students who had a job but were absent from work as a result of a layoff or because they were between casual jobs; or
c) were full-time students who did not have a job and had looked for work; or
d) persons how did not have a job and did not look for work.

Mandatory community service
This is unpaid help provided to a group or organization that was mandated, or required, by a school; an internship, apprenticeship or postsecondary program; an employer; a charitable or non-profit organization; a court or some other authority.

Organization classification
Respondents were asked to provide information on the organizations for which they volunteered and to which they made donations. Respondents were first asked to provide the name of the organization. A pick-list was used, including the most

[3] This is a change from CSGVP 2010, where labour force estimates referred to the population aged 15 to 75 only. In 2010, respondents, aged 76 and older, were not asked the related series of questions.
[4] Work includes any work for pay or profit, that is, paid work in the context of an employer-employee relationship, or self-employment. It also includes unpaid family work, which is defined as unpaid work contributing directly to the operation of a farm, business or professional practice owned and operated by a related member of the same household. Such activities may include keeping books, selling products, waiting on tables, and so on. Tasks such as housework or maintenance of the home are not considered unpaid family work.

common organizations reported in previous iterations of the survey. If the organization cited by the respondent was not on this pick-list, the respondent was then asked to provide information about what this organization does.
To classify these organizations, the *International Classification of Nonprofit Organizations (ICNPO)*[5] was used. Although organizations are classified according to their primary area of activity, some organizations operate in multiple areas. A major advantage of the ICNPO system is that it is used widely by other countries and thus allows for international comparisons. It has also been devised specifically to reflect the range and nature of activities typically undertaken in the non-profit and voluntary sector. The ICNPO system developed by the Johns Hopkins Comparative Nonprofit Sector Project, and modified for use in Canada, groups organizations into 15 Major Activity Groups, including a catch-all "Not Elsewhere Classified" category. These 15 Major Activity Groups are further grouped into 12 categories.

The 15 categories are as follows:

1) *Arts and culture:* includes organizations and activities in general and specialized fields of arts and culture, including media and communications; visual arts, architecture, ceramic art; performing arts; historical, literacy and humanistic societies; museums; and zoos and aquariums.

2) *Sports and recreation:* includes organizations and activities in general and specialized fields of sports and recreation. Two sub-groups of organizations are included in this group: (1) amateur sports (including fitness and wellness centres); and (2) recreation and social clubs (including service clubs).

3) *Education and research:* includes organizations and activities administering, providing, promoting, conducting, supporting and servicing education and research. Three sub-groups are contained in this group: (1) primary and secondary education organizations; (2) organizations involved in other education (i.e., adult/continuing education and vocational/technical schools); and (3) organizations involved in research (i.e., medical research, science and technology, and social sciences). Note that organizations devoted primarily to education and research in the area of specific medical conditions (e.g., Heart and Stroke Foundation of Canada, Canadian Cancer Society) are included under category 5, *Health*.

4) *Universities and colleges:* includes organizations and activities related to higher learning. This includes universities, business management schools, law schools and medical schools.

5) *Health:* includes organizations that engage primarily in out-patient health-related activities and health support services. Two sub-groups are included in this category: (1) mental health treatment and crisis intervention; and (2) other health services (including public health and wellness education, out-patient health treatment, rehabilitative medical services, and emergency medical services). Also included in this category are organizations devoted primarily to education, research or support services in the area of specific medical conditions (e.g., Heart and Stroke Foundation, Canadian Cancer Society) as well as organizations providing support to the terminally ill (e.g., hospices and other types of palliative care).

6) *Hospitals:* includes organizations that engage primarily in in-patient health care. Two sub-groups are included in this category: (1) hospitals and rehabilitation; and (2) nursing homes.

7) *Social Services:* includes organizations and institutions providing human and social services to a community or target population. Three sub-groups are contained in this category: (1) social services (including organizations providing services for children, youth, families, the handicapped and the elderly, and self-help and other personal social services); (2) emergency and relief; and (3) income support and maintenance.

8) *Environment:* includes organizations promoting and providing services in environmental conservation, pollution control and prevention, environmental education and health, and animal protection. Two sub-groups are included in this category: (1) environment; and (2) animal protection.

9) *Development and housing:* includes organizations promoting programs and providing services to help improve communities and promote the economic and social well-being of society. Three sub-groups are included in this

[5] The classification is based on L.M. Salamon and H.K. Anheier, 1997. *Defining the Nonprofit Sector: A Cross-national Analysis.* Manchester University Press.

category: (1) economic, social and community development (including community and neighbourhood organizations); (2) housing; and (3) employment and training.

10) *Law, Advocacy and Politics:* includes organizations and groups that work to protect and promote civil and other rights, advocate the social and political interests of general or special constituencies, offer legal services or promote public safety. Three sub-groups are contained in this category: (1) civic and advocacy organizations; (2) law and legal services; and (3) political organizations.

11) *Grant-making, fundraising and voluntarism promotion:* includes philanthropic organizations and organizations promoting charity and charitable activities including grant-making foundations, voluntarism promotion and support, and fund-raising organizations.

12) *International:* includes organizations promoting cultural understanding between peoples of various countries and historical backgrounds as well as those providing relief during emergencies and promoting development and welfare abroad.

13) *Religion:* includes organizations promoting religious beliefs and administering religious services and rituals (e.g., churches, mosques, synagogues, temples, shrines, seminaries, monasteries and similar religious institutions), in addition to related organizations and auxiliaries of such organizations.

14) *Business and professional associations, unions*: includes organizations promoting, regulating and safeguarding business, professional and labour interests.

15) *Groups not elsewhere classified.*

The correspondence between the 12 category classification and the 15 category classification is as follows:

12 Category ICNPO	**15 Category ICNPO**
1) Culture and recreation	1) Arts and culture 2) Sports and recreation
2) Education and research	3) Education and research 4) Universities and colleges
3) Health	5) Health 6) Hospitals
4) Social services	7) Social services
5) Environment	8) Environment
6) Development and housing	9) Development and housing
7) Law, advocacy and politics	10) Law, advocacy and politics
8) Philanthropic intermediaries and voluntarism	11) Grant-making, fundraising and voluntarism promotion
9) International	12) International
10) Religion	13) Religion
11) Business and professional associations, unions	14) Business and professional associations, unions
12) Groups not elsewhere classified	15) Groups not elsewhere classified

Participant

The 2018 GSS GVP defines a participant as a person who was a member of at least one group, organization or association in the 12-month reference period preceding the survey. This includes professional organizations or unions; service clubs or fraternal organizations; political groups; cultural, educational, or hobby related organizations; sports or

recreation organizations; religious organizations; seniors' or youth groups; support or self-help programs; environmental groups; and community or school related associations.

Reference period
For most questions in the 2018 GSS GVP questionnaire, the reference period was the 12 months preceding the interview. Interviews were conducted from September 4th to December 28th, 2018.

Volunteer (international concept)[6]
The 19th International Conference of Labor Statisticians (ICLS) defines volunteer work as "work performed by persons of working age who, during a short reference period, performed any unpaid, non-compulsory activity to produce goods or provide services for others, where:

a) 'any activity' refers to work of at least one hour;
b) 'unpaid' is interpreted as the absence of remuneration in cash or in-kind for work done or hours worked; nevertheless, volunteer workers may receive some small form of support or stipend in cash, when below one third of local market wages (e.g. for out-of-pocket expenses or to cover living expenses incurred for the activity), or in-kind (e.g. meals, transportation, symbolic gifts);
c) 'non-compulsory' is interpreted as work carried out without civil, legal, or administrative requirements which are different from the fulfilment of social responsibilities of a communal, cultural, or religious nature;
d) production 'for others' refers to work performed:
    i. through, or for, organizations comprising market and non-market units (i.e. organization-based volunteer work) including through or for self-help, mutual aid, or community-based groups of which the volunteer is a member; or
    ii. directly for households other than the household of the volunteer worker or of related family members (i.e. direct volunteer work).

Volunteer Type (Canadian)
The concept of 'volunteer type' brings together formal and informal volunteering. It indicates whether a respondent is engaged as a formal and/or informal volunteer, as per the Canadian concept of volunteering. For an explanation of the differences between the Canadian and international concepts of volunteering, see Appendix C.

[6]For a summary of key differences between the Canadian and international concepts of volunteering, see Appendix C.

4. Summary of key changes and comparability of estimates

This section summarizes key changes to the survey content, frame, coding, processing and weights and discusses the issue of comparability of GVP, CSGVP and NSGVP estimates.

4.1 Summary of key changes

1) Core content on giving, volunteering and participating[7]

Between 2004 and 2018, core content of the survey was revised in a number of ways, based on experience gained from earlier iterations. Some questions were revised to improve their clarity for respondents, and others were added or dropped following consultations with stakeholders from the charitable and non-profit sector, government and academic communities. In 2018, for example, new questions were added about quality of the volunteer experience and skills used, mandatory unpaid work hours, hours spent on informal volunteer activities, help given directly to communities, money given directly to people, disability screening and veteran status. Modules on skills gained and participating were rotated out. Modules on employer support (minimum) and youth experiences and attitudes were rotated in.

In 2018, updates were also made in light of developments in international standards concerning the definition of volunteering. These updates included the addition of:

- a new option allowing reporting of minutes to better measure “unpaid work of at least one hour,”
- questions to quantify volunteer hours performed during time associated with employment, or during paid time off from a job granted by an employer,
- questions to quantify mandatory unpaid work hours associated with all volunteer activities,
- questions to quantify unpaid work performed for relatives living outside the respondent’s household.

To reduce respondent burden, thresholds and cut off values were added for certain modules. For example, only respondents who volunteered at least 4 volunteer hours in the past 12 months were asked questions about the reasons why they volunteered and only respondents who donated at least 10 dollars were asked questions about their decisions and reasons for giving. Most questions about reasons for not donating more were skipped for those who donated more than 1,150 dollars in the past 12 months.

2) Transition to online reporting

In 2018, there were updates made throughout the questionnaire due to the transition to online reporting, including:

- rewording and restructuring of some questions, introductions, help text (on and off screen), dynamic text, bolding format and transition statements to account for the lack of interviewer assistance,
- rewording and restructuring to accommodate new online features such as searchable drop down lists, radio buttons and check boxes, a component list, hidden related fields, grid screen with an auto sum display,
- removal of most hard edits and relocation of soft edits.

Revisions to existing questions and new content for the 2018 GSS GVP were tested by Statistics Canada’s Questionnaire Design Resource Centre (QDRC) in the Fall of 2016. The screen designs and a prototype of the online application were tested by QDRC in the Fall of 2017. Final content revisions and the complete application were tested through a national pilot test administered online and by telephone from February 19, 2018 to March 30, 2018.

3) Frame

Over time, the survey frame has changed. The NSGVP was administered to a sub-sample of respondents to Statistics Canada’s Labour Force Survey (LFS). Because of concerns about demands being placed on LFS respondents, the provincial component of the 2004, 2007, and 2010 CSGVP were conducted as Random Digit Dialling (RDD) surveys.

[7] This section provides a broad overview of content changes since 1997, focusing on changes made in 2018. Appendix CA provides a more detailed summary of content changes by module, GSS GVP 2018 compared to GSS GVP 2013 and CSGVP 2010.

Starting in 2013, the survey was implemented using the newly redesigned GSS frame, which integrates data from sources of telephone numbers (landline and cellular) available to Statistics Canada and the Address Register (AR). This new frame includes “cell phone only” households, a growing population not covered by the previous Random Digit Dialling (RDD) frame. Since 2013, the sampling unit has been defined as groupings of telephone numbers linked to the same address. See Section 5.3 for more details.

4) Coding

The North American Industry Classification System (NAICS) 2017 and National Occupational Classification (NOC) 2016 were used for industry and occupation coding.

There have been no changes to the International Classification of Nonprofit Organizations (ICNPO). The same ICNPO codes were used in 2018 that were used for CSGVP 2010. Names of organizations associated with particular ICNPOs were updated to account for new organizations identified by GVP pilot test respondents.

