■ Business Special Surveys and Technology Statistics Division (BSSTSD)

# Research and Development of Canadian Private Non-profit Organizations, 2010

	•	érez ce questionnaire s, veuillez cocher 🗌
	If necessary, please make addr in the boxes below.	ress label corrections
C0002	Legal Name	
C0008	First name of contact	
C0028	Last name of contact	4
C0021	Title of contact	A
C0004	Address (number and street)	
C0005	City	
	Province/territory	Postal code

C0007

This document is confidential when completed

#### Survey purpose

This survey collects data which are essential to assure the availability of pertinent statistical information to monitor science and technology related activities in Canada and to support the development of science and technology policy. Your data will be used, for instance, to provide indicators on the state of research and development (R&D) performed by private non-profit organizations and to complete national totals for scientific R&D expenditures and personnel.

#### Fax or other electronic transmission disclosure

Statistics Canada advises you that there could be a risk of disclosure during facsimile or other electronic transmission. However, upon receipt, Statistics Canada will provide the guaranteed level of protection afforded all information collected under the authority of the *Statistics Act*.

#### Confidentiality

The Statistics Act protects the confidentiality of information collected by Statistics Canada.

#### **Data-sharing agreements**

C0006

To reduce respondent burden, Statistics Canada has entered into data sharing agreements with provincial and territorial statistical agencies and other government organizations, which must keep the data confidential and use them only for statistical purposes.

Information on confidentiality, data-sharing agreements and record linkages can be found on the last page of this questionnaire.

This information is collected under the authority of the *Statistics Act*, Revised Statutes of Canada, 1985, Chapter S-19. COMPLETION OF THIS QUESTIONNAIRE IS A LEGAL REQUIREMENT UNDER THIS ACT.

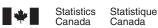
This questionnaire should be completed for the fiscal year ending in 2010.

Please return the questionnaire within 30 days.

Please mail the completed questionnaire in the enclosed envelope or fax it to Statistics Canada at **1-888-883-7999**. Lost the return envelope or need help? See instruction guide on page 9, call us at **1-877-604-7828** or mail to: Statistics Canada, 150 Tunney's Pasture Driveway, Distribution Center SC-0702, Ottawa, Ontario K1A 0T6

#### **GENERAL DATA** 1. a) Fiscal year ending in 2010 From To C0185 **\$** 000 Total revenues for the fiscal year ending in 2010 (CAN\$ thousands) employees Total employees for the fiscal year ending in 2010 For the fiscal year ending in 2010, did your organization C0170 1 perform any R&D? (as defined on page 9) Yes, go to question 2 No If 'NO', did your organization fund any R&D for the fiscal year C0172 1 ending in 2010? Yes, go to question 7 No

5-5300-408.1: 2011-05-02





#### DATA ON R&D PERFORMED (questions 2 to 6)

#### 2. Expenditures for R&D performed within this organization in Canada

	Expenditure	s for fiscal year ending in 2010						
Major fields	Current	Capital	Total					
of R&D	CAN\$ thousands							
Natural sciences and	C2030	C2035	C2040					
engineering: sub-total	\$ 000	\$ 000	\$ 000					
	C2031	C2036	C2041					
Medical	\$ 000	\$ 000	\$ 000					
	C2032	C2037	C2042					
Other	\$ 000	\$ 000	\$ 000					
Social sciences	C2033	C2038	C2043					
and humanities sub-total	\$ 000	\$ 000	\$ 000					
	C2034	C2039	C2044					
Total	\$ 000	\$ 000	\$ 000					

	Planned expend	itures for fiscal year ending in 20	011			
Major fields	Current	Capital	Total			
of R&D		CAN\$ thousands				
Natural sciences and	C2045	C2050	C2055			
engineering: sub-total	\$ 000	\$ 000	\$ 000			
	C2046	C2051	C2056			
Medical	\$ 000	\$ 000	\$ 000			
	C2047	C2052	C2057			
Other	\$ 000	\$ 000	\$ 000			
Social sciences	C2048	C2053	C2058			
and humanities sub-total	\$ 000	\$ 000	\$ 000			
	C2049	C2054	C2059			
Total	\$ 000	\$ 000	\$ 000			

