

62M0004XCB

User Guide

Public-use Microdata File

Survey of Household Spending, 2001

**Income Statistics Division
Statistics Canada**

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1. INTRODUCTION

1.1 General Information

1.1.1 Background

This public-use microdata file presents data from the 2001 Survey of Household Spending (SHS) conducted in January through March 2002. Information about the spending habits, dwelling characteristics and household equipment of Canadian households during 2001 was obtained by asking people in the ten provinces and the three territories to recall their expenditures for the previous calendar year (spending habits) or as of December 31 (dwelling characteristics and household equipment).

Conducted since 1997, the Survey of Household Spending integrates most of the content found in the Family Expenditure Survey and the Household Facilities and Equipment Survey. Many data from these two surveys are comparable to the Survey of Household Spending data. However, some differences related to methodology, to data quality and to definitions must be considered before comparing these data. See Section 1.1.4 "For further information".

1.1.2 New for 2001

For 2001 only, extra questions were included in the survey so that data from the SHS could be used in the weighting of the Consumer Price Index. This change may affect historical comparisons for a few variables. See the section 4.2.4., "Comparability Over Time".

There were also new questions added to the 2001 SHS. The expenditure questions covered yarn and thread, regular and other leasing fees for vehicles, and cable and satellite services. Questions were also added about the presence in the home of a satellite dish, DVD player or CD writer, and the type of Internet connection.

1.1.3 Layout of the document

This document is laid out in the following manner:

- Record Layout.
- Data Dictionary (variable specifications, code sets and other information).
- Technical Information (survey methodology, data quality, and guidelines for tabulation, analysis, and dissemination).

Appendices are available in Excel format. See file SHS2001EDM-Appendices_Annexes.

- Appendix A presents the frequency counts for non-dollar variables in the public-use microdata file. They are included to help you verify your tabulations.
- Appendix B presents expenditure data tabulated using the public-use microdata file and also using the internal survey database. They are included to help you verify your tabulations.
- Appendix C contains a table indicating the spending variables included in previous public-use microdata files of the Survey of Household Spending and the Family Expenditure Survey.

- Appendix D shows any changes in variables from the previous year.
- Appendix E presents the coefficients of variation for published data from the 2001 SHS.

1.1.4 For further information

Additional information about the SHS can now be obtained free on the Statistics Canada web site (www.statcan.ca). See especially:

- Note to former users of data from the Family Expenditure Survey (62F0026MIE2000002)
- Note to former users of data from the Household Facilities and Equipment Survey (62F0026MIE2000003)
- User Guide for the Survey of Household Spending, 2001 (62F0026MIE2002002)
- Methodology for the Survey of Household Spending (62F0026MIE2001003)
- 2001 Survey of Household Spending Data Quality Indicators

For more information about the current survey results and related products and services, or to enquire about the concepts, methods or data quality of the Survey of Household Spending, contact Client Services (613-951-7355; 1-888-297-7355; fax 613-951-3012; income@statcan.ca), Income Statistics Division.

1.2 Technical characteristics of the file

Content: Household spending, dwelling characteristics, and household equipment, 2001

Source: Survey of Household Spending, 2001
Income Statistics Division
Statistics Canada

Data Set Definition:

DATA SET NAME SHS2001.TXT

NUMBER OF RECORDS 16,901

FORMAT

Record length 2,093

RECORD LAYOUT Supplied

See "Record Layout", next section

Variables are grouped under the following headings:

- Location
- Dwelling
- Characteristics of reference person
- Characteristics of spouse of reference person
- Household description
- Household equipment (at December 31)
- Expenditure items
 - Food
 - Shelter
 - Household operation
 - Household furnishings and equipment
 - Clothing
 - Transportation
 - Health care
 - Personal care
 - Recreation
 - Reading materials and other printed matter
 - Education
 - Tobacco products and alcoholic beverages
 - Other expenses

2. RECORD LAYOUT

Field	Size	Implied Decimal	Position			Type	Description	Variable Name
							LOCATION	
1	5	0	1	-	5	c	Identification number	CASEID
2	5	0	6	-	10	n	Weight at household level	WEIGHT
3	1	0	11	-	11	c	Full-year/part-year household indicator	FYPYFLAG
4	2	0	12	-	13	c	Province	PROVINCP
5	1	0	14	-	14	c	Urban/rural code	URBRUR
6	1	0	15	-	15	c	Size of area of residence code	URBSIZEP
							DWELLING	
7	1	0	16	-	16	c	Type of dwelling occupied at December 31	TYPDWELP
8	1	0	17	-	17	c	Period of construction of dwelling	YEARBUIP
9	2	0	18	-	19	n	Number of rooms	NUMRMP
10	1	0	20	-	20	n	Number of bedrooms	NUMBEDRP
11	1	0	21	-	21	n	Number of bathrooms	NUMBTHRP
12	1	0	22	-	22	c	Dwelling tenure during reference year	TENURYRP
13	1	0	23	-	23	c	Dwelling tenure at December 31	TENDC31P
14	11	2	24	-	34	n	Purchase price of home bought in reference year	PURPRICE
15	11	2	35	-	45	n	Selling price of home sold in reference year	SELPRICE
16	1	0	46	-	46	c	Dwelling repairs needed	REPAIRS
17	11	2	47	-	57	n	Additions, renovations and alterations	ADRENALT
18	11	2	58	-	68	n	New installations of equipment and fixtures	NEWINST
19	1	0	69	-	69	c	Year household moved to the dwelling occupied at December 31	YRMOVEDP
20	1	0	70	-	70	c	Household purchased home in reference year	BUYHMFGL
21	1	0	71	-	71	c	Principal heating equipment	HEATMAIP
22	1	0	72	-	72	c	Age of principal heating equipment	HEATAGE
23	1	0	73	-	73	c	Principal heating fuel	HEATFUEP
24	1	0	74	-	74	c	Principal heating fuel for hot water	HOTWATEP
25	1	0	75	-	75	c	Principal cooking fuel	COOKINGP
26	1	0	76	-	76	c	Reduced rent reason	REDURENT
							CHARACTERISTICS OF REFERENCE PERSON	
27	11	2	77	-	87	n	Income before taxes	RPINCTOT
28	11	2	88	-	98	n	Income from earnings	RPINCEAR
29	11	2	99	-	109	n	Income from investment	RPINCINV
30	11	2	110	-	120	n	Income from government transfer payments	RPINCTRA
31	11	2	121	-	131	n	Income from other sources	RPINCOTH
32	1	0	132	-	132	c	Marital status	RPMARP
33	2	0	133	-	134	n	Age	RPAGEP
34	2	0	135	-	136	c	Age group	RPAGEGRP
35	1	0	137	-	137	c	Sex	RPSEX
36	2	0	138	-	139	n	Number of weeks worked full-time	RPWEEKFT
37	2	0	140	-	141	n	Number of weeks worked part-time	RPWEEKPT
38	1	0	142	-	142	c	Tenure of previous dwelling	RPPREVDW
							CHARACTERISTICS OF SPOUSE OF REFERENCE PERSON	
39	11	2	143	-	153	n	Income before taxes	SPINCTOT
40	11	2	154	-	164	n	Income from earnings	SPINCEAR
41	11	2	165	-	175	n	Income from investment	SPINCINV
42	11	2	176	-	186	n	Income from government transfer payments	SPINCTRA
43	11	2	187	-	197	n	Income from other sources	SPINCOTH
44	2	0	198	-	199	n	Age	SPAGEP
45	2	0	200	-	201	c	Age group	SPAGEGRP
46	1	0	202	-	202	c	Sex	SPSEX