5) Processing

Most of the ongoing data processing steps are standard, including consistency edits, family edits and imputation. For edits and imputation, the same methodology was applied as previously used for GVP 2013.

At every stage of processing, verification and dissemination, considerable effort was made to produce data that are as precise as possible in their level of detail, and to ensure that the published estimates are of good quality in keeping with Statistics Canada standards.

All social surveys at Statistics Canada have variable names of 8 characters or less and the following reserve codes: 6 Valid skip; 9 Not stated.

4.2 Comparability of 2018 GSS GVP estimates with previous iterations

The 2018 GSS on Giving, Volunteering and Participation offered for the first time an Internet option to survey respondents. This new approach to data collection was in recognition of the need to adapt to the changing use of technology and the ever present demands on Canadians’ time. By having both telephone and Internet modes of data collection, the 2018 GSS offered survey respondents greater flexibility and convenience in providing key and vital information to Statistics Canada. It is important to point out that any significant change in survey methodology can affect the comparability of the data over time. It is impossible to determine with certainty whether, and to what extent, differences in a variable are attributable to an actual change in the population or to changes in the survey methodology. However, there are reasons to believe that the use of an electronic questionnaire had an impact on the estimations. Because of these changes it is **not** appropriate to compare results from GSS GVP 2018 with previous iterations. Analysis and associated documentation is ongoing and will be available on Statistics Canada web site.

5. Survey and sample design

Data for 2018 GSS on Giving, Volunteering and Participation were collected from September 4th to December 28th, 2018. Please see the following sections for descriptions of the target population, stratification, the frame, the sampling strategy, the sample size and sample allocation.

5.1 Target population

The target population for the survey included all persons 15 years of age and older in Canada, excluding:

1. Residents of the Yukon, Northwest Territories, and Nunavut;
2. Full-time residents of institutions.

5.2 Stratification

In order to carry out sampling, each of the ten provinces were divided into strata; i.e., geographic areas. Many of the Census Metropolitan Areas[8] (CMAs) were each considered separate strata. This was the case for St. John's, Halifax, Saint John, Montreal, Quebec City, Toronto, Ottawa, Hamilton, Winnipeg, Regina, Saskatoon, Calgary, Edmonton and Vancouver.

All CMAs not on this list are located in Quebec, Ontario and British Columbia, with the exception of Moncton. Three more strata were formed by grouping the remaining CMAs (except Moncton) in each of Quebec, Ontario and British Columbia. Finally, the non-CMA areas of each of the ten provinces were also grouped to form ten more strata, for a total of 27 strata. Moncton was added to the Non-CMA stratum for New Brunswick.

5.3 Frame

The survey frame was created using two different components:

1. Lists of telephone numbers in use (both landline and cellular) available to Statistics Canada from various sources (Telephone companies, Census of population, etc.);
2. The Address Register (AR): List of all dwellings within the ten provinces.

The Address Register (AR) was used to group together all telephone numbers associated with the same valid address. About 86% of available telephone numbers were linked to the AR. The records resulting from this linkage could possess more than one telephone number (grouped by the address). The other 14% of telephone numbers not linked to the AR were also included on the frame[9]. The combination of those two components resulted in the survey frame. The rationale for using all the telephone numbers (linked and not linked to the AR) was to ensure a good coverage of all households with telephone numbers.

When multiple telephone numbers were attached to a record, they were sorted by source and by type of telephone number (landline telephone numbers first and cellular telephone numbers last). The first telephone number was considered the best telephone number available to reach the household.

Please note that for the remaining sections of this document, the word "record" will refer to the grouping of telephone numbers that consists of our sampling unit on the survey frame.

5.4 Sampling strategy

Each record in the survey frame was assigned to a stratum within its province. A simple random sample without replacement of records was next selected in each stratum.

The frame for GSS was created using several linked sources, such as the Census of population, administrative data files and billing files. Compared to the previous random digit dialing frame, coverage was improved (though over coverage and under coverage may still exist). Households without telephones were excluded from the survey population. Survey estimates were adjusted (weighted) to represent all persons in the target population, including those not covered by the survey frame.

For the 2018 GSS GVP, 94.5% of the selected telephone numbers reached eligible households. To be eligible, a household had to include at least one person 15 years of age or older. During collection, households that did not meet the eligibility criteria were terminated after an initial set of questions that determined eligibility.

A respondent from each household was then selected using the age-order method to complete an electronic questionnaire or to respond to a telephone interview.

[8] Based on 2011 Census geography.

[9] About 9% of these telephone numbers were grouped using address information from administrative sources. Each of the remaining telephone numbers constitutes a single record on the frame.

5.5 Rejective sampling

Due to the potential difficulties in reaching volunteers as a result of their relatively low prevalence in the population, an approach called 'rejective sampling' was chosen as part of the sample design for the 2018 GSS GVP. Rejective sampling works by 'rejecting' a certain portion of the population with a given probability in order to allow more time and effort to be spent trying to find the population of interest, in this case, volunteers.

In the case of the 2018 GSS GVP, a pre-set proportion of interviews with respondents who were non-volunteers were terminated after an initial set of questions that established that they were in fact non-volunteers. Although, they are considered respondents, these 'rejected' cases, whose interviews were terminated, are removed from the file and not directly used in any estimates produced for this cycle. Instead, their information is accounted for in the weighting process through the remaining respondents (see Section 8 for more information). Note that the "volunteer population" (i.e., volunteers) are identified as those respondents who said 'Yes' to at least one of the following questions: FV_Q020 to FV_Q160.

This rejective sampling technique is analogous to sub-sampling except that, rather than viewing it as sub-sampling a portion of respondents (i.e., those not 'rejected'), it is viewed contrarily as 'rejecting' a portion of the respondents (i.e., all those not sub-sampled). By rejecting a portion of respondents, it allows for more call attempts to be made, possibly increasing the number of volunteers found. It should be pointed out that, because donors are more prevalent in the population, they are much easier to find than volunteers.

The pre-set proportion of non-volunteers that are rejected (i.e., the rejection rate) varies by province and can be as low as 0% and as high as 50%. The rejection rates by province are as follows:

Newfoundland, New Brunswick – 25%
Prince Edward Island – 0%
Nova Scotia – 20%
Quebec – 50%
Ontario – 40%
Manitoba, Saskatchewan – 0%
Alberta – 20%
British Columbia – 30%

At the time the sample file was created, a flag was included which was randomly set so that it had a "1 minus rejection rate" chance of being set to one and the same chance as the "rejection rate" of being set to zero. So, for instance, for Ontario, all cases would have a 60% (1-0.40) chance of the flag being set to a one and a 40% chance of the flag being set to a zero. If a respondent was a non-volunteer and the randomly set flag on the sample file had been set to one, then the interview continued until the end of the questionnaire; if the flag had been set to zero, the interview ended after the screening questions (listed above). If the respondent was a volunteer, the flag was ignored.

5.6 Sample size and allocation

The target sample size (i.e., the number of respondents excluding 'rejected' respondents) for the 2018 GSS GVP was 20,000, while the actual number of respondents (again excluding 'rejected' respondents) was 16,149. For each province, minimum sample sizes were determined that would ensure certain estimates would have acceptable sampling variability at the stratum level. Once these stratum sample size targets had been met, the remaining sample was allocated to the strata in a way that balanced the need for precision of both national-level and stratum-level estimates.

6. Collection and response rate

Collection
Data for the 2018 GSS GVP were collected electronically as a self-completed questionnaire (rEQ) as well as via computer assisted telephone interviews (iEQ). Respondents were interviewed in the official language of their choice. Proxy interviews were not permitted.

Telephone interviews were conducted from five of Statistics Canada's regional offices: Halifax, Sherbrooke, Sturgeon Falls, Winnipeg and Edmonton. Interviewers were trained by Statistics Canada staff in telephone interviewing techniques

using the electronic questionnaire (iEQ). The majority of interviewers had experience interviewing for previous GSS or CSGVP cycles.

Interviewers were instructed to make all reasonable attempts to make contact with the selected member of the household, 15 years of age or older. Those who at first refused to participate were re-contacted up to two more times to explain the importance of the survey and to encourage their participation. For cases in which the timing of the interviewer's call was inconvenient, an appointment was arranged to call back at a more convenient time. For cases in which there was no one home, numerous call backs were made.

Interviewer manuals are not included in this documentation package but can be made available by contacting Statistics Canada (see Section 10).

Data for the 2018 GSS GVP were collected from September to December, 2018. The following steps summarize the collection process and the movement of cases from rEQ to iEQ. Once in iEQ, cases could not be transferred back to rEQ.

1. Introductory letters were sent to households whose telephone numbers were able to be matched to addresses, approximately 78% of cases. The letter provided a secure access code that a selected member of the household aged 15 or older was asked to use to log in to the survey.
2. Once in the survey application, this household member was asked to verify that the primary phone number shown on screen belonged to someone in the household, and provide the number of landlines and cell phones that belonged to the household. If the listed phone number did not belong to anyone in the household the case was immediately transferred to iEQ. Similarly, if the listed phone number was a business number but there were additional phone numbers associated with the household, the case was immediately transferred to iEQ.
3. The selected respondent was asked for their province of residence, postal code and to list the names and ages of all individuals residing in the household.

Response rate
The overall response rate was 41.9%.

The 2018, 2013 GSS GVP and 2010 CSGVP response rates (41.9%, 46.0% and 55.7% respectively) are not directly comparable. The 2018 and 2013 samples were selected using the new GSS frame, which necessitated some adjustments in the methodology used to calculate the response rate. Addition of "cell phone only" households to the frame was essential since this population constitutes a constantly growing portion of the population and coverage had been steadily declining with the previous frame. While the addition of these households is necessary for coverage of the Canadian population, this population is harder to reach. Another factor that affects comparability of the response rate over time is the way in which status (in-scope, out-of-scope) is determined under the new design.

7. Processing

Data processing is used to transform survey responses obtained during collection into a form that is suitable for tabulation and data analysis. It includes all data handling activities – automated and manual – that occur after collection and prior to the dissemination of estimates.

7.1 Data capture

Responses to survey questions were entered directly into computers by respondents who self-completed the electronic questionnaire (rEQ) and by interviewers who completed interviews with respondents by telephone (iEQ). Both respondents and interviewers used the same data capture system to complete the questionnaire.

The data capture program allowed a valid range of codes for each question, had built in edits, and automatically followed the flow of the questionnaire. The data output was encrypted and transmitted electronically to Ottawa.

7.2 Coding

Several questions allowed for write-in responses. These responses were coded into existing categories (where a match was possible), grouped into new categories or left in “other-specify” (if a match with an existing category was not possible or frequencies were too small to create a new category). Where possible (e.g., occupation, industry, language, education, country of birth, religion), coding followed standard classification systems used by the General Social Survey and Statistics Canada’s harmonized content program. Organizations in the volunteering and giving sections were coded following the *International Classification of Nonprofit Organizations (ICNPO).*

7.3 Edit and imputation

Electronic files containing the daily transmissions of completed respondent survey records were combined to create the “raw” survey file. Before further processing, verification was performed to identify and eliminate potential duplicate records and to drop non-response and out-of-scope records.

A number of out-of-scope respondents were identified during the data processing and data cleanup stages. A small percentage of the sample, identified through specific questions related to age and whether or not selected telephone number was personal and belonged to someone in the household were determined to be out-of-scope. All respondent records that were determined to be out-of-scope and to be nonresponse were removed from the data file.

Records with missing or incorrect information were, in a small number of cases, corrected deterministically or imputed from other information on the questionnaire. The flow editing carried out by head office followed a ‘top down’ strategy, in that whether or not a given question was considered ‘on path’ was based on the response codes to the previous questions. If the response codes to the previous questions indicated that the current question was ‘on path,’ the responses, if any, to the current question were retained; if, however, a response was missing to the current question, it was coded as ‘Not Stated,’ i.e., 9 (99 or 999, etc.). If the response codes to the previous questions indicated that the current question was ‘off path’ because the respondent was clearly identified as belonging to a sub-population for which the current question was inappropriate or not of interest, the current question was coded as ‘Valid Skip’, i.e., 6 (96 or 996, etc.).