	Forecast expend	itures for fiscal year ending in 2	012					
Major fields	Current	Capital	Total					
of R&D	of R&D CAN\$ thousands							
Natural sciences and	C2060	C2065	C2070					
engineering: sub-total	\$ 000	\$ 000	\$ 000					
	C2061	C2066	C2071					
Medical	\$ 000	\$ 000	\$ 000					
	C2062	C2067	C2072					
Other	\$ 000	\$ 000	\$ 000					
Social sciences	C2063	C2068	C2073					
and humanities sub-total	\$ 000	\$ 000	\$ 000					
	C2064	C2069	C2074					
Total	\$ 000	\$ 000	\$ 000					

Page 2 5530408021

3.	Sources of funds for R&D performed within this organization for the fiscal year ending in 2010			CAN\$ thousands		
	a) Reporting organization (e.g. interest on own funds, investments income, membership dues, trust funds).	C3160	\$			000
	b) Federal government	C3161	\$			000
	c) Provincial governments (sub-total)	C3162	\$			000
	Newfoundland and Labrador	C3163	\$		1	000
	Prince Edward Island	C3164	\$			000
		C3165	\$			000
	3. Nova Scotia	C3166	\$			000
	4. New Brunswick	C3167	\$			000
	5. Quebec.	C3168	\$			000
	6. Ontario	C3169	(\$			000
	7. Manitoba	C3170	S			000
	8. Saskatchewan	C3171	\$			000
	9. Alberta	C3172	\$			000
	10. British Columbia	C3173	\$			000
	11. Yukon	C3174	\$			000
	12. Northwest Territories	C3175	\$			000
	13. Nunavut	C3176	\$			000
	d) Canadian business enterprises	C3177	\$			000
	e) Other Canadian private non-profit organizations		Ψ			000
	f) Other Canadian sources (e.g. universities) (Please print full name)					
	1. C3578	C3178	\$			000
	2. C3579	C3179	\$			000
	3. C3580	C3180	\$			000
	g) Foreign sources	C3181	\$			000
	Total (equal to the 2010 grand total expenditures of question 2 (cell C2044))	C3182	\$			000
_	Personnel of this reporting unit engaged in R&D for					
4.	the fiscal year ending in 2010 (full-time equivalent – FTE)			Full time equi	valent	
	(use rounded numbers only) Scientists and engineers		C4112			
	Technicians and technologists: technically trained personnel who assist					
	scientists and engineers in R&D (e.g. chemical technicians, draftspersons). They may be certified by either provincial educational authorities or by provincial or national scientific or engineering associations.		C4113			
	<b>Other</b> : personnel directly engaged in the R&D program (e.g. machinists and electricians engaged in construction of prototypes or staff engaged in the administration or clerical support of R&D units)		C4114			
	Total R&D personnel		C4115			

Page 3 5530408031

		Yes	No							Yes	^
Cellular biology	C5067	1	3	Dru	gs and th	neir effects	6		C5074	1	3
Genetics	C5068	1	3		ual sciene . ophthaln	ces nology, opt	ometr	y	05075		
mmunology	C5069	1	3			related res			C5075		3
Endocrinology	C5070	1	3		er medic ase specif						
Nutrition and metabolism	C5071	1	3	a)	C5176				C5076	1	3
Cancer	C5072	1	3	b)	C5177			7	C5077	1	3
Haematology	C5073	1	3	c)	C5178				C5078	1	3
R&D expenditures by s	ocio-ec	onom	ic object	es within th	is organ	nization fo	or the	fisca	l year	ending	ı in :
onponumento by c			,				,				,
						00117	Φ	CAN\$	thous	ands	
1. Exploration and explo	oitation o	f the E	Earth			C6117	\$				
2. Infrastructure and ger						C6118	\$				
(e.g. transport, telecom	municatio	ons, oti	ner)			••	Ψ				
						C6119	\$				
3. Control and care of the	ne enviro	nmen	ıt				φ				
						C6120	\$				
4. Protection and improv	vement o	of hum	nan healti				φ				
						C6121	\$				
5. Production, distribution	on and ra	itional	utilizatio	of energy			φ				
6. Agricultural productio	n and te	chnol	ogy			C6122	\$				
(e.g. agriculture, fishing	g, torestry	)					Ψ				
		<i>y</i> .				C6123	<b>c</b>				
7. Industrial production	and tech	nolog	у				φ				
						C6124	<u></u>				
8. Social structures and	relations	ships.					\$				
						00105	ф				
9. Exploration and explo	oitation o	f spac	e			C6125	\$				
							<u> </u>				
0. Non-oriented research	:h					C6126	\$				
1. Other civil research						C6127	\$				
2. Defence						C6128	\$				