Field	Size	Implied Decimal	Position			Type	Description	Variable Name
47	2	0	203	-	204	n	Number of weeks worked full-time	SPWEEKFT
48	2	0	205	-	206	n	Number weeks worked part-time	SPWEEKPT
49	1	0	207	-	207	c	Tenure of previous dwelling	SPPREVDW
							HOUSEHOLD DESCRIPTION	
50	1	0	208	-	208	n	Number of economic families in household	ECFAM
51	1	0	209	-	209	c	Household type	HHTYPEP
52	2	0	210	-	211	n	Household size at December 31	HHSZD31
53	1	0	212	-	212	n	Number of children 0 to 4 (December 31)	CH04D31
54	1	0	213	-	213	n	Blank	BLANK
55	1	0	214	-	214	n	Number of children 5 to 17 (December 31)	CH517D31
56	1	0	215	-	215	n	Blank	BLANK
57	1	0	216	-	216	n	Number of youths 18 to 24 (December 31)	Y1824D31
58	1	0	217	-	217	n	Number of adults 25 to 64 years (December 31)	A2564D31
59	1	0	218	-	218	n	Number of seniors 65 years or more (December 31)	SE65D31
60	2	0	219	-	220	n	Household size (number of persons a member sometime in reference year)	HHSZTOT
61	2	0	221	-	222	n	Age of youngest child (member sometime in reference year)	AGEYOUNP
62	3	0	223	-	225	n	Total number of weeks (sum for all household members)	NUMWKS
63	1	0	226	-	226	n	Number of full-time earners	NUMFTP
64	1	0	227	-	227	n	Number of part-time earners	NUMPTP
65	1	0	228	-	228	c	Household major source of income	MAINCSCP
66	11	2	229	-	239	n	Household income before taxes	HHINCTOT
67	11	2	240	-	250	n	Household income from earnings	HHINCEAR
68	11	2	251	-	261	n	Household income from investment	HHINCINV
69	11	2	262	-	272	n	Household income from government transfer payments	HHINCTRA
70	11	2	273	-	283	n	Household income from other sources	HHINCOTH
71	11	2	284	-	294	n	Total other money receipts	TOTHMONR
72	11	2	295	-	305	n	Money flows (assets, loans and other debts)	MONFLOWS
73	11	2	306	-	316	n	Registered Retirement Savings Plan (RRSP) change	RRSPCHNG
74	1	0	317	-	317	c	Employment insurance benefit (EI) indicator	EIFLAG
							HOUSEHOLD EQUIPMENT (AT DECEMBER 31)	
75	1	0	318	-	318	c	Washing machine	WASHER
76	1	0	319	-	319	c	Clothes dryer	DRYERP
77	1	0	320	-	320	c	Dishwasher	DSHWASH
78	1	0	321	-	321	n	Number of refrigerators	NMFRIDGP
79	1	0	322	-	322	c	Freezer	FREEZER
80	1	0	323	-	323	c	Microwave oven	MICROWV
81	1	0	324	-	324	c	Air conditioner	AIRCONP
82	1	0	325	-	325	n	Number of telephones	NMPHONP
83	1	0	326	-	326	n	Number of telephone numbers	NMPHNUMP
84	1	0	327	-	327	c	Cellular telephone	CELLPHON
85	1	0	328	-	328	c	Compact disc player	CDPLYER
86	1	0	329	-	329	c	Cablevision	CABLETV
87	1	0	330	-	330	c	Satellite dish	SATELLIT*
88	1	0	331	-	331	c	DVD player	DVD*
89	1	0	332	-	332	c	CD writer	CDWRITER*
90	1	0	333	-	333	n	Number of video cassette recorders	NMVCRP
91	1	0	334	-	334	c	Home computer	COMPUTER
92	1	0	335	-	335	c	Internet	INTERNET