Imputation is the process that supplies valid values for those variables that have been identified for a change either because of invalid information or because of missing information. The new values are supplied in such a way as to preserve the underlying structure of the data and to ensure that the resulting records will pass all required edits. In other words, the objective is not to reproduce the true microdata values, but rather to establish internally consistent data records that yield good aggregate estimates.

We can distinguish between three types of non-response. Complete non-response is when the respondent does not provide the minimum set of answers. These records are dropped and accounted for in the weighting process (see Section 8.1). Item non-response is when the respondent does not provide an answer to one question, but goes on to the next question. These are usually handled using the “not stated” code or are imputed. Finally, partial non-response is when the respondent provides the minimum set of answers but does not finish the interview. These records can be handled like either complete non-response or multiple item non-response.

In the case of the GVP, donor imputation was used to fill in missing data for some item and partial non-response. Further information on the imputation process is given in Section 9.2.1.

7.4 Creation of combined and derived variables

A number of variables on the file were derived by combining items on the questionnaire in order to facilitate data analysis. In some cases, the derived variables were straightforward and involved the collapsing of categories. In other cases, two or more variables were combined to create a new variable. The data dictionary identifies which variables were derived and the source of their derivation.

7.5 Additional PUMF processing steps

As mentioned earlier, in order to preserve confidentiality, the PUMF was the object of additional processing steps. Among the measures taken, donation perturbation and rounding are particular to the GSS GVP. The method involved is

consistent with that of previous PUMFs and generally has a negligible, or no, impact on donation estimations. However, when analysis involves small domains of estimation, caution must be exercised.

8. Estimation

When a probability sample is used, as is the case for the GSS, the principle behind estimation is that each person selected in the sample represents (in addition to himself or herself) several other persons not in the sample. For example, in a simple random sample of 2% of a population size of 1000, each person in the sample represents 50 persons in the population. The number of persons represented by a given person in the sample is usually known as the weight or weighting factor of the sampled person.

The 2018 GSS GVP estimates can be produced from the PUMF file. This file contains questionnaire responses and associated information from 16,149 respondents.

A weighting factor is made available to analysts in the PUMF.

WGHT_PER: This is the basic weighting factor for analysis at the person level, i.e., to calculate estimates of the number of persons (non-institutionalized and aged 15 or over) having one or several given characteristics. WGHT_PER should be used for all person-level estimates. For example, to estimate the number of persons who say their health is excellent, the value of WGHT_PER is summed over all records with this characteristic.

In addition to the estimation weights, bootstrap weights have been created for the purpose of design-based variance estimation.

8.1 Weighting of persons

As mentioned previously, the records on the survey frames are groups of telephone numbers. A simple random sample of those records was selected in each stratum. Therefore, each record within a stratum has an equal probability of selection.

This probability is equal to:

$$\frac{\text{Number of records sampled in the stratum}}{\text{Total number of records in the stratum from the survey frame}}$$

1) Initial weight calculation

Certain households in the survey frame had a probability of being reached through more than one record. This was possible since groupings of telephone numbers were subject to error.

As mentioned previously, telephone numbers belonging to the same valid address were grouped together on the survey frame. However, for a few cases, the grouping of those telephone numbers might be erroneous (i.e., all the telephone numbers grouped together do not belong to the same household). In addition, the remaining telephone numbers that could not be linked to addresses were also included in the frame. It is possible that some of those telephone numbers could reach households already covered by the telephone numbers linked to addresses.

As a result, a series of questions were added to the survey to establish the prevalence of these situations. Several adjustments were made to the initial probability of selection to account for the fact that such households had a higher probability of being selected (i.e., they could be contacted through more than one group of telephone numbers). Therefore, the initial weight is the inverse of this adjusted probability of selection.
The resulting initial weight is a household weight.

2) Removal of out-of-scope records

Telephone numbers associated with businesses, institutions or other out-of-scope dwellings, as well as numbers not in service or any other non-working numbers are all examples of out-of-scope telephone numbers for this survey. Records with all telephone numbers out-of-scope are simply removed from the process, leaving only in-scope records in the sample. These in-scope records keep the same initial weight as described in the previous step.

3) Three-stage non-response adjustment

Weights for responding households were adjusted to represent non-responding telephone numbers.

Non-responding telephone numbers were grouped into three types: those with some auxiliary information available (in particular, a complete roster of household members), those with auxiliary information from various sources available to Statistics Canada and those with no auxiliary information.

This non-response adjustment was done in three stages. In the first stage, adjustments were made for complete non-response (i.e., households for which no auxiliary information was available). This was done independently within each stratum. In the second stage, adjustments were made for non-response with auxiliary information from sources available to Statistics Canada. These households had some auxiliary information obtained from other sources than the questionnaire which was used to model propensity to respond. In the third stage, adjustments were made for partial non-response. These households had some auxiliary information obtained through the questionnaire which was used to model propensity to respond. The last two adjustments were done independently within each wave. The combination of these three adjustments is referred to as Factor 1.

Non-responding telephone numbers were then dropped.

4) Person weight calculation

A person weight was calculated for the respondent by multiplying the household weight by the number of persons 15 years of age or older in the household.

This step produces a person weight, which can be calculated as:

Initial Household Weight x Factor 1 x Number of eligible household members.

5) Adjustment of person weights for Rejective Sampling

In order to adjust for the 'rejecting' of a proportion of respondents that are not volunteers, the person weight for respondents that are not 'rejected' and are not volunteers is multiplied by a factor. This factor is equal to:

$$\frac{\text{Sum of weights for non} - \text{volunteer respondents in each stratum} - \text{age group}}{\text{Sum of weights for non} - \text{volunteer respondents not 'rejected' in each stratum} - \text{age group}}$$

There are two age categories within each stratum; less than 45, and 45 and over.

There is no adjustment to the person weights for volunteers (i.e., the factor=1).

'Rejected' responding units are dropped at this step.

6) Adjustment of person weights to external totals

The person weights were adjusted several times using a raking ratio procedure. This procedure ensures that, based on the survey's total sample, estimates produced that should match certain external reference totals do indeed match them. Three sets of external references were used for this survey. Two of them population totals: for stratum (geographic), and for age-sex groups by province. The other was for income distribution.

It should be noted that persons living in households without telephone service (or telephone service not covered by the frame) are included in the external references even though such persons were not sampled.

6a) Stratum Adjustment

An adjustment was made to the person weights on records within each stratum (geographic area) in order to make population estimates consistent with the corresponding projected population counts. This was done by multiplying the person weight for each record within the stratum by the following ratio:

$$\frac{\text{Projected population count for the stratum}}{\text{Sum of the person weights for the stratum}}$$

6b) Income Adjustment

The weighted income distribution of GVP was skewed when compared to the income distribution of the 2017 Canadian Income Survey. The income was grouped into four categories: less than $20,000, $20,000 to $39,999, $40,000 to $59,999, $60,000 and over. In particular, the income distribution of GVP over-represented high income earners and under-represented lower income earners. The weights were adjusted so that the weighted income distribution of GVP matched the 2017 CIS distribution by province.

The weights were adjusted as follows within income category and province:

$$w = w_j \times \left(\frac{\sum_j w_j CIS_{ij} \Big/ \sum_{i=1}^{4} \sum_j w_j CIS_{ij}}{\sum_j w_j \times ESG\ DBP_{ij} \Big/ \sum_{i=1}^{4} \sum_j w_j \times ESG\ DBP_{ij}} \right)$$ within income category *i* and province

Where:

$$\text{CIS}_{\text{ij}} = \begin{cases} 1 \text{ if unit j is in income category i} \\ 0 \text{ otherwise} \end{cases}$$

$$\text{GVP}_{\text{ij}} = \begin{cases} 1 \text{ if unit is in income category i} \\ 0 \text{ otherwise} \end{cases}$$

And w_j is the weight of the j[th] unit in the population

6c) Province - age - sex adjustment

The next weighting step was to adjust the weights to agree with projected province-age-sex population distributions.

Projected population counts were obtained for males and females within the following age groups:

15-24	25-34
35-44	45-54
55-64	65-74
75 +	

For each of the resulting classifications the person weights for records within the classification were adjusted by multiplying by the following ratio:

$$\frac{\text{Projected province} - \text{age} - \text{sex group population count}}{\text{Sum of the province} - \text{age} - \text{sex group person weights}}$$

When sample sizes were small, adjacent age group data for the same province and sex were combined before this adjustment was made.

6d) Raking ratio adjustments

As previously stated in 6), the weights of each respondent were adjusted several times using a raking ratio procedure to ensure that estimates produced for Stratum and Province-Age-Sex totals agree with the external reference totals. This adjustment was made by repeating steps 6a), 6b) and 6c) of the weighting procedures until each repetition of the step made a minimal adjustment to the weights.

7) Final person weight

The weight produced at the end of step 6) is the final person weight WGHT_PER placed on the PUMF.

8.2 Weighting policy

Users are cautioned against releasing unweighted tables or performing any analysis based on unweighted survey results. As was discussed in Section 8.1, there were several weight adjustments performed that depended on the province, volunteer status, stratum, age and sex of the respondent. Sampling rates, rejection rates, as well as non-response rates varied significantly from province to province, and non-response rates varied with demographic characteristics. For example, non-respondents are often more likely to be males and more likely to be younger. In the responding sample, 2.6% of persons were males between the ages of 15 and 24, while in the overall population approximately 7.4% were males between 15 and 24. Therefore, it is clear that unweighted sample counts cannot be considered to be representative of the survey target population.

The total number of households in the survey's scope was estimated at 47,436**.** Among these resolved households, 19,857 usable responses were obtained (although only 16,149 responses remain on the PUMF file due to 'rejected' responding units being dropped), which gives a response rate of 41.9%. The distribution of the non-response and response categories is given in the table below:

Source	Number	%
1. Household non-response	23,673	49.9
2. Non-response (person level)	3,906	8.2
3. Responses kept	16,149	34.0
4. Rejected responses	3,708	7.8
Total Households	**47,436**	**100.0**

In all, there were 27,579 non-response cases (lines 1 and 2), which represented 58.1% of the household sample. The non-response includes cases of refusal by the selected person or because of language difficulties or other problem for example. Responses obtained from Electronic Questionnaire (EQ) represents 51.8% of the 19,857 responses obtained.

8.3 Types of estimates

Two types of 'simple' estimates are possible from the results of the General Social Survey. These are qualitative estimates (estimates of counts or proportions of people possessing certain qualities or characteristics) and quantitative estimates involving quantities or averages. More complex estimation and analyses are covered in Section 8.5.

8.3.1 Qualitative estimates

The target population for the GSS was non-institutionalized persons aged 15 and older, living in the ten provinces. Qualitative estimates are estimates of the number or proportion of this target population possessing certain characteristics. The number of people (6,075,750) who describe their state of health as excellent (HM_01 = 1) is an example of this kind of estimate. These estimates are readily obtained by summing the person weights (WGHT_PER) of the records possessing the characteristic of interest. This estimate does not, however, adjust for item non-response to the question in any way.

If we make the assumption that those who didn't responded have the same distribution as those who responded, then an adjusted estimate can be made. To do this, the proportion of the target population with this characteristic is estimated by excluding respondents with a 'Not Stated' answer to question HM_01 and calculating the ratio of the total of the weights of those respondents who reported that their health was 'Excellent' (HM_01=1) to that of all respondents who answered the question (HM_01=1, 2, 3, 4, or 5). This proportion is then multiplied by the size of the target population to produce the final estimate (it should be noted that this adjustment does not have to be done, but it can be if needed):

$$6{,}494{,}335 = 30{,}843{,}019 \times \frac{6{,}047{,}700}{28{,}721{,}852}$$

8.3.2 Quantitative estimates

Some variables on the GSS PUMF are quantitative in nature (e.g. age, number of volunteering hours in a year). From these variables, it is possible to obtain such estimates as the average number of volunteering hours done in a year. These quantitative estimates are of the following ratio form:

$$\text{Estimate (average)} = \text{X/Y}$$

The numerator (*X*) is a quantitative estimate of the total of the variable of interest (for example, the number of volunteering hours done in a year) for a given sub-population (for example, males with volunteering hours). In this example, *X* would be calculated by multiplying the person weight (WGHT_PER) by the variable of interest (VD1DHRS) when it is known, 1 <= VD1DHRS < 9996, (i.e., not equal to '99999.96'), and summing this product over all records for males who volunteered i.e., GENDER = 1 and (1 <= VD1DHRS < 99999.96), which yields 711,743,878.