Page 4 5530408041

#### DATA ON PAYMENTS FOR R&D

#### 7. Payments for R&D performed by other organizations for the fiscal year ending in 2010

	Major fiel	ds of R&D	Subcomponents of I			
Sector of performance	Social sciences and humanities Sub-total	Natural sciences and engineering Sub-total	engineering:  Medical Other		Total	
		I	CAN\$ thousands	I		
	C7200	C7207	C7214	C7221	C7228	
Federal Government	\$ 000	\$ 000	\$ 000	\$ 000	\$ 000	
	C7201	C7208	C7215	C7222	. C7229	
Provincial Government	\$ 000	\$ 000	\$ 000	\$ 000	\$ 000	
Canadian	C7202	C7209	C7216	C7223	C7230	
business enterprises	\$ 000	\$ 000	\$ 000	\$ 000	\$ 000	
Other Canadian private	C7203	C7210	C7217	C7224	C7231	
non-profit organizations	\$ 000	\$ 000	\$ 000	\$ 000	\$ 000	
Other Canadian	C7204	C7211	C7218	C7225	C7232	
sources (e.g. universities)	\$ 000	\$ 000	\$ 000	\$ 000	\$ 000	
	C7205	C7212	C7219	C7226	C7233	
Foreign	\$ 000	\$ 000	\$ 000	\$ 000	\$ 000	
	C7206	C7213	C7220	C7227	C7234	
Total	\$ 000	\$ 000	\$ 000	\$ 000	\$ 000	

## SURVEY COMPLETION TIME

3. Please indicate how long it took	you to complete this	questionnaire.
-------------------------------------	----------------------	----------------

C8909

minutes

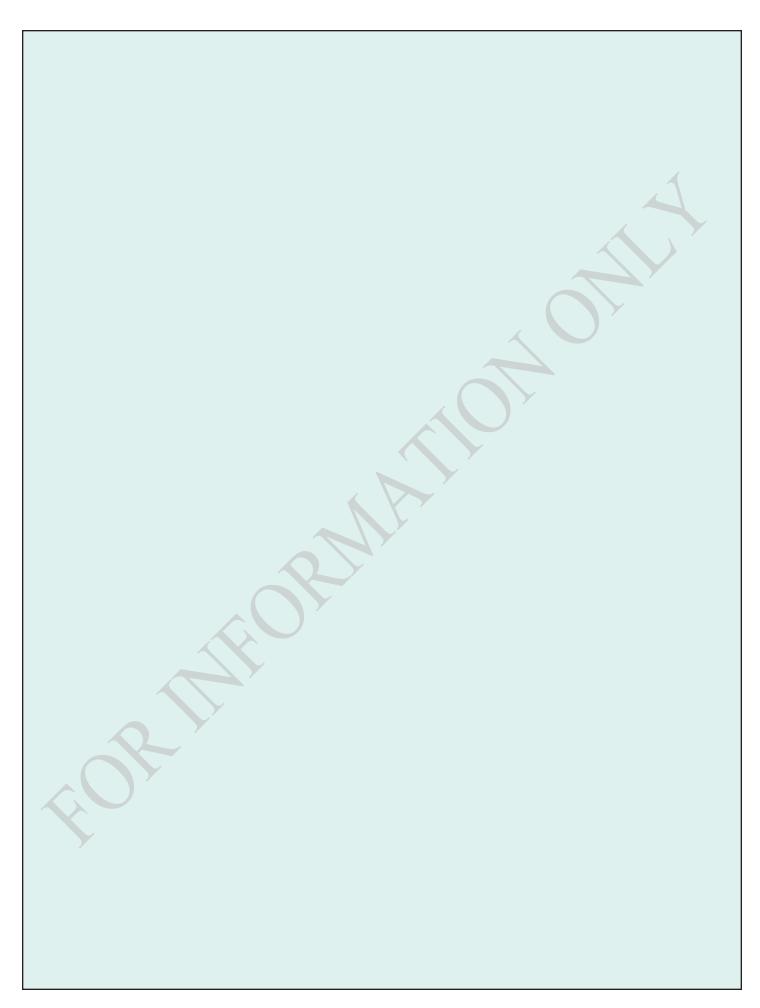
		CERTIFI	CATION		
First name of person who comp	leted this report (please print)		Last name of person who completed	this report (plea	se print)
Official position					
	7				
Business address c1004					Postal Code
Telephone No.	Extension C0027	Fax No.		GST No. (E	BN No.)
E-mail address				Date C0015	
				YY	Y Y M M D D
	our organization's main activit nnual report which contains t		ion, disregard this question.		