Field	Size	Implied Decimal	Position			Type	Description	Variable Name
93	1	0	336	-	336	c	Internet connection	NETCONEC*
94	1	0	337	-	337	n	Number of colour televisions	NMCOLTVP
95	1	0	338	-	338	n	Number of vehicles owned on December 31	NMVEHONP
96	1	0	339	-	339	c	Vehicles leased on December 31	VEHLEASP
							EXPENDITURES	
							FOOD	
97	11	2	340	-	350	n	Food	F001
98	11	2	351	-	361	n	Food purchased from stores	F002
99	11	2	362	-	372	n	Food purchased from restaurants	F008
							SHELTER	
100	11	2	373	-	383	n	Shelter	G001
101	11	2	384	-	394	n	Principal accommodation	G002
102	11	2	395	-	405	n	Rented living quarters	G003
103	11	2	406	-	416	n	Rent	G004
104	11	2	417	-	427	n	Owned living quarters	G007
105	11	2	428	-	438	n	Regular mortgage payments	G040
106	11	2	439	-	449	n	Maintenance, repairs and replacements	G008
107	11	2	450	-	460	n	Condominium charges	G009
108	11	2	461	-	471	n	Property taxes	G010
109	11	2	472	-	482	n	Homeowners' insurance premiums	G011
110	11	2	483	-	493	n	Water, fuel and electricity	G019
111	11	2	494	-	504	n	Water and sewage	G020
112	11	2	505	-	515	n	Fuel (eg. oil, gas, etc.)	G022
113	11	2	516	-	526	n	Electricity	G024
114	11	2	527	-	537	n	Other accommodation	G025
115	11	2	538	-	548	n	Owned vacation home	G026
116	11	2	549	-	559	n	Traveller accommodation	G032
							HOUSEHOLD OPERATION	
117	11	2	560	-	570	n	Household operation	H001
118	11	2	571	-	581	n	Communications	H002
119	11	2	582	-	592	n	Telephone	H003
120	11	2	593	-	603	n	Purchase of telephones and equipment	H004
121	11	2	604	-	614	n	Telephone services	H005
122	11	2	615	-	625	n	Cellular services	H008
123	11	2	626	-	636	n	Internet services	H009
124	11	2	637	-	647	n	Postal and other communication services	H010
125	11	2	648	-	658	n	Child care expenses	H011
126	11	2	659	-	669	n	Domestic and other custodial services	H016
127	11	2	670	-	680	n	Pet expenses	H017
128	11	2	681	-	691	n	Household cleaning supplies	H022
129	11	2	692	-	702	n	Paper, plastic and foil household supplies	H023
130	11	2	703	-	713	n	Garden supplies and services	H026
							HOUSEHOLD FURNISHINGS AND EQUIPMENT	
131	11	2	714	-	724	n	Household furnishings and equipment	I001
132	11	2	725	-	735	n	Household furnishings	I002
133	11	2	736	-	746	n	Furniture	I003
134	11	2	747	-	757	n	Rugs, mats and underpadding	I004
135	11	2	758	-	768	n	Window coverings and household textiles	I005
136	11	2	769	-	779	n	Art, antiques and decorative ware	I006
137	11	2	780	-	790	n	Household equipment	I010
138	11	2	791	-	801	n	Household appliances	I011
139	11	2	802	-	812	n	Other household tools, equipment and accessories	I027TOT
140	11	2	813	-	823	n	Maintenance and repairs of furniture and equipment	I042

Field	Size	Implied Decimal	Position			Type	Description	Variable Name
141	11	2	824	-	834	n	Services related to furnishings and equipment	I046
							CLOTHING	
142	11	2	835	-	845	n	Clothing	J001
143	11	2	846	-	856	n	Women's and girls' wear (4 years and over)	J002
144	11	2	857	-	867	n	Clothing gifts to non-household members	J007
145	11	2	868	-	878	n	Men's and boys' wear (4 years and over)	J008
146	11	2	879	-	889	n	Clothing gifts to non-household members	J013
147	11	2	890	-	900	n	Children's wear (under 4 years)	J014
148	11	2	901	-	911	n	Clothing gifts to non-household members	J017
149	11	2	912	-	922	n	Clothing material and notions	J019TOT
150	11	2	923	-	933	n	Services	J021
151	11	2	934	-	944	n	Laundry and dry cleaning	J023TOT
							TRANSPORTATION	
152	11	2	945	-	955	n	Transportation	K001
153	11	2	956	-	966	n	Private transportation	K002
154	11	2	967	-	977	n	Purchase of automobiles and trucks	K003
155	11	2	978	-	988	n	Purchase of automotive accessories	K007
156	11	2	989	-	999	n	Rented and leased automobiles and trucks	K008
157	11	2	1000	-	1010	n	Operation of owned and leased automobiles and trucks	K019
158	11	2	1011	-	1021	n	Gasoline and other fuels	K020
159	11	2	1022	-	1032	n	Maintenance and repair	K022
160	11	2	1033	-	1043	n	Garage rent and parking	K023
161	11	2	1044	-	1054	n	Private and public vehicle insurance premiums	K028
162	11	2	1055	-	1065	n	Public transportation	K031
163	11	2	1066	-	1076	n	Local and commuter transportation	K032TOT
164	11	2	1077	-	1087	n	Inter-city transportation	K034TOT
165	11	2	1088	-	1098	n	Other passenger transportation	K037
166	11	2	1099	-	1109	n	Household moving, storage and delivery services	K038
							HEALTH CARE	
167	11	2	1110	-	1120	n	Health care	L101
168	11	2	1121	-	1131	n	Direct costs to household	L102
169	11	2	1132	-	1142	n	Health care supplies	L103
170	11	2	1143	-	1153	n	Medicinal and pharmaceutical products	L104
171	11	2	1154	-	1164	n	Prescribed	L105
172	11	2	1165	-	1175	n	Other medicines and pharmaceutical products	L106
173	11	2	1176	-	1186	n	Physicians' care	L107
174	11	2	1187	-	1197	n	Eye-care goods and services	L108
175	11	2	1198	-	1208	n	Dental services	L112
176	11	2	1209	-	1219	n	Blank Field	Blank
177	11	2	1220	-	1230	n	Hospital care	L114
178	11	2	1231	-	1241	n	Blank Field	Blank
179	11	2	1242	-	1252	n	Other health care practitioners	L116
180	11	2	1253	-	1263	n	Other medical services	L117
181	11	2	1264	-	1274	n	Health insurance premiums	L118
182	11	2	1275	-	1285	n	Public hospital, medical and drug plans	L119
183	11	2	1286	-	1296	n	Private health insurance plans	L120
							PERSONAL CARE	
184	11	2	1297	-	1307	n	Personal care	L201
185	11	2	1308	-	1318	n	Personal care supplies and equipment	L202
186	11	2	1319	-	1329	n	Personal care services	L207
							RECREATION	