The denominator (*Y*) is the qualitative estimate of the number of persons within that sub-population (males with volunteering hours). In this example, *Y* would be calculated by summing the person weight (WGHT_PER) over all male respondents with 1 <= VD1DHRS < 99999.96, yielding 5,804,942.

The two estimates *X* and *Y* are derived independently and then divided to provide the quantitative estimate. The average number of volunteering hours by year is then calculated to be:

$$\frac{711{,}743{,}878}{5{,}804{,}942} = 122.6$$

8.4 Guidelines for analysis

As detailed in Section 5 of this document, 2018 GSS GVP respondents do not form a simple random sample of the target population. Instead, the survey had a complex design, with stratification and multiple stages of selection, and unequal probabilities of selection of respondents. Using data from such complex surveys presents analytical challenges because the survey design and the selection probabilities affect the estimation and variance calculation procedures that should be used.

The 2018 GSS GVP used a stratified design, with significant differences in sampling fractions between strata. Thus, some areas were over-represented in the sample (relative to their populations) while some other areas were relatively under-represented; this means that the unweighted sample was not representative of the target population, even if there was no non-response. As well, rejection rates varied significantly by province and by respondent type (i.e. a respondent who volunteered versus someone who didn't volunteer). This further compounds the fact that the unweighted sample will not be representative of the target population. Non-response rates may vary by demographic group, making the unweighted sample even less representative.

The survey weights must be used when producing estimates or performing analyses in order to account as much as possible for the over- and under-representation of geographic areas, age-sex groups and months of the year in the unweighted file. While many analysis procedures found in statistical packages allow weights to be used, the meaning or definition of the weight in these procedures often differs from that which is appropriate in a sample survey framework, with

the result that while in many cases the estimates produced by the packages are correct, the variances that are calculated are almost meaningless.

For many analysis techniques (for example linear regression, logistic regression, estimation of rates and proportions, and analysis of variance), a method exists which can make the variances calculated by the standard packages more meaningful. If the weights on the data, or on the subset of the data that is of interest, are rescaled so that the average weight is one (1), then the variances produced by the standard packages will be more reasonable; they still will not take into account the stratification and clustering of the sample's design, but they will take into account the unequal probabilities of selection. This rescaling can be accomplished by dividing each weight by the overall average weight before the analysis is conducted.

Section 9 describes sampling variability and data reliability in more detail.

8.5 Methods of estimation and interpretation of estimates

8.5.1 Estimating numbers of persons by using WGHT_PER

As previously mentioned, a basic person weight has been assigned to each sampled individual and, as described in Section 8.1, these weights have been adjusted to reflect the age and sex composition of the various provincial populations as estimated by Statistics Canada for each month covered by the 2018 GSS GVP.

$$\sum_{i=1}^{16,149} \mathrm{WGHT\_PER_i} = 30{,}843{,}019^{*}$$

* Estimate of the number of persons aged 15 and over in the population.

In general, when an estimate is based on the unit of observation being the person, WGHT_PER should be used. Examples of this are the average number of hours contributed by volunteers the percentage of persons who made a charitable donation by responding to a request through the mail, and the number of people aged between 25 and 44 who are currently attending school, college, CEGEP or university.

The last example would be calculated as follows: WGHT_PER would be summed up for all records on the PUMF with 2 <= AGEGR10 <= 3 and ESC1_01 = 1, giving an estimate of 897,271 persons aged 25 to 44 who are currently attending school, college, CEGEP or university.

9. Release guidelines and data reliability

It is important for users to become familiar with the contents of this section before publishing or otherwise releasing any estimates derived from the General Social Survey PUMF.

This section provides guidelines to be followed by users. With the aid of these guidelines, users of the PUMF should be able to produce figures consistent with those produced by Statistics Canada and in conformance with the established guidelines for rounding and release. The guidelines include four broad sections: Minimum Sample Sizes for Estimates; Sampling Variability Policy; Sampling Variability Estimation; and Rounding Policy.

9.1 Minimum sample size for estimates

Users should determine the number of records on the PUMF which contribute to the calculation of a given estimate. This number should be at least 15 in the case of persons or households. When the number of contributors to the weighted estimate is less than 15, the weighted estimate should generally not be released regardless of the value of the Coefficient of Variation. If it is, it should be with great caution and the insufficient number of contributors associated with the estimate should be prominently noted.

9.2 Sampling variability guidelines

The estimates derived from this survey are based on a sample of persons. Somewhat different figures might have been obtained if a complete census had been taken using the same questionnaire, interviewers, supervisors, processing methods, etc., as those actually used. The difference between the estimates obtained from the sample and the results from a complete count taken under similar conditions is called the sampling error of the estimate.

Errors which are not related to sampling may occur at almost every phase of a survey operation. Interviewers may misunderstand instructions, respondents may make errors in answering questions, the answers may be incorrectly entered into the EQ system, and errors may be introduced in the processing and tabulation of the data. These are all examples of non-sampling errors.

Over a large number of observations, randomly occurring errors will have little effect on estimates derived from the survey. However, errors occurring systematically will contribute to biases in the survey estimates. Considerable time and effort was made to reduce non-sampling errors in the survey. Quality assurance measures were used at each step of the data collection and processing cycle to monitor the quality of the data. These measures included the use of highly skilled interviewers, extensive training of interviewers with respect to the survey procedures and questionnaire, observation of interviewers to detect problems of questionnaire design or misunderstanding of instructions, as well as the use of on and off-screen help text, including examples where relevant, and coding and edit quality checks to verify the processing logic.

9.2.1 Non-sampling errors and imputation

A major source of non-sampling errors is the effect of non-response on survey results. Non-response varies from item or partial non-response (failure to answer one or more questions) to total non-response. Total non-response occurs when the interviewer was unable to contact the respondent, no household member was able to provide the information, or the respondent refused to participate in the survey. Total non-response was handled by adjusting the weight of households that responded to the survey to offset those that did not respond.

In most cases, item or partial non-response occurs when the respondent did not understand or misinterpreted a question, refused to answer a question, or could not recall the requested information. For item and partial non-response, donor imputation was done for certain variables. Most of these imputations were done to provide complete data so that totals could be calculated (e.g., total number of hours and total amount of donations). Also, the imputation made it possible to keep records in the sample, even if part of the required information was not provided by the respondent.

Except in a few cases, all imputations were made using donor records selected through a score function. Certain characteristics on each record with item or partial non-response (also called a recipient record) were compared with the characteristics on all donor records. When a characteristic was the same on the donor record and the recipient record, the donor's score increased. The donor record with the highest score was deemed the "nearest" donor and was chosen to fill in the missing information of the non-respondent. If more than one donor record had the highest score, one record was randomly selected. The pool of donor records was made up in such a way that the imputed value assigned to the recipient, in conjunction with other non-imputed items from the recipient, would still pass the edits. Where donor imputation could not be used, mean imputation among a pool of donors was used.

Imputation was carried out in nine steps. The first step consisted of imputing personal income and family income. The next three steps involved imputing the formal volunteering variables in the analytical master file. Steps five and six were imputing the informal volunteering variables in the analytical master file. Finally, the last three steps involved imputing variables in the donation file and the solicitation methods (FG1A_030 to FG1A_140 and FG1A_170) in the analytical master file.

In 2018, personal income questions were not asked in the survey. Income information was obtained by linking to the tax data of respondents who had not objected to the linkage. Personal income data were obtained from the 2017 T1FF for 81.9% of respondents. Missing information for other respondents was imputed. As in the 2017 GSS, family income (obtained through direct linkage with a variable from the T1FF that corresponds with census family income) was used for the 2018 GSS instead of household income. Overall, a value for family income was obtained for 81.7% of households. Missing information for the other respondents was imputed.

The second step was to impute the hours volunteered, by activity, for the main organization. The third step was to impute the total hours volunteered for the second and third organizations, and the total hours volunteered for all other organizations combined. The fourth step was to impute the total number of hours of mandatory unpaid work (MUW) and the total number of hours of employer-supported volunteering (ESV). At the fifth step, missing data on hours spent directly helping people were imputed by type of assistance (IVS1HRS). The sixth step involved imputing the total number of volunteer hours spent on tasks aimed at improving the community (ICHRS) and the number of hours of unpaid assistance to relatives (IVS1FAM).

At the seventh step, data for the contributions paid variables were imputed in the analytical donation file. Additional records were created in the analytical donation file when the "yes" value was imputed for question GSA_070 (Other financial donations through this solicitation method). At the eighth step, the missing data were imputed in the analytical master file for variables that indicated whether the respondent had made a donation in response to each of the 13 solicitation methods (FG1A_030 to FG1A_140 and FG1A_170 from module FG1A of the questionnaire, "Financial giving to charitable organizations"). Imputation at this step affected only the respondents who were donors (i.e., cases with at least one "yes" value in questions FG1A_030 to FG1A_140 and FG1A_170). This step also included creating additional records in the analytical donation file for cases where one or more of the questions FG1A_030 to FG1A_140 and FG1A_170 had been imputed as "yes." Finally, the ninth step involved imputing partial records, where the respondent's donation status was uncertain because of missing values in questions FG1A_030 to FG1A_140 and FG1A_170. This last step also included creating additional records in the analytical donation file when the "yes" value was imputed for at least one of the questions FG1A_030 to FG1A_140 and FG1A_170.

The following table shows the number of records imputed for selected key survey variables.

Number and percentage of records imputed for selected variables

Variable	Records imputed	Total records	% imputed
Personal income	2,928	16,149	18.1
Family income	2,947	16,149	18.3
Hours for organization 1	403	16,149	2.5
Hours for organization 2	205	16,149	1.3
Hours for organization 3	118	16,149	0.7
Donation methods 1 to 13	9,472	51,763	18.3
Extra Donations	6,341	51,763	12.2

Note that the percentage of additional contributions after imputation increased for the 2018 GSS (this percentage was 5.5% in 2013). That was mainly because of partial records for the section of the 2018 GSS on the value of donations.

The following table shows how imputation affected the real estimates.

Percentage of estimates from imputed values

Variable	Imputed estimate (millions)	Total estimate (millions)	% imputed
Personal income[10]	n/a	n/a	n/a
Family income[11]	n/a	n/a	n/a
Hours for organization 1	47.5	1,222.3	3.9
Hours for organization 2	8.3	265.4	3.1
Hours for organization 3	1.7	106.0	1.6
Donation methods 1 to 13	1,940.5	11,713.2	16.6
Extra Donations	80.5	143.6	56.1
Number of donors	0.88	20.9	4.2

The GSS GVP imputation process worked well and helped to complete responses based on those of other respondents with similar or identical characteristics. This adds to the number of units used for analysis by researchers.

Note that the public use microdata file does not contain any imputation flags. This adds an extra layer of confidentiality.

9.2.2 Sampling errors

Since it is an unavoidable fact that estimates from a sample survey are subject to sampling error, sound statistical practice calls for researchers to provide users with some indication of the magnitude of this sampling error.

Although the exact sampling error of the estimate, as defined above, cannot be measured from sample results alone, it is possible to estimate a statistical measure of sampling error, the standard error, from the sample data. Using the standard error, confidence intervals for estimates (ignoring the effects of non-sampling error) may be obtained under the assumption that the estimates are normally distributed about the true population value. The chances are about 68 out of 100 that the difference between a sample estimate and the true population value would be less than one standard error, about 95 out of 100 that the difference would be less than two standard errors, and virtually certain that the differences would be less than three standard errors.