Page 5 5530408051

COMMENTS
Reasons for major changes in reporting R&D expenditures and personnel
In order to eliminate the necessity to verify discrepancies between this report and your last return (fiscal year ending in 2009) please explain any significant changes which might be misconstrued as an error in reporting.
C9920
69920
Thank you for completing this questionnaire.  Please retain a copy for your records.

Page 6 5530408061

# INSTRUCTION GUIDE Need assistance? Call us at 1-877-604-7828



#### INSTRUCTION GUIDE

Please answer all questions. Since the required information cannot normally be readily extracted from available records, your best estimates will be quite satisfactory. The last survey was carried out for the fiscal year ending in 2009. You may have a file copy of your return which will help you now.

Additional forms and explanations of the terms used in the questions can be obtained from Statistics Canada: call **1-877-604-7828**.

# Please return the completed questionnaire within 30 days of receipt.

If you are unable to do so, please inform us of the expected completion date. If you receive more than one copy of this survey questionnaire for the same private non-profit organization, please complete only one and return with duplicate(s). If you require assistance in the completion of this questionnaire or have any questions regarding the survey please address all enquiries to:

Statistics Canada Ottawa, Ontario K1A 0T6

Tel: 1-877-604-7828 Fax: 1-888-883-7999

Email: bsso@statcan.gc.ca

#### **Definitions**

Research and development (R&D) is creative work in the natural sciences and engineering, and social sciences and humanities fields undertaken on a systematic basis to increase the stock of knowledge or discover new applications for existing knowledge. New knowledge involves the integration of newly acquired information into existing hypotheses, the formulation and testing of new hypotheses or the re-evaluation of existing observations.

NOTE: Exclude all non-R&D activities (such as investigative studies, medical care, social services, education and training, dissemination of information, etc.), which your organization undertakes or funds.

To illustrate the distinction between R&D and investigative studies: the developing and testing of new methods for treating a neurosis is research. A study of psychiatric services in a region to suggest changes is an investigative study.

#### Major fields of R&D

- a) Natural sciences and engineering:
  - Medical sciences include medicine, dentistry, pharmacy, etc.
  - Other sciences include all disciplines in the natural sciences except the medical sciences (e.g. mathematics, physics, chemistry, biology and engineering).
- Social sciences and humanities include all disciplines involving the study of human actions and conditions,

and the social, economic and institutional mechanisms affecting humans (e.g. economics, history, sociology).

#### **Expenditure types**

**Current expenditures** are expenditures on items used up within a relatively short time period or costing relatively little. They include wages, salaries and related costs; materials and supplies used; necessary background literature; minor scientific equipment and associated administrative overhead costs.

**Capital expenditures** are expenditures on facilities such as buildings, equipment, machinery and land.

Exclude capital depreciation.

#### Questions 1 and 4 – Full Time Equivalent (FTE)

R&D may be carried out by persons who work solely on R&D projects or by persons who devote only part of their time to R&D, and the balance to other activities such as testing, quality control and production engineering. To arrive at the total effort devoted to R&D in terms of personnel, it is necessary to estimate the full-time equivalent of these persons working only part-time in R&D.

FTE = Number of persons who work solely on R&D projects + the estimate of time of persons working only part of their time on R&D.

Example calculation: If out of five scientists engaged in R&D work, one works solely on R&D projects and the remaining four devote only one quarter of their working time to R&D, then: FTE = 1 + 1/4 + 1/4 + 1/4 + 1/4 = 2 scientists.

# Question 6 – Research and development (R&D) expenditures by socio-economic objectives

Socio-economic objectives allow organizations to classify their R&D resource allocations according to the purpose for which the expenditure is intended. The objectives are listed on the questionnaire at the highest level of aggregation with sub-levels given here for clarification of categories. In many cases, projects have multiple objectives and an organization should assign its expenditures consistent with the stated objectives. Care must be taken to avoid "double counting".

The objectives are based on the Nomenclature for the Analysis and Comparison of Scientific Programs and Budgets (NABS) produced by the Statistical Office of the European Communities (Eurostat).