Field	Size	Implied Decimal	Position			Type	Description	Variable Name
187	11	2	1330	-	1340	n	Recreation	M101
188	11	2	1341	-	1351	n	Recreation equipment and associated services	M102
189	11	2	1352	-	1362	n	Sports and athletic equipment	M103
190	11	2	1363	-	1373	n	Toys, electronic games and arts/hobby materials	M106TOT
191	11	2	1374	-	1384	n	Computer equipment and supplies	M110
192	11	2	1385	-	1395	n	Photographic goods and services	M116
193	11	2	1396	-	1406	n	Recreation vehicles and associated services	M126
194	11	2	1407	-	1417	n	Purchase of recreation vehicles	M127
195	11	2	1418	-	1428	n	Bicycles, parts and accessories	M128
196	11	2	1429	-	1439	n	Other recreational vehicles and outboard motors	M129
197	11	2	1440	-	1450	n	Operation of recreational vehicles	M139
198	11	2	1451	-	1461	n	Bicycle maintenance and repairs	M140
199	11	2	1462	-	1472	n	Recreation vehicle operation	M142TOT
200	11	2	1473	-	1483	n	Expenses for rented and leased recreational vehicles	M180
201	11	2	1484	-	1494	n	Home entertainment equipment and services	M148
202	11	2	1495	-	1505	n	Audio (eg., radio, CD players, speakers)	M150
203	11	2	1506	-	1516	n	Compact discs, tapes, videos and video discs	M151
204	11	2	1517	-	1527	n	Blank audio and video tapes	M152
205	11	2	1528	-	1538	n	Televisions, VCRs, camcorders and other television/video components	M153
206	11	2	1539	-	1549	n	Rental of videotapes and video discs	M156
207	11	2	1550	-	1560	n	Rental of home entertainment equipment and other services	M157
208	11	2	1561	-	1571	n	Recreation services	M159
209	11	2	1572	-	1582	n	Entertainment	M160
210	11	2	1583	-	1593	n	Movie theatres	M161
211	11	2	1594	-	1604	n	Live sports events	M162
212	11	2	1605	-	1615	n	Live performing arts	M163
213	11	2	1616	-	1626		Rental of cablevision and satellite services	M165
214	11	2	1627	-	1637	n	Rental of cablevision services	M408*
215	11	2	1638	-	1648	n	Rental of satellite services	M409*
216	11	2	1649	-	1659	n	Use of recreation facilities	M166
217	11	2	1660	-	1670	n	Membership and single usage fees for sports and recreation facilities	M167**
218	11	2	1671	-	1681	n	Children's camps	M171
219	11	2	1682	-	1692	n	Admission to museums and other activities	M164
220	11	2	1693	-	1703	n	Package travel tours	M172
221	11	2	1704	-	1714	n	Other recreational services	M173
							READING MATERIALS AND OTHER PRINTED MATTER	
222	11	2	1715	-	1725	n	Reading materials and other printed matter	M201
223	11	2	1726	-	1736	n	Newspapers	M202
224	11	2	1737	-	1747	n	Magazines and periodicals	M203
225	11	2	1748	-	1758	n	Books and pamphlets (excluding school books)	M204
							EDUCATION	
226	11	2	1759	-	1769	n	Education	M301
227	11	2	1770	-	1780	n	Education supplies and textbooks	M302TOT

Field	Size	Implied Decimal	Position			Type	Description	Variable Name
228	11	2	1781	-	1791	n	Tuition fees	M308
							TOBACCO PRODUCTS AND ALCOHOLIC BEVERAGES	
229	11	2	1792	-	1802	n	Tobacco products and alcoholic beverages	N101
230	11	2	1803	-	1813	n	Tobacco products and smokers' supplies	N102
231	11	2	1814	-	1824	n	Cigarettes, cigars and tobacco	N103
232	11	2	1825	-	1835	n	Alcoholic beverages	N105
233	11	2	1836	-	1846	n	Served on licensed premises	N106
234	11	2	1847	-	1857	n	Purchased from stores	N107
235	11	2	1858	-	1868	n	Self-made alcoholic beverages	N108
							OTHER EXPENSES	
236	11	2	1869	-	1879	n	Miscellaneous expenditures	O101
237	11	2	1880	-	1890	n	Financial services	O104
238	11	2	1891	-	1901	n	Dues to unions and professional associations	O109
239	11	2	1902	-	1912	n	Games of chance (net)	N201
240	11	2	1913	-	1923	n	Personal taxes	O201
241	11	2	1924	-	1934	n	Personal insurance payments and pension contributions	O301
242	11	2	1935	-	1945	n	Life insurance premiums, annuity contracts, and transfers to RRIFs	O302TOT
243	11	2	1946	-	1956	n	Employment insurance premiums	O304
244	11	2	1957	-	1967	n	Retirement and pension fund payments	O305
245	11	2	1968	-	1978	n	Canada and Quebec pension plan	O306
246	11	2	1979	-	1989	n	Other government pension funds	O307
247	11	2	1990	-	2000	n	Other retirement or pension funds (excluding RRSP)	O308
248	11	2	2001	-	2011	n	Gifts of money and contributions	O401
249	11	2	2012	-	2022	n	Gifts of money and other support payments to persons living inside Canada	O403
250	11	2	2023	-	2033	n	Gifts of money and other support payments to persons living outside Canada	O404
251	11	2	2034	-	2044	n	Religious organizations	O406
252	11	2	2045	-	2055	n	Non-religious charitable organizations	O407
253	11	2	2056	-	2066	n	Current expense	TOTCUCON
254	11	2	2067	-	2077	n	Total expense	TOTEXPEN
							ADDITIONAL VARIABLES	
255	1	0	2078	-	2078	c	Housing adequacy indicator	ADEQUACY
256	1	0	2079	-	2079	c	Housing affordability indicator	AFFORDAB
257	1	0	2080	-	2080	c	Housing suitability indicator	SUITABLE
258	2	0	2081	-	2082	c	Required number of bedrooms	RQNUMBED
259	11	2	2083	-	2093	n	Monthly serviced rent	MONRENT

* New for 2001

** combined variable

c = character

n = numeric

3. DATA DICTIONARY

3.1 Location

Variable Name: **CASEID**
Unit Type: Code
Description: Identification number

Variable Name: **WEIGHT**
Unit Type: Count
Description: Weight at household level

Variable Name: **FYPYFLAG**
Unit Type: Code
Description: Full-year/part-year household indicator

Code	Description
1	Full-year household
2	Part-year household

Note: To create statistics for average annual expenditures, users should use data for full-year households. To tabulate dwelling characteristics, household equipment or create other types of expenditure statistics such as aggregates or market share, users should use data for full-year and part-year households.