Since the absolute size of the sampling error of an estimate is often less important than its relative size (relative to the estimate itself) the standard error is not always the best measure of sampling error. For example, a standard error of 10 for an estimate of 20 would generally be taken as indicating that the estimate is a poor one, while the same standard error for an estimate of 1,000 would generally indicate a good estimate. For this reason the size of the sampling error is often expressed relative to the size of the estimate, as the coefficient of variation (CV). The coefficient of variation of an estimate is obtained by dividing the standard error of the estimate by the estimate itself, and the resulting fraction is usually expressed as a percentage. In the above example, the first estimate has a CV of 50% (10/20), while the second has a CV of 1% (10/1,000).

The choice between using the standard error or the CV as a measure of sampling variability is one the user should make based on his/her specific analysis. Guidelines for publishing estimates using the CV are given in the next section.

[10] Only available in an aggregated format.

[11] Only available in an aggregated format.

With enough observations, the user can proceed to calculating variances and coefficients of variation using the bootstrap weights provided with the data (see Section 9.2.3 for guidelines to follow when using coefficients of variation and Section 9.3 for more details on the appropriate software to use for bootstrap weights).

9.2.3 Guidelines for release of estimates

When considering releasing *and*/*or* publishing an estimate from the PUMF, users should consult the table below and follow the guideline that matches the coefficient of variation of the estimate.

Type of Estimate	**Coefficient of Variation**	**Policy Statement**
1.With Moderate Sampling Variability	0.0% to 16.5%	Estimates can be considered for general unrestricted release. No special notation is required.
2. With High Sampling Variability	16.6% to 33.3%	Estimates can be considered for general unrestricted release but should be accompanied by a warning cautioning users of the high sampling variability associated with the estimates.
3. With Very High Sampling Variability	33.4% or over	Estimates should generally not be released, but when they are it should be with great caution and the very high sampling variability associated with the estimate should be prominently noted.

9.3 Variance estimation using bootstrap weights

In order to determine the quality of the estimate and to calculate the CV, the standard deviation must be calculated. Confidence intervals also require the standard deviation of the estimate. The GSS uses a multi-stage survey design and calibration, which means that there is no simple formula that can be used to calculate variance estimates. Therefore, an approximate method was needed. The bootstrap method is used because the sample design and calibration needs to be taken into account when calculating variance estimates. The method is fairly easy to use with the help of available software that compute variances using bootstrap weights (See Appendix B).

This technique involves dividing the records on the microdata file into subgroups (or replicates) and determining the variation in the estimates from replicate to replicate. The replicates are formed by selecting independently within each stratum a simple random sample with replacement of ($n-1$) of the n units in the sample. Note that since the selection is with replacement, a unit may be chosen more than once. A bootstrap weight based on the bootstrap sample is calculated for each sample unit in the stratum. This process (selecting simple random samples, recalculating weights for each stratum) is repeated B times, where B is large, yielding B different initial bootstrap weights. The GSS typically uses B=500, to produce 500 bootstrap weights.

These weights are then adjusted according to the same weighting process as the regular person weights: non-response adjustment, calibration and so on. The end result is 500 final bootstrap weights for each unit in the sample. The variation among the 500 possible estimates based on the 500 bootstrap weights is related to the variance of the estimator based on the regular weights and can be used to estimate it.

9.4 Rounding

In order that estimates produced from the General Social Survey microdata files correspond to those produced by Statistics Canada, users are urged to adhere to the following guidelines regarding the rounding of such estimates. It may be misleading to release unrounded estimates, as they imply greater precision than actually exists.

9.4.1 Rounding guidelines

1) Estimates of totals in the main body of a statistical table should be rounded to the nearest thousand using the normal rounding technique (see definition in Section 9.4.2).

2) Marginal sub-totals and totals in statistical tables are to be derived from their corresponding unrounded components and then are to be rounded themselves to the nearest thousand units using normal rounding.

3) Averages, proportions, rates and percentages are to be computed from unrounded components and then are to be rounded themselves to one decimal using normal rounding.

4) Sums and differences of aggregates and ratios are to be derived from corresponding unrounded components and then rounded to the nearest thousand units or the nearest one decimal using normal rounding.

5) In instances where, due to technical or other limitations, a different rounding technique is used, resulting in estimates different from Statistics Canada estimates, users are encouraged to note the reason for such differences in the released document.

9.4.2 Normal rounding

In normal rounding, if the first or only digit to be dropped is 0 to 4, the last digit to be retained is not changed. If the first or only digit to be dropped is 5 to 9, the last digit to be retained is raised by one. For example, the number 8499 rounded to thousands would be 8000 and the number 8500 rounded to thousands would be 9000.

10. Additional information

Additional information about this survey can be obtained from the individuals listed below. Data from this survey are available through Statistics Canada's Research Data Centres (RDCs), published reports, and special request tabulations. The PUMF will be available from Diversity and Social Statistics (DSS) at Statistics Canada. Tabulations can be obtained at a cost that will reflect the resources required to produce the tabulation.

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Appendix A – Content of the 2018 GSS GVP compared to the 2013 GSS GVP and CSGVP 2010

The following table outlines the content of the 2018 General Social Survey on Giving Volunteering and Participating (GSS 2018 GVP) compared to GSS 2013 and CSGVP 2010 (where module order is different between the two surveys the order below matches the 2018 GSS GVP).

Section	**Modules** **CSGVP 2010**	**GVP 2013**	**2013 updates**	**GVP 2018**	**2018 updates[1]**
Postal Code	Postal code (PC)	Postal code (RPC)	New standard for collecting postal code data (previously collected by CSGVP near end of interview in PC module).	Postal code (RPC)	N/A
Household composition and demographics	Household roster (Age, sex and marital status of all household members); Full relationship matrix	Household roster (Age, sex and marital status of all household members); Relationship to Selected Respondent (RSR); Confirmation of respondent's birth date, age, and marital status (ANC and MSNC)	RSR replaces the full relationship matrix previously collected in Entry. It includes the relationship of all household members to the selected respondent only. This block is only called if there is more than one person in the household.	Number of persons in household (RRS); Household roster (RRS3) (Age of all household members); Relationship to selected respondent (RSR2); Sex and gender of respondent (RRS4); Sex and gender of respondent's spouse/partner (RRS4); Confirmation of respondent's birth date, age, and marital status (ANCQ and MSNC)	Sex and marital status are no longer collected for all household members; sex and gender of respondent and the respondent's spouse/partner (where applicable) are collected in 2018.
Formal volunteering	Formal volunteering (FV)	Formal volunteering (FV)	N/A	Formal volunteering (FV)	FV_Q020 - English text revised to include "door-to-door" canvassing to better match the French.
	History volunteering (HV)	History volunteering (HV)	N/A	History volunteering (HV)	N/A

Section	Modules CSGVP 2010	GVP 2013	2013 updates	GVP 2018	2018 updates[1]
Formal volunteering *(continued)*	Volunteer specifics/details (VS/VD)	Volunteer specifics/details (VS/VD)	• Dropped questions about volunteering for the 2010 Olympics (CSGVP: VS_Q06, VS_Q07) • Added a new method of recording hours at VD_Q040 (CSGVP VD_Q04) so that respondents have the option of reporting hours volunteered as a total for the past 12 months, or by month, week or day (previously it was only possible to record a total for the past 12 months)	Volunteer specifics/details (VS1/VD/VS2)	• There was a redesign of the way organization details are collected, with onscreen options included for respondents who cannot find or remember the name of the organization. • Also, there was a redesign of the way total hours and hours by month are collected, including a new option for reporting unpaid activity of less than one hour (i.e., “Number of minutes of unpaid activity").
	Main volunteering activities (MV)	Main volunteering activities (MV)	• Added a new answer category and merged two existing categories at MV_Q070 (CSGVP MV_Q07) • Added MV_Q150 *("In the past 12 months, as a volunteer for this organization did you receive a benefit, such as a free or discounted gym membership, event pass or meal?")* and MV_Q160 *("...did you receive formal recognition from this organization, such as a letter, certificate or invitation to a volunteer appreciation event?")*	Main volunteering activities (MV1/MV2)	In 2018, there was a redesign of how hours by activity are collected for the organization to which the respondent volunteered the most hours. The following questions were dropped: MV_Q030, which asked about discrepancies between total hours and the sum of hours by activity; MV_Q40 and MV_Q50, which asked about extra hours spent on special activities.

Section	Modules CSGVP 2010	GVP 2013	2013 updates	GVP 2018	2018 updates[1]
Formal volunteering *(continued)*	Main volunteering activities (MV) (continued)	Main volunteering sub-block (MVS)	• Added a new sub-block (MVS) so that the input method of hours at MV_Q020 matches the input method at VD_Q040	Main volunteering activities (MV1/MV2) (continued)	The intention of collecting hours by activity in 2018 was to generate a proportional distribution only and not to reconcile hours by activity with total hours reported. Questions previously asked about mandatory volunteering (MV_Q100, MV_Q110) have been updated and moved to a stand-alone (MUW) module, where they are asked with reference to all volunteer hours reported.
	Reasons for volunteering (RV)	Reasons for volunteering (RV)	• Added RV_Q025 *("...because a family member volunteers")*, RV_Q100 *("...to support a political, environmental or social cause")*, and RV_Q110 *("...to improve you sense of well-being or health")*	Reasons for volunteering (RV)	• Only respondents reporting 4 hours or more of unpaid activities in 2018 were asked about their reasons for volunteering. • Wording was revised at RV_Q060 (Religious reasons) and a question about spiritual or other beliefs (RV_Q065) was added.
	N/A	N/A	N/A	Quality of the volunteer experience and skills used (QVS)	**New for GSS GVP 2018.** **R**espondents reporting 4 hours or more of unpaid activities in 2018 were asked about the quality of their volunteer experience and skills used.

Section	Modules CSGVP 2010	GVP 2013	2013 updates	GVP 2018	2018 updates[1]
Formal volunteering *(continued)*	N/A	N/A	N/A	Mandatory unpaid work (MUW)	**New for GSS GVP 2018:** The new mandatory unpaid work module covers all volunteering activities, whereas questions on this topic were previously limited to the organisation for which respondents spent the most hours.
	N/A	Internet use by respondent in past year (IUY)	Added IUY_Q01 (In the past 12 months, did you use the Internet?) to allow for later skips to Internet related questions.	N/A	**Dropped in 2018**
	Volunteering in general (GV)	Volunteering in general (GV)	N/A	Volunteering in general (GV)	N/A
	Rotating module: Skills gained from volunteering (SK)	**Rotating module:** Skills gained from volunteering (SK)	Added interviewer notes to SK questions to clarify that responses should include new skills obtained and existing skills improved while volunteering in the past 12 months.	N/A	**Rotated out for 2018**
	Reasons for not volunteering (more) (NV)	Reasons for not volunteering (more) (NV)	Added a condition so that non-volunteers with no volunteer history skip NV_Q020 *("...you gave enough time already")* and NV_Q030 *("...you were dissatisfied with a previous volunteering experience")* (previously CSGVP NV_Q02 and NV_Q03). Added *"prior to the past 12 months"* as dynamic text for non-volunteers with a volunteer history at NV_Q020 *("You gave enough time already prior to the past 12 months")*.	Reasons for not volunteering (more) (NV)	Respondents who reported volunteering more than 372 hours were only asked NV_Q070 and NV_Q100. Two new categories were added (NV_Q120 *"You did not identify an opportunity to use your skills or experiences in a volunteer role"* and NV_Q130 *"You were not asked to contribute in a way that was meaningful to you"*).