#### 1. Exploration and exploitation of the Earth

R&D activities with objectives related to the exploration of the Earth's crust and mantle, seas, oceans and atmosphere. It also includes climatic and meteorological research, polar exploration (under various headings, as appropriate) and hydrology.

#### **Examples:**

- Mineral, oil and natural gas prospecting
- Exploration and exploitation of the sea-bed

- Earth's crust and mantle excluding sea-bed and studies of soil for agriculture (objective 6)
- Hydrology excludes R&D activities on: water supplied and disposal (objective 2) and water pollution (objective 3)
- Sea and oceans
- Atmosphere

**Excludes:** R&D activities on pollution (objective 3), soil improvement or land-use (objective 2), and fishing (objective 6).

#### 2. Infrastructure and general planning of land use

R&D activities on infrastructure and land development, including research on the construction of buildings.

#### **Transport systems**

Covers scientific activities on transport systems, including road accident prevention and ancillary services such as electronic traffic aids and radar stations. Also included are general scientific activities on transport systems, road and rail traffic, inland waterway and sea transport, air traffic, pipeline transport systems, works transport systems, combined transport systems and scientific activities on the potential effects on the environment of the planning and operation of transport systems. Scientific activities on transport equipment is included only when it forms part of the coordinated programs for the development of improved and safer transport systems, otherwise, such research is classified in objective 7.

#### **Telecommunication systems**

Covers scientific activities on telecommunication services and the planning and organization of telecommunication networks. It includes, in particular, general scientific activities on telecommunication systems, telephones, telex, data transmission, radio and television (including cable TV)

#### Other scientific activities

Covers scientific activities on the infrastructure and general planning of land use.

#### Examples:

- General scientific activities
- General planning of land-use
- Construction and planning of buildings
- Civil engineering excludes scientific activities on building materials and industrial processes (objective 7)
- Water supply

#### 3. Control and care of the environment

Covers scientific activities into the control of pollution, aimed at the identification and analysis of the sources of pollution and their causes, and all pollutants, including their dispersal in the environment and the effects on man, species (fauna, flora, microorganisms)

and biosphere. Development of monitoring facilities for the measurement of all kinds of pollution is included. The same is valid for the elimination and prevention of all forms of pollution in all types of environment.

#### **Examples:**

- Protection of atmosphere and climate
- Protection of ambient air and water
- Solid waste
- Protection of soil and groundwater
- Noise and vibration
- Protection of species and habitats
- Protection against natural hazards
- Radioactive pollution
- Other scientific activities on the environment

#### 4. Protection and improvement of human health

Scientific activities aimed at protecting, promoting and restoring human health broadly interpreted to include health aspects of nutrition and food hygiene. It ranges from preventative medicine, including all aspects of medical and surgical treatment, both for individuals and groups, and the provision of hospital and home care, to social medicine and pediatric and geriatric research.

#### **Examples:**

- Medical scientific activities, hospital treatment, surgery
- Preventive medicine
- Biomedical engineering and medicines
- Occupational medicine
- Nutrition and food hygiene
- Drug abuse and addiction
- Social medicine
- Hospital structure and organization of medical care

# 5. Production, distribution and rational utilization of energy

Covers scientific activities into the production, storage, transportation, distribution and rational use of all forms of energy. It also includes scientific activities on processes designed to increase the efficiency of energy production and distribution, and the study of energy conservation.

#### **Examples:**

- Fossil fuels and their derivatives
- Nuclear fission and fusion
- Radioactive waste management including decommissioning with regard to fuel/energy
- Renewable energy sources
- Rational utilization of energy

#### 6. Agricultural production and technology

Covers all scientific activities on the promotion of agriculture, forestry, fisheries and foodstuff production. It includes: scientific activities on chemical fertilizers, biocides, biological pest control and the mechanization of agriculture; research on the impact of scientific activities in the field of developing food productivity and technology.

#### 7. Industrial production and technology

Covers scientific activities on the improvement of industrial production and technology. It includes scientific activities on industrial products and their manufacturing processes except where they form an integral part of the pursuit of other objectives (e.g. defence, space, energy, agriculture).