Variable Name: **PROVINCP**
Unit Type: Code
Description: Province/Territory

Code	Description
00	Masked records
10	Newfoundland and Labrador
11	Prince Edward Island
12	Nova Scotia
13	New Brunswick
24	Quebec
35	Ontario
46	Manitoba
47	Saskatchewan
48	Alberta
59	British Columbia
60	Yukon/Northwest Territories/Nunavut

Variable Name: **URBRUR**
Unit Type: Code
Description: Urban/rural region code

Code	Description
0	Masked records
1	Urban
2	Rural

Variable Name: **URBSIZEP**
Unit Type: Code
Description: Size of area of residence code

Code	Description
0	Masked records
1	100,000 and over
2	Under 100,000
3	Rural

3.2 Dwelling

Variable Name: **TYPDWELP**
Unit Type: Code
Description: Type of dwelling occupied at December 31

- 1 (If SHS_B:001 = 01)
- 2 (If SHS_B:001 = 02)
- 3 (If SHS_B:001 = 03)
- 4 (If SHS_B:001 = 04)
- 5 (If SHS_B:001 = (05 or 06))
- 6 (If SHS_B:001 between 07 and 09)

Code	Description
1	Single detached
2	Double
3	Row or terrace
4	Duplex
5	Apartment
6	Hotel, rooming or lodging house, mobile home, or other

Note: This variable describes the type of dwelling in which the household resided on December 31. A dwelling is a structurally separate set of living premises with a private entrance from outside the building or from a common hall or stairway.

Single detached: A structure with one dwelling only, separated by open space from all other structures.

Double or semi-detached: A dwelling joined to only one other dwelling, separated from it by a wall extending from ground to roof.

Row or terrace: A dwelling unit in a row of three or more dwellings, sharing common walls extending from ground to roof and in which there are no other dwellings either above or below.

Duplex: Two dwellings, situated one above the other, not attached to any other structure and surrounded on all sides by open space.

Apartment: Dwellings in triplexes, quadruplexes or apartment separated from other dwellings by horizontal and vertical divisions.

Hotel, rooming or lodging house, mobile home, or other:

Includes:

- motels, hotels, tourist homes, halfway houses, school residences, YM/YMCAs;
- all rooming and lodging houses or individual rooms within such structures;

- bunk houses in lumber, mining, construction and military camps, and Hutterite colonies;
- mobile homes - movable dwellings designed and constructed to be transported (by road) on their own chassis to a site, and placed on a temporary foundation such as block posts or a prepared pad;
- others - dwellings (other than mobile homes) used as permanent residences and capable of being moved on short notice, e.g., motor homes, tents, railroad cars, houseboats (including float-houses and live-aboard boats).

Additional clarification: Although we exclude identified collectives at the time of survey, it is possible that on December 31 the household lived in a collective and that is why this option is included in Type of Dwelling.

Variable Name: **YEARBUIP**
 Unit Type: Code
 Description: Period of construction of dwelling

- 1 (If SHS_B:003 = 10)
- 2 (If SHS_B:003 = 11)
- 3 (If SHS_B:003 = 12)
- 4 (If SHS_B:003 = 13)
- 5 (If SHS_B:003 = 14)
- 6 (If SHS_B:003 = 15)
- 7 (If SHS_B:003 = (16 or 17))

Code	Description
1	1920 or before
2	1921 - 1945
3	1946 - 1960
4	1961 - 1970
5	1971 - 1980
6	1981 - 1990
7	1991 to reference year

Note: This variable gives the year or period in which the original building was constructed.

Variable Name: **NUMRMP**
 Unit Type: Count
 Description: Number of rooms

- 01-10 (If SHS_B:005 between 1 and 10)
- 11 (If SHS_B:005 >10)

Code	Description
01-10	Actual numbers
11	11 or more rooms

Note: This variable includes the kitchen, bedrooms, and finished rooms in the attic or basement. It excludes bathrooms, halls, vestibules and rooms used solely for business purposes.

Variable Name: **NUMBEDRP**
 Unit Type: Count
 Description: Number of bedrooms

0-4 (If SHS_B:006 between 0 and 4)

5 (If SHS_B:006 >4)

Code	Description
0-4	Actual numbers
5	5 or more bedrooms

Note: This variable includes all rooms designated as bedrooms even though the use may be occasional, as in the case of "spare" bedrooms. Bedrooms that were built in the basement of a dwelling are also included.

Exclude rooms designated as dining rooms, living rooms, etc. which may be used as bedrooms at night.

Variable Name: **NUMBTHRP**
Unit Type: Count
Description: Number of bathrooms

0-2 (If SHS_B:007 between 0 and 2)

3 (If SHS_B:007 >2)

Code	Description
0-2	Actual numbers
3	3 or more bathrooms

Note: This variable indicates the number of rooms in the dwelling with an installed bathtub and/or shower.

Variable Name: **TENURYRP**
Unit Type: Code
Description: Dwelling tenure during reference year

Dwelling tenure = Code 1 (Owned without mortgage)
when SHS_E:002 between 1 and 11 + SHS_D:001 = 1 + SHS_I:001 = 0;
or when SHS_E:002 = 12 + SHS_D:001 = 1

Dwelling tenure = Code 2 (Owned with mortgage)
when SHS_E:002 between 1 and 11 + SHS_D:001 = 2 + SHS_I:001 = 0;
or when SHS_E:002 = 12 + SHS_D:001 = 2

Dwelling tenure = Code 3 (Rented or occupied rent free)
when SHS_E:002 = 0 + SHS_D:001 = 3 + SHS_I:001 between 1 and 11;
or when SHS_E:002 = 0 + SHS_D:001 = 3 + SHS_I:001 = 12;
or when SHS_E:002 between 1 and 11 + SHS_D:001 = 3 + SHS_I:001 = 12;
or when SHS_E:002 = 12 + SHS_D:001 = 3 + SHS_I:001 = 12;
or when SHS_E:002 = 0 + SHS_D:001 = 4 + SHS_I:001 between 1 and 11;
or when SHS_E:002 = 0 + SHS_D:001 = 4 + SHS_I:001 = 12;
or when SHS_E:002 between 1 and 11 + SHS_D:001 = 4 + SHS_I:001 = 12;
or when SHS_E:002 = 12 + SHS_D:001 = 4 + SHS_I:001 = 12

Dwelling tenure = Code 4 (Mixed tenure)
when SHS_E:002 between 1 and 11 + SHS_D:001 = 1 + SHS_I:001 between 1 and 11;
or when SHS_E:002 between 1 and 11 + SHS_D:001 = 2 + SHS_I:001 between 1 and 11;
or when SHS_E:002 between 1 and 11 + SHS_D:001 = 1 + SHS_I:001 = 12;
or when SHS_E:002 between 1 and 11 + SHS_D:001 = 2 + SHS_I:001 = 12;

or when SHS_E:002 between 1 and 11 + SHS_D:001 = 3 + SHS_I:001 between 1 and 11;
or when SHS_E:002 between 1 and 11 + SHS_D:001 = 4 + SHS_I:001 between 1 and 11;
or when SHS_E:002 = 12 + SHS_D:001 = 3 + SHS_I:001 between 1 and 11;
or when SHS_E:002 = 12 + SHS_D:001 = 4 + SHS_I:001 between 1 and 11

Code	Description
1	Owned without mortgage during the reference year
2	Owned with mortgage during the reference year
3	Rented or occupied rent free during the reference year
4	Mixed tenure during the reference year

Note: Owned with mortgage indicates that the dwelling was owned by a household member for the entire reference year and that there is a mortgage as of December 31.