Section	Modules CSGVP 2010	GVP 2013	2013 updates	GVP 2018	2018 updates[1]
Informal volunteering	Informal volunteer activities (IV)	Informal volunteer activities (IV)	N/A	Informal volunteer activities (IVA1/IVS1/IVA2/IVS2/IVA3)	**New for GSS GVP 2018:** • Hours/minutes were collected for informal volunteer activities; • For those who included help for relatives living outside their household, they were later asked how much (or what percentage) was for relatives. • New questions were asked about informal volunteer activities aimed at improving communities, including hours/minutes spent on these activities.
Financial giving to charitable organizations	Financial giving to charitable organizations (FG)	Financial giving to charitable organizations (FG)	Question order revised • Added FG_Q060 *("In the past 12 months, did you make any charitable donations online?")* • Added examples of charity events to interviewer's note to facilitate recall at FG_Q080 (CSGVP FG_Q04). • Dropped CSGVP FG_Q13 *("In the past 12 months, did you make a charitable donation by donating any stocks or stock options to a charitable or non-profit organization?")*. Can still be captured at FG_S170 (Other specify).	Financial giving to charitable organizations (FG1A/FG2A)	• Wording was revised at FG1A_Q060 (i.e., "online request" replaced "online") and examples as well as onscreen help text were added; at FG1A_Q090, "in memory" replaced "in memoriam"; at FG1A_Q120, "when going through a store checkout" was added. • FG2A_Q180 was asked with reference to the largest donation reported (replacing DG_Q040).

Section	Modules CSGVP 2010	GVP 2013	2013 updates	GVP 2018	2018 updates[1]
Financial giving to charitable organizations *(continued)*	Giving specifics (GS)	Giving specifics (GS)	• Added *"By mobile device after text messaging"* and *"PayPal"* as response categories at GS_Q050 (CSGVP GS_Q05) "*What was the payment method?*" • Added a condition so that the Internet question, (GS_Q060 "*Was this done over the Internet?*" (CSGVP GS_Q06), is skipped if the donation was made "online" (i.e., FG_Q060=1). • Modified condition so that the Internet question (GS_Q060/GS_Q06) is skipped only if the payment method is cash or cheque (i.e., GS_Q050=1). All other response categories at GS_Q050 flow to GS_Q060. • Added a condition so that respondents who report donating $5 or less skip GS_Q040 *("Was this donation made by you personally or jointly with your (spouse/partner)?"*), GS_Q050 *("What was the payment method?")*, GS_Q060 *("Was this done over the Internet?")*.	Giving specifics (GSA)	• There was a redesign of how individual donations are collected. • Within the giving specifics module (GSA), there was also a redesign of how organization details are collected, including onscreen options for respondents who cannot find or remember the organization name; • "Cheque" was added as a separate category in response to "What was the payment method?"; • The follow-up question "Was this done over the Internet?" was updated to read "Was this done online?"; • All respondents with a marital status of married or common-law were asked "Was this donation made by you personally or jointly with your (spouse/partner)?" at GSA_Q040 and GSA_Q090, regardless of the amount reported.
	Rotating module: Natural disasters (ND)	N/A	**Natural disasters rotated out starting in 2013.**	N/A	N/A

Section	Modules CSGVP 2010	GVP 2013	2013 updates	GVP 2018	2018 updates[1]
Financial giving to charitable organizations *(continued)*	Decisions on giving (DG)	Decisions on giving (DG)	• Added an Interviewer's note at DG_Q005 (previously CSGVP DG_Q01) to clarify that this set of questions only relates to donations to registered charities. • Replaced CSGVP DG_Q02 *("Would you contribute more if the government gave you a better tax credit for your donation?")* with NG_Q090 (see below). • Added *"Not applicable"* as an unread response category at DG_Q040. • Moved CSGVP DG_Q06 to the OG module (OG_Q030 *"Have you included a donation to a charitable or non-profit organization through a bequest in your current will or through another financial planning instrument, such as an insurance product?"*). • Added DG_Q060 and DG_Q070/S070 *("...do you/how do you search for information about a charity before giving")*; DG_Q080 *("Do you know how to verify if an organization is a registered charity?")*; DG_Q090 *("Are you aware of any organizations that monitor how charities use their donations in Canada?")*; DG_Q100/S100 *("Could you provide the name or an example of these organizations?")*.	Decisions on giving (DG)	• DG_Q040 was replaced by FG2A_Q180. • At DG_Q060, the answer category *"Sometimes"* was added and the answer category *"Not applicable"* was replaced with *"You never consider donating to a charity that you have not donated to in the past"*. • Two answer categories were merged at DG_Q070C and a follow-up question was added (DG_Q075A...E) • DG_Q100 was dropped.
	Reasons for giving (RG)	Reasons for giving (RG)	Added RG_Q070 (A family member, friend, neighbour or colleague requested that you make a donation.)	Reasons for giving (RG)	• Questions in this section were only asked of respondents who reported donating at least $10 or more. • Text at RG_Q030 (Religious reasons) was revised and a question about spiritual or other beliefs (RG_Q035) was added.

Section	Modules CSGVP 2010	GVP 2013	2013 updates	GVP 2018	2018 updates[1]
Financial giving to charitable organizations *(continued)*	Reasons for not giving (NG)	Reasons for not giving (NG)	• Added *"or effectively"* at NG_Q110 (CSGVP NG_Q09) *("You did not think the money would be used efficiently or effectively")*. • Added NG_Q090 *("You felt that the tax credit for donations was not enough incentive to give more")*; NG_Q120/S120 *("Was this because the organization was...")* as a follow-up to NG_Q110; NG_S140 *("Other-specify")* for NG_Q140 *("What did you not like about the way requests were made?")*; and NG_Q160 *("Please tell me whether you agree or disagree...You are concerned about charity fraud or scams.")* • Revised wording of two (out of four) unread answer categories at NG_Q140 (CSGVP NG_Q11).	Reasons for not giving (NG)	• Respondents who reported donating more than $1,150 were only asked NG_Q020 *(You were satisfied with what you had already given)*, NG_Q090 *(You felt that you had already given enough money directly to people on your own, instead of through and organization)* and NG_Q110 *(You thought the money would not be used efficiently or effectively)*. • A new category *(i.e., "The method of contact")* was added at NG_Q140E.
Other giving	Other giving (OG)	Other giving (OG)	• Added brackets around examples in question text at OG_Q020 (CSGVP OG_Q02) • Added OG_Q030 (relocated to the OG module from CSGVP DG_Q06).	Other giving (OG)	**New for GSS GVP 2018:** • OG_Q040 was added (i.e., *"In the past 12 months, have you helped people by giving money directly to them, rather than through a charitable or non-profit organization?*); • followed by OG_Q050A...D ("*Who did you help? A stranger on the street, someone's personal-cause crowdfunding campaign, family members living outside your household; and other*); • for those who responded "family members..." an additional question was asked (i.e., "*Do these relatives live in Canada or outside Canada?" OG_Q050CA In Canada and OG_Q050CB Outside Canada*).

Section	Modules CSGVP 2010	GVP 2013	2013 updates	GVP 2018	2018 updates[1]
Rotating modules: Participating	CSGVP 2004: Participating (PA)	Civic engagement of respondent (CER) Groups respondent participated in past 12 months (GRP) Organization involvement in past 5 years (OIF)	Modules on "Participating" rotated in for the 2013 GVP Main Survey (previously asked in CSGVP 2004): • CER asks about the types of groups, organizations and associations the respondent participated in the past 12 months. This module replaces CSGVP PA_Q01 to PA_Q11/S11. There are differences in question wording for several elements: for example, the term "advocacy" has been dropped and "party" added at CER_Q120 "a political party or group" (replaces CSGVP PA_Q03); there are separate questions for "a seniors' group" and "a youth organization" (CER_Q190 and CER_Q200 replace PA_Q07); there is a new question element for "an immigrant or ethnic association or club" (CER_Q210); CSGVP PA_Q08 (support or self-help program) and CSGVP PA_Q09 (conservation or environmental group) have been dropped. • GRP_Q40 replaces PA_Q12 (frequency of group participation). The rest of GRP represents new content, recording the total number of groups, organizations or associations that the respondent was a member or participant in the past 12 months and information about how the Internet is used for group participation. • OIF is a new one question module (OIF_Q10 Over the past five years, would you say that your involvement in organizations has...? Increased, Decreased, Stayed the same) • CSGVP PA_Q13 has been dropped. • Question wording and structure of the CER, GRP and OIF questions is consistent with the GSS, Cycle 27 survey on Social Identity.	N/A	**Rotated out for 2018.**

Section	Modules CSGVP 2010	GVP 2013	2013 updates	GVP 2018	2018 updates[1]
Rotating module: Youth experiences and attitudes	Youth experiences and attitudes (EA)	N/A	Rotated out for GVP 2013.	**Youth experiences and attitudes (EA)**	**Rotated in for 2018.**
Education of respondent	Education (ED)	Education of respondent (ESC1/EDM/EHG1)	CSGVP education module (ED) replaced by harmonized content (ESC1/EDM/EHG3): • Concepts measured remain the same: school attendance, part-time/full-time education status, highest degree. Question wording and structure reflect the new Statistics Canada standard for social surveys.	Education of respondent (ESC1/EDM/EHG1)	N/A
Labour market activities	Labour force (LF)	Labour market activities (LMAM)	CSGVP labour force module (LF) replaced by harmonized content (LMAM and LMA2-6): • Concepts measured remain the same: labour market activity, labour force status, class of worker, industry, occupation, and usual hours of work. Question wording and structure reflect the new Statistics Canada standard for social surveys. • Multiple employment (ME) module and Class of worked introduction (CWI) added to improve the quality of data collected in LMA3, LMA4, LMA5 and LMA6 for respondents who have more than one job.	Labour market activities (LMAM)	N/A
		Labour force situation (LMA2)		Labour force situation (LMA2)	N/A
		Multiple employment (ME)		N/A	The modules ME and CWI were dropped for 2018 and replaced with new onscreen help text at LMA3_Q10.
		Class of worker introduction (CWI)		N/A	
		Class of workers (LMA3)		Class of workers (LMA3)	N/A
		Industry (LMA4)		Industry (LMA4)	N/A
		Occupation (LMA5)		Occupation (LMA5)	N/A
		Usual hours of work (LMA6)		Usual hours of work (LMA6)	N/A
Rotating Module: Employer support	Employer support (ES)	Employer support (ES), Employer Support – volunteers (ESV), Employer support – non-volunteers (ESN)	For GVP 2013, the original ES questions were split into two sub-modules (ES and ESV) and a parallel set of questions was added for non-volunteers (ESN).	Employer support – Minimum (ESM)	Employer support (ES, ESV, ESN) replaced by Employer support - Minimum (ESM), including the possibility of distinguishing work for others performed during work time or during paid time off from a job.

Section	Modules CSGVP 2010	GVP 2013	2013 updates	GVP 2018	2018 updates[1]
Birthplace of respondent	Socio-demographics (SD)	Birthplace of respondent (BPR1) Immigration extended (BPR)	CSGVP questions on birthplace and citizenship of respondent (SD_Q03/S03, SD_Q04, SD_Q05, SD_Q06) replaced by harmonized content (BPR): • Concepts measured remain the same: Place of birth, Country of Citizenship, Year of first arrival in Canada, Year of immigration in Canada. Question wording and structure reflect the new Statistics Canada standard for social surveys.	Birthplace of respondent - Immigration extended (BPR)	N/A
Ethnic origin		N/A	Dropped CSGVP question on ethnic origin (SD_Q08/S08).	N/A	N/A
Aboriginal status of respondent		Aboriginal identity of respondent (AMB)	CSGVP questions on aboriginal identity (SD_Q11 and SD_Q12) replaced by harmonized content (AMB): • Concept measured remains the same. Question wording and structure reflect the new Statistics Canada standard for social surveys.	Aboriginal identity of respondent (AMB)	N/A
Self-rated health	Health in General (HG)	Health minimum block (HM)	CSGVP HG_Q01 replaced by harmonized content module (HM): • Concept measured remains the same. Question wording and structure reflect the new Statistics Canada standard for social surveys.	Health minimum block (HM)	N/A
Subjective Well-being		Subjective Well-being (SLM)	CSGVP HG_Q02 replaced by harmonized content module (SLM): • Concept measured remains the same. Question wording and structure reflect the new Statistics Canada standard for social surveys.	Subjective Well-being (SLM)	N/A

Section	Modules CSGVP 2010	GVP 2013	2013 updates	GVP 2018	2018 updates[1]
Length of time respondent has lived in city or local community	Socio-demographics (SD)	Length of time respondent has lived in city or local community (LRC)	CSGVP SD_Q07 *("How long have you resided in your community?")* replaced by LRC_Q20 *("How long have you lived in this city or local community?")*. Question wording is consistent with the GSS, Cycle 27 survey on Social Identity.	Length of time respondent has lived in city or local community (LRC)	N/A
Religion of respondent		Religion – extended (REE)	CSGVP SD_Q01 and SD_Q02 replaced by harmonized content module (REE): • The concepts of "Religion" and "Religious Participation with Other People" continue to be measured. "Religious Participation on One's Own" added. Question wording and structure reflect the new Statistics Canada standard for social surveys.	Religion – extended (REE)	N/A
Language of respondent		Language (LNR)	CSGVP SD_Q09 and SD_Q10 replaced by LNR module. The concepts of "Mother Tongue" and "Home Language Spoken Most Often" continue to be measured. "Knowledge of Official Languages (English and French)," added. Question wording and structure is consistent with the GSS, Cycle 27 survey on Social Identity.	Language (LAN)	Language (LNR) was replaced by harmonized content (LAN). "Knowledge of Official Languages (English and French) and "Home Language Spoken Most Often" are collected in the same way. "Mother Tongue" is collected using a single question, i.e., *"What is the language that you first learned at home in childhood and still understand?"* (LAN_Q15A/LAN_Q16A/LAN_Q17A), instead of multiple questions.