#### **Examples:**

- Increasing economic efficiency and competitiveness
- Manufacturing and processing techniques
- Petrochemical and coal by-products
- Pharmaceutical products
- Manufacture of motor vehicles and other means of transport
- Aerospace equipment manufacturing and repairing
- Electronic and related industries
- Manufacture of electrical/non-electrical machinery and apparatus
- Medical and surgical equipment and orthopedic appliances, food products and beverages, clothing and textiles and leather goods
- Recycling

#### 8. Social structures and relationships

Scientific activities on social objectives, as analyzed in particular by social and human sciences, which have no obvious connection with other objectives. This analysis includes quantitative, qualitative, organizational and forecasting aspects of social problems.

#### **Examples:**

- Education, training, recurrent education and retraining
- Cultural activities
- Management of businesses and institutions
- Improvement of working conditions
- Social security system
- Political structure of society
- Social change, social processes and social conflicts
- Other scientific activities with regard to society

#### 9. Exploration and exploitation of space

All civil space scientific activities. Corresponding scientific activities in the defence field is classified in objective 12. (Although civil space research is not, in general, concerned with particular objectives, it frequently has a specific goal, such as the increase of general knowledge (e.g. astronomy), or relates to particular applications (e.g. telecommunication satellites)).

#### **Examples:**

- General scientific activities
- Scientific exploration of space
- Applied research programs
- Launch systems
- Space laboratories and space travel
- Other research on the exploration and exploitation of space

#### 10. Non-oriented research

Basic activities motivated by scientific curiosity with the objective of increasing scientific knowledge. It also includes funding used to support postgraduate studies and fellowships.

#### **Examples:**

- Mathematics and Computer Sciences
- Physical Sciences
- Chemical Sciences
- Biological Sciences
- Earth and Related (Environmental) Sciences
- Engineering Sciences
- Medical Sciences
- Agricultural Sciences
- Social Sciences
- Humanities

#### 11. Other civil research

Civil scientific activities which cannot (yet) be classified to a particular objective.

#### 12. Defence

Covers scientific activities for military purposes. It also includes basic research and nuclear and space research financed by ministries of defence. Civil scientific activities financed by ministries of defence, for example, in the fields of meteorology, telecommunications and health, should be classified in the relevant objectives.

### **General information**

#### Confidentiality

#### Your answers are confidential.

Statistics Canada is prohibited by law from releasing any information it collects which could identify any person, business, or organization, unless consent has been given by the respondent or as permitted by the Statistics Act. The confidentiality provisions of the Statistics Act are not affected by either the Access to Information Act or any other legislation. Therefore, for example, the Canada Revenue Agency cannot access identifiable survey records from Statistics Canada.

Information from this survey will be used for statistical purposes only and will be published in aggregate form only.

#### **Data-sharing agreements**

To reduce respondent burden, Statistics Canada has entered into data sharing agreements with provincial and territorial statistical agencies and other government organizations, which must keep the data confidential and use them only for statistical purposes. Statistics Canada will only share data from this survey with those organizations that have demonstrated a requirement to use the data.

**Section 11** of the *Statistics Act* provides for the sharing of information with provincial and territorial statistical agencies that meet certain conditions. These agencies must have the legislative authority to collect the same information, on a mandatory basis, and the legislation must provide substantially the same provisions for confidentiality and penalties for disclosure of confidential information as the *Statistics Act*. Because these agencies have the legal authority to compel businesses to provide the same information, consent is not requested and businesses may not object to the sharing of the data.

For this survey, there are Section 11 agreements with the Institut de la statistique du Québec

The shared data will be limited to information pertaining to business establishments located within the jurisdiction of the respective province or territory.

**Section 12** of the *Statistics Act* provides for the sharing of information with federal, provincial or territorial government organizations. Under **Section 12**, you may refuse to share your information with any of these organizations by writing a letter of objection to the Chief Statistician and returning it with the completed questionnaire. Please specify the organizations with which you do not want to share your data.

For agreements with provincial and territorial government organizations, the shared data will be limited to information pertaining to business establishments located within the jurisdiction of the respective province or territory.

#### **Record linkages**

To enhance the data from this survey, Statistics Canada may combine it with information from other surveys or from administrative sources.

# Thank you for completing this questionnaire. Please retain a copy for your records.

Need assistance? Call us at 1-877-604-7828.

Please mail the completed questionnaire in the enclosed envelope or fax it to Statistics Canada at 1-888-883-7999.

Lost the return envelope or need help?

See instruction guide on page 9, call us at 1-877-604-7828 or mail to:

Statistics Canada,

150 Tunney's Pasture Driveway,

Distribution Center SC-0702,

Ottawa, Ontario K1A 0T6