Owned without mortgage indicates that the dwelling was owned by a household member for the entire reference year and that there was no mortgage as of December 31.

Rented or occupied rent-free indicates that the dwelling was rented or occupied rent-free by a household member for the entire reference year.

Mixed tenure includes those households that both owned and rented during the reference year.

Variable Name: **TENDC31P**
Unit Type: Code
Description: Dwelling tenure at December 31
1 (If SHS_D:001 = 1)
2 (If SHS_D:001 = 2)
3 (If SHS_D:001 = (3 or 4))

Code	Description
1	Owned without mortgage on December 31
2	Owned with mortgage on December 31
3	Rented or occupied rent-free on December 31

Note: Owned with mortgage indicates that, on December 31, the dwelling was owned by a household member and there was a mortgage.

Owned without mortgage indicates that, on December 31, the dwelling was owned by a household member and there was no mortgage.

Rented or occupied rent-free indicates that, on December 31, the dwelling was rented or occupied rent-free by a household member.

Variable Name: **PURPRICE**
Unit Type: Dollar (\$)
Description: Purchase price of home bought in reference year
SHS_F:003

Variable Name: **SELPRICE**
Unit Type: Dollar (\$)
Description: Selling price of home sold in reference year
SHS_F:006

Variable Name: **REPAIRS**
Unit Type: Code
Description: Dwelling repairs needed

1 (If SHS_B:004 = 18)
2 (If SHS_B:004 = 19)
3 (If SHS_B:004 = 20)

Code	Description
1	Yes, major repairs were needed
2	Yes, minor repairs were needed
3	No, only regular maintenance was needed

Note: This variable indicates the respondent's perception of the repairs the dwelling needed on December 31 to restore it to its original condition. Remodelling, additions, conversions, or energy improvements which would upgrade the dwelling over and above its original condition are excluded.

Variable Name: **ADRENALT**
Unit Type: Dollar (\$)
Description: Additions, renovations and alterations
SHS_H:002 + SHS_H:004 + SHS_H:006

Variable Name: **NEWINST**
Unit Type: Dollar (\$)
Description: New installations of equipment and fixtures
SHS_H:009 + SHS_H:012 + SHS_H:015

Variable Name: **YRMOVEDP**
Unit Type: Code
Description: Year household moved to the dwelling occupied at December 31

SHS_D:003

Code	Description
1	Before 1970
2	1970 - 1979
3	1980 - 1989
4	1990 – 2000

Note: This item refers to the year the household moved into the dwelling. If the dwelling was occupied by previous generations, the first year that the household member who occupied the dwelling the longest is recorded.

Variable Name: **BUYHMFLG**
Unit Type: Code
Description: Household purchased home in reference year

SHS_F:001

Code	Description
0	No
1	Yes

Variable Name: **HEATMAIP**
Unit Type: Code
Description: Principal heating equipment

1 (If SHS_B:008 = 01)
2 (If SHS_B:008 = (02 or 03))
3 (If SHS_B:008 = (04, 06 or 07))
4 (If SHS_B:008 = 05)

Code	Description
1	Steam or hot water furnace
2	Forced hot air and other hot air furnace
3	Heating stoves (including wood stove), cookstove, or other
4	Electric heating

Note: This variable indicates the type of heating equipment which is chiefly used to heat the dwelling in winter.

Steam or hot water furnaces distribute central heating through radiators located throughout the house and connected by pressure pipes.

Forced hot air furnaces distribute central heating by a motor-driven fan through vents located throughout the dwelling. (This is the most common central heating system.) Furnaces with a pump are included in this category. Other hot air furnaces distribute central heating by convection (natural) flow of hot air through vents located throughout the house. Gravity furnaces are included in this category.

Heating stoves are localised heating units with no central distribution system to other parts of the house (e.g., oil space heater, gas space heater, wood stoves). Also includes cookstoves and any other type of heating equipment not listed above.

Electric heating includes electric furnaces and permanently installed baseboard electric heating and other types such as floor or ceiling heating wires in all or most rooms.

Variable Name: **HEATAGE**
Unit Type: Code
Description: Age of principal heating equipment

1 (If SHS_B:010 = 08)
2 (If SHS_B:010 = 09)
3 (If SHS_B:010 = 10)
4 (If SHS_B:010 = 11)
5 (If SHS_B:010 = 12)

Code	Description
1	5 years or less
2	6 to 10 years
3	11 to 15 years
4	16 to 20 years
5	Over 20 years

Note: This variable indicates how long ago the principal heating equipment was installed.

Variable Name: **HEATFUEP**
Unit Type: Code
Description: Principal heating fuel
1 (If SHS_B:011 = 13)
2 (If SHS_B:011 = 14)
3 (If SHS_B:011 = 16)
4 (If SHS_B:011 = (15, 17 ou 18))

Code	Description
1	Oil or other liquid fuel
2	Piped gas (natural gas)
3	Electricity
4	Bottled gas, wood, or other

Note: The principal winter fuel used in the principal heating equipment is given here (e.g., oil or other liquid fuel, piped or bottled gas, electricity, wood or other fuels).

Variable Name: **HOTWATEP**
Unit Type: Code
Description: Principal heating fuel for hot water
1 (If SHS_B:013 = 19)
2 (If SHS_B:013 = 20)
3 (If SHS_B:013 = (21, 23, 24 or 25))
4 (If SHS_B:013 = 22)

Code	Description
1	Oil or other liquid fuel
2	Piped gas (natural gas)
3	Bottled gas (propane), wood, other, or no running hot water
4	Electricity

Note: This variable indicates the type of fuel used for the running hot water supply (e.g., oil or other liquid fuel, piped gas, electricity or other fuels such as bottled gas or wood).