Section	Modules CSGVP 2010	GVP 2013	2013 updates	GVP 2018	2018 updates[1]
Disability Screening Questions	N/A	N/A	N/A	Disability Screening Questions (DSQ)	**New for GSS GVP 2018**
Veteran Identifier	N/A	N/A	N/A	Veteran Identifier (VET)	**New for GSS GVP 2018**
Income	Income (IN)	N/A	Dropped for the 2013 GVP Main. Replaced by administrative tax data.	N/A	No questions on income have been asked since 2013. Replaced by administrative tax data.
EXIT	EXIT	Telephone information (LPH, LPN, CPH, CPN, NATP)	Required by Methodology.	Telephone information (XQ)	Required by Methodology.
		Record linkage Statement (RLS)	For GVP 2013, there is a planned link to the 2012 T1/T1FF file.	Record linkage Statement (RLS) (for iEQ respondents) and Standard record linkages statement in Entry (for rEQ respondents)	For GVP 2018, there is a planned link to the 2017 T1/T1FF file

[1]In addition to the content changes described here, there were other changes due to the ICOS/EQ transition:

- Rewording and restructuring to account for the lack of interviewer assistance when the survey is self-administered through rEQ mode.
- Rewording and restructuring to accommodate new EQ features such as, searchable drop down list, radio buttons and check boxes, component list, hidden related fields, grid/calendar screen with auto sum displayed.
- Many changes due to the new ICOS/EQ platform resulted in revisions of introductions, help text (off and on screen), dynamic text, and bolding format and transition statements.
- Removal of hard edits and relocation of soft edits to account for self-administered rEQ mode.

Appendix B – Tips for using GSS standard bootstrap weights

A survey weight variable with a corresponding set of 500 standard bootstrap weight[12] variables are provided with many GSS microdata files so that a full design-based approach may be taken for doing analysis with the data.

A design-based approach to analysis first involves using the survey weight variable for obtaining weighted estimates of the quantities of interest. Then, additional information about the survey design is used in order to make estimates of the variances[13] (and covariances) of these estimated quantities. In the case of many GSS microdata files, this additional information is in the form of 500 survey bootstrap weight variables. The design-based estimates and variance estimates can then be used for making the inferences required in the analysis.

The form of a bootstrap variance estimate can be described briefly as follows:

Let $\hat{\beta}$ be the weighted estimate of quantity of interest, β, computed using the survey weight variable w, and let $\hat{\beta}^{(b)}$ be an estimate obtained in exactly the same manner, except for substituting the bth bootstrap weight variable $w^{(b)}$ for the survey weight variable w, b=1,2,…500. This yields the bootstrap estimates $\hat{\beta}^{(1)},....,\hat{\beta}^{(500)}$ of β. Then the usual bootstrap estimate of the variance of $\hat{\beta}$ is

$$\hat{V}_B(\hat{\beta}) = \frac{1}{500}\sum_{b=1}^{500}\left(\hat{\beta}^{(b)} - \hat{\beta}\right)^2 . \qquad (1)$$

If $\hat{\beta}$ is a vector instead of a single value, such as if $\hat{\beta}$ is the set of coefficients of a model, then the matrix of estimates of the variances and covariances of the elements of $\hat{\beta}$ is

$\hat{V}_B(\hat{\beta}) = \frac{1}{500}\sum_{b=1}^{500}\left(\hat{\beta}^{(b)} - \hat{\beta}\right)\left(\hat{\beta}^{(b)} - \hat{\beta}\right)'$. (The value "500" in the formula is due to the fact that we have 500 different series of bootstrap weights. If the number of bootstrap samples should change from 500, then the values in formula (1) would need to change.)

Survey bootstrapping is just one replication approach that may be used in order to obtain design-based variance estimates with survey data. While several commercial software packages for design-based analysis offer replication approaches for variance estimation, they usually do not specify bootstrapping as one of these approaches. However, due to the similarity in the form of the variance estimate for the bootstrap and for the particular replication method called BRR, programs that can carry out variance estimation by this latter approach with user-supplied replication weights can be used to obtain bootstrap variance estimates[14]. In particular, in these software, the 500 bootstrap weights provided in the GSS microdata files need to be designated as 500 BRR weights.

In the sections below, instructions will be given for implementing bootstrap variance estimation with GSS microdata, using 3 different commercial software packages that can carry out some design-based analysis for BRR: Stata 9 or 10, SUDAAN and WesVar. In all GSS cycles where bootstrap weights are provided, the names given to these bootstrap variables in the user documentation are wtbs_001 to wtbs_500[15]. The name of the survey weight variable is usually wght_per.

[12] Since 2013, GSS has been using standard bootstrap weights. Special attention should be given to formula (1) as it is different from the formula for the mean bootstrap weights.

[13] The variance that is estimated in a design-based approach is the variability in an estimate due to re-sampling by exactly the same design from the same finite population.

[14] For a more detailed description see Gagné, Keown and Roberts (2014)

[15] Please note that in previous GSS cycles (Cycle 26 and earlier), the variables wtbs_001 to wtbs_500 were mean bootstrap weights. Beginning with cycle 27 of GSS (2013), the variables wtbs_001 to wtbs_500 are standard bootstrap weights.

Stata 12

Beginning with Version 9, the commercial software package Stata added some replication approaches for carrying out design-based variance estimation in its survey analysis commands. Moreover, Stata 12 release included approaches specifically designed to work with Statistics Canada bootstrap weights. One replication approach offered is the bootstrap approach, and it is this approach that would be specified when analyzing GSS data.

In order to specify this approach, the following is recommended:

1. Before using any of the survey analysis commands, use a "svyset" statement to declare the data to be survey data, to designate the variables that contain information about the survey design and to specify the method for variance estimation. Settings made by "svyset" are saved with a dataset when (or if) a dataset is saved. The form of the svyset statement to be used with a GSS analysis dataset would have the following form:

svyset [pweight=wght_per], bsrweight(wtbs_001-wtbs_500) vce(bootstrap) dof(500) mse

Declaring **pweight=wght_per** tells Stata that the survey weight (which is often called the probability weight) is the variable wght_per.

The option **vce(bootstrap)** states that the variance estimation approach to use is bootstrap.

The option **bsrweight (wtbs_001-wtbs_500)** states that the names of the bootstrap weight variables are **wtbs_001, wtbs_002, …, wtbs_500.** This option can also be designated as **bsrweight (wtbs_*)** provided there are no variables other than the bootstrap weight variables whose names begin with "wtbs_".

The **dof(500)** option sets the degrees of freedom to the default. i.e. the number of bootstrap weights. The number of primary sampling units containing sample in the population being analyzed minus the number of strata containing sample could be a good approximation. However, this information is rarely known by researchers. Most of the time, using the number of bootstrap weights will have negligible impact on the results.

Finally, the **mse** option tells Stata to calculate the variance using squared differences between bootstrap estimates and the full-sample estimate of the quantities of interest, as shown in equation (1). If this option is not included, Stata uses squared differences between each bootstrap estimate and the mean of all the bootstrap estimates. Both approaches should yield approximately the same result.

2. There is an extensive list of survey analysis commands in Stata, which take a design-based approach in their computations. These commands, described in the Stata documentation, are implemented through the use of the "svy" prefix along with the names of other estimators. For example, **svy: mean** is the command for estimating population and subpopulation means and estimates of variability taking a design-based approach. When the **svyset** statement precedes all survey commands, the survey commands do not have to contain any information about the design-based approach to be taken. It should be noted that, even though most of the commands that allow the "svy" prefix are also the names of commands for non-survey data, what is estimated, what options are available and what can be done through post-estimation change when the "svy" prefix is added.

SUDAAN

SUDAAN is a commercial software package developed by the Research Triangle Institute specifically for analysis of data from complex sample surveys and other observational and experimental studies involving cluster-correlated data. The SAS-callable version of the software is particularly useful to people familiar with SAS.

Specification of the variance estimation approach to be used by SUDAAN is done in the procedure statement for a particular procedure. Additional sample design statements provide further information required by the program. In particular, to carry out bootstrapping with GSS data, the following is required:

- specify **DESIGN=BRR** in the procedure statement
- include the following WEIGHT statement to identify the survey weight variable:
  WEIGHT wght_per;
- include the REPWGT statement to indicate the names of the bootstrap variables on your data file. In particular, for GSS microdata files, this REPWGT statement would have the form:

REPWGT wtbs_001-wtbs_500;

WesVar

WesVar is a software package produced by Westat which carries out various analyses of survey data using exclusively replication methods for variance estimation. One of the methods offered is BRR. Quoting heavily from Phillips (2004), in WesVar, the variance estimation method is specified when creating a new WesVar data file. The resulting file is then used to define workbooks where table and regression requests are carried out. To define a WesVar data file with bootstrap weights:

- Move the replicate weight variables (i.e., wtbs-001 to wtbs_500) to the *Replicates* box..
- Move the survey weight variable (i.e., wght_per) to the *Full sample* box.
- For the mean bootstrap, specify the *Method* as BRR.
- Move analysis variables to the *Variables* box, a unique identifier to the ID box (optional), and save the file.

References

Gagné, C., Roberts, G. and Keown, L.-A. (2014) “Weighted estimation and bootstrap variance estimation for analyzing survey data: How to implement in selected software”. The Research Data Centres Information and Technical Bulletin. (Winter) 6(1):5-70. Statistics Canada Catalogue no. 12-002-X.
https://www150.statcan.gc.ca/n1/pub/12-002-x/2014001/article/11901-eng.htm

Appendix C - Canadian and international concepts of volunteering compared

For the first time, using 2018 GSS GVP data, it is possible to tabulate volunteer rates and hours from both a Canadian and international perspective. This appendix highlights codebook variables that are the building blocks for each approach and summarizes key differences between them.

➢ Canadian approach

Using the Canadian approach, formal and informal volunteering are reported separately. Formal volunteering refers to unpaid work for groups and organizations, including mandatory and employer supported hours. Informal volunteering refers to unpaid help provided directly to people, including help given to relatives living outside the respondent's household and unpaid work to improve communities, not on behalf of a group or organization. Both formal and informal volunteering types include amounts of less than one hour reported by category.