Variable Name: **COOKINGP**
Unit Type: Code
Description: Principal cooking fuel
1 (If SHS_B:015 = 27)
2 (If SHS_B:015 = 29)
3 (If SHS_B:015 = (26, 28, 30 or 31))

Code	Description
------	-------------

- 1 Piped gas (natural gas)
- 2 Electricity
- 3 Oil or other liquid fuel, bottled gas (propane), wood, or other

Note: This variable indicates the main fuel for the range or stove on which the household does most of the cooking (e.g., piped gas, electricity, oil or other liquid fuel, bottled gas, and wood).

Variable Name: **REDURENT**

Unit Type: Code
Description: Reduced rent reason

SHS_I:005

Code	Description
0	Dwelling not rented
1	Government subsidized housing
2	Other reason (e.g. services to landlord)
3	No reduced rent

3.3 Characteristics of Reference Person

Variable Name: **RPINCTOT**

Unit Type: Dollar (\$)
Description: Income of reference person before taxes

Sum(SHS_U:004 for Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:005 for Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:006 for Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:007 for Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:008 for Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:009 for Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:010 for Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:011 for Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:012 for Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:013 for Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:014 for Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:015 for Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:016 for Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:018 for Reference Person: If (SHS_A:012 between 1 and 3))

Note: Includes income for reference person from earnings, investment, government transfer payments and other sources.

Variable Name: **RPINCEAR**

Unit Type: Dollar (\$)
Description: Income of reference person from earnings

Sum(SHS_U:004 for Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:005 for Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:006 for Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:007 for Reference Person: If (SHS_A:012 between 1 and 3))

Note: Includes income for reference person from wages and salaries, net income from self-employment, and gross income from roomers and boarders.

Variable Name: **RPINCINV**

Unit Type: Dollar (\$)

Description: Income of reference person from investment

Sum(SHS_U:008 for Reference Person: If (SHS_A:012 between 1 and 3))

Note: Includes income for reference person from dividends, interest, and other investment income such as net rental income or interest received from loans or mortgages.

Variable Name: **RPINCTRA**

Unit Type: Dollar (\$)

Description: Income of reference person from government transfer payments

Sum(SHS_U:009 for Reference Person: If (SHS_A:012 between 1 and 3))

Sum(SHS_U:010 for Reference Person: If (SHS_A:012 between 1 and 3))

Sum(SHS_U:011 for Reference Person: If (SHS_A:012 between 1 and 3))

Sum(SHS_U:012 for Reference Person: If (SHS_A:012 between 1 and 3))

Sum(SHS_U:013 for Reference Person: If (SHS_A:012 between 1 and 3))

Sum(SHS_U:014 for Reference Person: If (SHS_A:012 between 1 and 3))

Sum(SHS_U:015 for Reference Person: If (SHS_A:012 between 1 and 3))

Note: Includes income for reference person from Child Tax Benefits, Old Age Security Pension, Guaranteed Income Supplement, Spouse's Allowance, Canada Pension Plan Benefits or Quebec Pension Plan Benefits, Employment Insurance Benefits, Goods and Services Tax Credit, Provincial Tax Credits, Social Assistance, Provincial Income Supplements, Workers' Compensation Benefits, Veterans' Pensions, Civilian War Pensions and Allowances, and Other Income from Government Sources.

Variable Name: **RPINCOTH**

Unit Type: Dollar (\$)

Description: Income of reference person from other sources

Sum(SHS_U:016 for Reference Person: If (SHS_A:012 between 1 and 3))

Sum(SHS_U:018 for Reference Person: If (SHS_A:012 between 1 and 3))

Note: Includes income of reference person from retirement pensions, superannuation, annuities, RRIF withdrawals, and other income such as alimony, separation allowance, child support, retirement allowance, severance pay, income maintenance plan payments, scholarships, bursaries and income from outside Canada.

Variable Name: **RPMARP**

Unit Type: Code

Description: Marital status of reference person

SHS_A:005

Code	Description
1	Married or common law
2	Never married (single)
3	Other (separated, divorced, or widowed)

Variable Name: **RPAGEP**
Unit Type: Count
Description: Age of reference person

SHS_A:003

Code	Description
24	Less than 25 years
25 to 79	Actual numbers in years
80	80-84 years
85	85 years and over

Variable Name: **RPAGEGRP**
Unit Type: Code
Description: Age group of reference person

SHS_A:003

Code	Description
01	Less than 25 years
02	25-29 years
03	30-34 "
04	35-39 "
05	40-44 "
06	45-49 "
07	50-54 "
08	55-59 "
09	60-64 "
10	65-69 "
11	70-74 "
12	75-79 "
13	80-84 "
14	85 years and over

Variable Name: **RPSEX**
Unit Type: Code
Description: Sex of reference person

Sex (SHS_A:004) of person having relationship (SHS_A:002) = 1

Code	Description
1	Male
2	Female

Variable Name: **RPWEEKFT**
Unit Type: Count
Description: Number of weeks worked full-time by reference person

SHS_U:002

Code	Description
00 to 52	Actual numbers

Variable Name: **RPWEEKPT**
Unit Type: Count
Description: Number of weeks worked part-time by reference person
SHS_U:003
Code Description
00 to 52 Actual numbers

Variable Name: **RPPREVDW**
Unit Type: Code
Description: Tenure of previous dwelling of reference person
SHS_D:003
SHS_D:004
Code Description
1 Before 1996
2 Owned
3 Rented
4 Did not maintain own dwelling

Note: Households that moved to their dwelling before 1996 were not asked this question.

3.4 Characteristics of Spouse of Reference Person

Variable Name: **SPINCTOT**

Unit Type: Dollar (\$)
Description: Income of spouse before taxes

Sum(SHS_U:004 for Spouse of Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:005 for Spouse of Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:006 for Spouse of Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:007 for Spouse of Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:008 for Spouse of Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:009 for Spouse of Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:010 for Spouse of Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:011 for Spouse of Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:012 for Spouse of Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:013 for Spouse of Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:014 for Spouse of Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:015 for Spouse of Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:016 for Spouse of Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:018 for Spouse of Reference Person: If (SHS_A:012 between 1 and 3))

Variable Name: **SPINCEAR**
Unit Type: Dollar (\$)
Description: Income of spouse from earnings

Sum(SHS_U:004 for Spouse of Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:005 for Spouse of Reference Person: If (SHS_A:012 between 1 and 3))

Sum(SHS_U:006 for Spouse of Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:007 for Spouse of Reference Person: If (SHS_A:012 between 1 and 3))

Note: Includes income for spouse of reference person from wages and salaries, net income from self-employment, and gross income from roomers and boarders.