- **Who is a volunteer?**

In the past 12 months, did you do any of the following activities without pay on behalf of a group or an organization?	
FV_020	Door-to-door canvassing
FV_030	Fundraising
FV_040	Sit as a member of a committee or board
FV_050	Teaching, educating or mentoring
FV_060	Organize, supervise or coordinate activities or events
FV_070	Office work, bookkeeping, administrative duties, or library work
FV_080	Coach, referee or officiate
FV_090	Counsel or provide advice
FV_100	Provide health care or support including companionship
FV_110	Collect, serve or deliver food or other goods
FV_120	Work associated with the maintenance, repair or building of facilities or grounds
FV_130	Volunteer driving
FV_140	Provide help through first aid, fire-fighting, or search and rescue
FV_150	Engage in activities aimed at conservation or protection of the environment or wildlife
FV_160	Any other unpaid activities, not mention previously

At least one of these variables = 1 (Yes)

YES → **Volunteer** (FV1FVOL = 1; FVISVOLC = 1)

NO → **Non-volunteer** (FV1FVOL = 2; FVISVOLC = 2)

- **What is the sum of volunteer hours?**

VD1DHRS - Formal volunteering - Total hours - Canadian
This derived variable indicates the total number of hours volunteered, including mandatory unpaid work, employer supported hours and amounts of less than one hour reported by organization.

- **Who is an informal volunteer?**

Helped people directly, not on behalf of a group or organization	
In the past 12 months, did you…	
IVA105_1	help anyone with tasks such as cooking, cleaning, gardening, maintenance work, painting, snow shovelling, or car repairs?
IVA105_2	help anyone by doing any shopping, by driving or accompanying someone to the store or to an appointment?
IVA105_3	help anyone with paperwork tasks such as writing letters, doing taxes, filling out forms, banking, paying bills or finding information?
IVA105_4	provide anyone with health-related or personal care, such as emotional support, counselling, providing advice, visiting the elderly, or unpaid babysitting?
IVA105_5	help anyone with unpaid teaching, coaching, tutoring, or assisting with reading?
IVA2_005	help anyone in any other way?
Respondents were asked to include help given to friends, neighbours, acquaintances, colleagues and relatives living outside their household. They were asked to exclude help given to anyone living in their household, as well as any unpaid activities previously reported.	
If at least one of these variables = 1 (Yes), then the helping people directly flag = 1 (Yes) DV_HP = 1	

↓

Improved the community directly, not on behalf of a group or organization	
In the past 12 months, have you...	
IVA250_1	maintained a park or another public space, planted trees or repaired public facilities?
IVA250_2	actively participated in any public meetings in which there was discussion of community affairs?
IVA250_3	produced or disseminated information (online or elsewhere) to make others aware of an issue?
IVA250_4	organized or coordinated a group or an event (such as a community gathering, a sporting or cultural activity, a religious celebration, a political event or a neighbourhood watch)?
IVA250_5	helped develop an economic or social project for your community?
IVA3_190	improved your community in any other way?
Respondents were asked to exclude unpaid activities previously reported. For IVA250_2, they were also asked to exclude 'signing a petition', if no further action was taken. For IVA250_3, unpaid activity can include verbal, written or visual media, whether or not social media or other online tools were used. This activity can also refer to demonstrating. Respondents were asked to exclude 'likes' on social media such as Facebook and Twitter, if no further action was taken.	
If at least one of these variables = 1 (Yes), then the improving the community directly flag = 1 (Yes) DV_IC = 1	

↓

At least one of these variables** (DV_HP or DV_IC) **= 1 (Yes)

YES → **Informal Volunteer** (IVC_FLAG = 1)

NO → **Not an informal volunteer** (IVC_FLAG = 2)

- **What is the sum of informal volunteer hours?**

IVC_HRS - Informal volunteering - Canadian hours
This derive variable indicates the hours spent helping people directly and/or improving the community, in the past 12 months, without pay and not on behalf of an organization. It includes help given to relatives living outside the respondent's household and amounts less than one hour reported by category.

➢ International approach

Volunteering, from an international perspective, includes unpaid work on behalf of groups or organizations and direct help provided to people and communities. Mandatory and employer supported hours are excluded, as is help provided to relatives living outside the respondent's household and amounts of less than one hour reported by activity.

- **Who is a volunteer?**

The 19th International Conference of Labor Statisticians (ICLS) defines volunteer work as "work performed by persons of working age who, during a short reference period, performed any unpaid, non-compulsory activity to produce goods or provide services for others, where:

a) 'any activity' refers to work of at least one hour;

b) 'unpaid' is interpreted as the absence of remuneration in cash or in-kind for work done or hours worked; nevertheless, volunteer workers may receive some small form of support or stipend in cash, when below one third of local market wages (e.g. for out-of-pocket expenses or to cover living expenses incurred for the activity), or in-kind (e.g. meals, transportation, symbolic gifts);

c) 'non-compulsory' is interpreted as work carried out without civil, legal, or administrative requirements which are different from the fulfilment of social responsibilities of a communal, cultural, or religious nature;

d) production 'for others' refers to work performed:

   i. through, or for, organizations comprising market and non-market units (i.e. organization-based volunteer work) including through or for self-help, mutual aid, or community-based groups of which the volunteer is a member; or

   ii. directly for households other than the household of the volunteer worker or of related family members (i.e. direct volunteer work).

To operationalize the ICLS definition using 2018 GSS GVP variables, three steps are required:

- ✓ First, it is necessary to derive an international flag and hours for informal volunteering, where help provided to relatives living outside the respondent's household and amounts of less than one hour reported by activity are excluded.
- ✓ Next, an international flag and hours are needed for formal volunteering, where mandatory unpaid work, employer supported hours and amounts of less than one hour reported by organization are excluded.
- ✓ Finally, the international volunteer flag and hours are derived, which represent a sum of informal and formal, as per the ICLS definition *(see box above).*

(i) Step 1 – Derive international flag and hours for informal volunteering

Helped people directly	
Hours meeting the international ICLS definition are calculated for each activity:	
Including: *sum of hours spent helping people directly, in the past 12 months, without pay and not on behalf of an organization*	
Excluding: *amounts of less than one hour reported by activity, help given to relatives living outside the respondent's household and amounts previously reported*	
IVS1INT1	Hours for tasks such as cooking, cleaning, gardening, maintenance work, painting, snow shovelling, or car repairs
IVS1INT2	Hours for shopping, driving or accompanying someone to the store or to an appointment
IVS1INT3	Hours for paperwork tasks such as writing letters, doing taxes, filling out forms, banking, paying bills or finding information
IVS1INT4	Hours for health-related or personal care, such as emotional support, counselling, providing advice, visiting the elderly, or unpaid babysitting
IVS1INT5	Hours for teaching, coaching, tutoring, or assisting with reading
IVS1INT6	Hours for helping people directly in another way

Improved the community directly	
Hours meeting the international ICLS definition are calculated for each type of task:	
Including: *sum of hours spent improving the community directly, in the past 12 months, without pay and not on behalf of an organization*	
Excluding: *amounts of less than one hour reported by type of task and amounts previously reported*	
ICINTHS1	Hours for tasks such as maintaining a park or another public space, planting trees or repairing public facilities
ICINTHS2	Hours spent participating in any public meetings in which there was discussion of community affairs
ICINTHS3	Hours producing or disseminating information to make others aware of an issue
ICINTHS4	Hours spent organizing or coordinating a group or an event
ICINTHS5	Hours spent helping to develop an economic or social project
ICINTHS6	Hours spent on other tasks aimed at improving the community

IVS1INT - International sum of hours spent helping people directly, in the past 12 months, without pay and not on behalf of an organization, for up to six types of direct help

DV_HPINT - International flag indicating whether the respondent answered "yes" to providing any one of up to six types of direct help

ICINTHRS - International sum of hours spent improving the community, in the past 12 months, without pay and not on behalf of an organization, for up to six types of tasks

DV_ICINT - International flag indicating whether the respondent answered "yes" to improving the community through any one of up to six types of tasks

IVI_FLAG - Informal volunteering - International flag
*Flag indicating whether the respondent answered "yes" to providing any one of up to six types of direct help **AND/OR** any one of up to six types of tasks aimed at improving the community that were not on behalf of a group or organization. For each type of direct help, help of less than one hour reported by activity and help given to relatives living outside the respondent's household have been excluded. For each type of task aimed at improving the community, help of less than one hour reported by type of task has been excluded.*
IVI_HRS - Informal volunteering - International hours
*Sum of hours spent helping people directly **AND** improving the community, in the past 12 months, without pay and not on behalf of an organization. This derive variable excludes amounts of less than one hour reported by category and help given to relatives living outside the respondent's household, as per the definition of "volunteering" from the 19th International Conference of Labour Statisticians (ICLS).*

(ii) Step 2 – Derive international flag and hours for formal volunteering

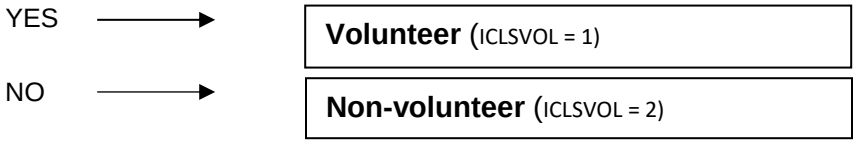
FV1FVOL / FVISVOLC	**Formal volunteering - Canadian flag** - This derived variable indicates whether the respondent is a volunteer or non-volunteer, including mandatory unpaid work, employer supported hours and amounts of less than one hour reported by organization.
VD1DHRS	**Formal volunteering - Total hours - Canadian** - This derived variable indicates the total number of hours volunteered, including mandatory unpaid work, employer supported hours and amounts of less than one hour reported by organization.
MUWHOURS	**Mandatory unpaid work hours** - This derived variable indicates the number of mandatory unpaid work hours reported by the respondent.
ESMHOURS	**Employer supported hours** - This derived variable indicates the number of employer supported hours reported by the respondent.

FVISVOLI - Formal volunteering - International flag
This derived variable indicates whether the respondent is a volunteer or non-volunteer, excluding mandatory unpaid work, employer supported hours and amounts of less than one hour reported by organization.
VSHRSINT - Formal volunteering - Total hours - International
This derived variable indicates the total number of hours volunteered, excluding mandatory unpaid work, employer supported hours and amounts of less than one hour reported by organization.

(iii) Step 3 – Derive international volunteer flag and hours

- **International volunteer flag**

The informal volunteering international flag (IVI_FLAG) AND/OR formal volunteering international flag (FVISVOLI) = 1 (Yes)



ICLSVOL - International - Volunteer flag
This derived variable indicates whether the respondent is a volunteer or non-volunteer as defined by the 19th International Conference of Labour Statisticians (ICLS).

- **International volunteer hours**

This is the sum of informal volunteering international hours (IVI_HOURS) AND formal volunteering international hours (VSHRSINT).

ICLSHRS - International - Volunteer hours
This derived variable indicates the total number of hours volunteered as defined by the 19th International Conference of Labour Statisticians (ICLS).

➢ Canadian and international approaches to volunteering compared

As noted above, the Canadian approach conceptualizes formal and informal volunteering separately, whereas the international approach, using the ICLS definition, refers to a single concept of volunteering that includes unpaid work on behalf of groups and organizations, as well as helping people directly and improving communities. The table that follows summarizes differences between these two approaches, highlighting what each concept includes and excludes.

Table C1: Canadian and international concepts of volunteering compared

Canadian concept of volunteering	
Formal volunteering	
Includes:	***Excludes:***
✓ Unpaid work on behalf of groups and organizations o Mandatory unpaid work o Employer supported volunteering ✓ Amounts of less than one hour reported by organization	- Informal volunteering (i.e., *not* on behalf of groups or organizations)
Informal volunteering (not on behalf of groups or organizations)	
Includes:	***Excludes:***
✓ Helping people directly o Helping friends, neighbours, acquaintances, colleagues and relatives living outside the respondent's household ✓ Improving communities ✓ Amounts of less than one hour reported by category	- Formal volunteering - Helping anyone living in the respondent's household - Signing a petition, if no further action was taken - 'Likes' on social media, if no further action was taken

International concept of volunteering	
Includes:	***Excludes:***
✓ Unpaid work on behalf of groups and organizations ✓ Helping people directly o Helping friends, neighbours, acquaintances and colleagues living outside the respondent's household ✓ Improving communities	- Mandatory unpaid work - Employer supported volunteering - Helping anyone living in the respondent's household - Helping relatives living outside the respondent's household - Signing a petition', if no further action was taken - 'Likes' on social media, if no further action was taken - Amounts of less than one hour (reported by organization for formal volunteering and by category for informal volunteering)