Variable Name: **SPINCINV**
Unit Type: Dollar (\$)
Description: Income of spouse from investment

Sum(SHS_U:008 for Spouse of Reference Person: If (SHS_A:012 between 1 and 3))

Note: Includes income for spouse of reference person from dividends, interest, and other investment income such as net rental income or interest received from loans or mortgages.

Variable Name: **SPINCTRA**
Unit Type: Dollar (\$)
Description: Income of spouse from government transfer payments

Sum(SHS_U:009 for Spouse of Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:010 for Spouse of Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:011 for Spouse of Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:012 for Spouse of Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:013 for Spouse of Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:014 for Spouse of Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:015 for Spouse of Reference Person: If (SHS_A:012 between 1 and 3))

Note: Includes income for spouse of reference person from Child Tax Benefits, Old Age Security Pension, Guaranteed Income Supplement, Spouse's Allowance, Canada Pension Plan Benefits or Quebec Pension Plan Benefits, Employment Insurance Benefits, Goods and Services Tax Credit, Provincial Tax Credits, Social Assistance, Provincial Income Supplements, Workers' Compensation Benefits, Veterans' Pensions, Civilian War Pensions and Allowances, and Other Income from Government Sources.

Variable Name: **SPINCOTH**
Unit Type: Dollar (\$)
Description: Income of spouse from other sources

Sum(SHS_U:016 for Spouse of Reference Person: If (SHS_A:012 between 1 and 3))
Sum(SHS_U:018 for Spouse of Reference Person: If (SHS_A:012 between 1 and 3))

Note: Includes income for spouse of reference person from retirement pensions, superannuation, annuities, RRIF withdrawals, and other income such as alimony, separation allowance, child support, retirement allowance, severance pay, income maintenance plan payments, scholarships, bursaries and income from outside Canada.

Variable Name: **SPAGEP**
Unit Type: Count
Description: Age of spouse

SHS_A:003

Code	Description
24	Less than 25 years
25 to 79	Actual numbers in years
80	80-84 years
85	85 years and over
99	No spouse

Variable Name: **SPAGEGRP**
Unit Type: Code
Description: Age group of spouse

SHS_A:003

Code	Description
01	Less than 25 years
02	25-29 years
03	30-34 "
04	35-39 "
05	40-44 "
06	45-49 "
07	50-54 "
08	55-59 "
09	60-64 "
10	65-69 "
11	70-74 "
12	75-79 "
13	80-84 "
14	85 years and over
99	No spouse

Variable Name: **SPSEX**
Unit Type: Code
Description: Sex of spouse

Sex (SHS_A:004) of person having relationship (SHS_A:002) = 2

Code	Description
1	Male
2	Female
9	No spouse

Variable Name: **SPWEEKFT**
Unit Type: Count
Description: Number of weeks worked full-time by spouse

SHS_U:002

Code	Description
00 to 52	Actual numbers
99	No spouse

Variable Name: **SPWEEKPT**
Unit Type: Count
Description: Number of weeks worked part-time by spouse

SHS_U:003

Code	Description
00 to 52	Actual numbers
99	No spouse

Variable Name: **SPPREVDW**
Unit Type: Code
Description: Tenure of previous dwelling of spouse
SHS_D:005

Code	Description
1	Before 1996
2	Owned
3	Rented
4	Did not maintain own dwelling
9	No spouse

Note: Households that moved to their dwelling before 1996 were not asked this question.

3.5 Household Description

Variable Name: **ECFAM**
Unit Type: Count
Description: Number of economic families in household
SHS_A:006

Code	Description
1	1
2	2 or more

Note: In the Survey of Household Spending, one-person households are included in code 1. However, the Census definition of an economic family is "a group of two or more persons who live in the same dwelling and are related to each other by blood, marriage, common-law or adoption".

Variable Name: **HHTYPEP**
Unit Type: Code
Description: Household type

1. One-person household
Size of household = 1
2. Couple household only
Couple household with no children and no additional persons
Size of household = 2 and marital status (A:005) = 1 or 2 and member of household December 31 (A:007) = 1 and person data collection code (A:012) = 1 to 3 for both reference person and spouse
3. Couple household with single children only
Couple household with single children and no additional persons
Marital status (A:005) = 1 or 2 and member of household December 31 (A:007) = 1 and person data collection code (A:012) = 1 to 3 for both reference person and spouse and primary children > 0 and secondary persons = 0

4. Couple household with other relative(s)
 Couple household with additional related persons
 (these households may or may not have children)
 Marital status (A:005) = 1 or 2 and member of household December 31 (A:007) = 1 and person data collection code (A:012) = 1 to 3 for both reference person and spouse and related secondary persons > 0 and unrelated secondary persons = 0
 Couple household with unrelated person(s)
 Couple household with additional persons, at least one person unrelated
 (these households may or may not have children)
 Marital status (A:005) = 1 or 2 and member of household December 31 (A:007) = 1 and person data collection code (A:012) = 1 to 3 for both reference person and spouse and unrelated secondary persons > 0
5. Lone-parent household with no additional persons
 No person with relationship (A:002) = 02 and primary children > 0 and secondary persons = 0
6. Other household, all persons related
 Any other household where related secondary persons > 0 and unrelated secondary persons = 0 or household with spouse not married or not present December 31 (any person with relationship (A:002) = 02 and marital status (A:005) not 1 or 2 or member of household December 31 (A:007) not 1) and person data collection code (A:012) = 1 to 3 and unrelated secondary persons = 0)
7. Other household, at least one person unrelated
 Any other household with at least one person with person data collection code (A:012) = 1 to 3

Code	Description
1	One person
2	Couple only
3	Couple with single children only
4	Couple with other relatives or unrelated persons
5	Lone parent with no additional persons
6	Other household with relative(s)
7	Other household with unrelated person(s)

Note: Children can be any age as long as they are single (never married). Foster children are included.
 Relatives may include:

- sons, daughters and foster children (of the reference person) whose marital status is other than single (never married),
- relatives (of the reference person) by birth or marriage (not spouse, son, daughter, or foster child),
- spouse (of the reference person) who was not present in the household on December 31.

Variable Name: **HHSZD31**
 Unit Type: Count
 Description: Household size at December 31
 SHS_A:007

Code	Description
------	-------------

1-5 Actual numbers
6 6 or more

Note: Count of persons member of household on December 31. Top-coded at 6 in the public-use file.

Variable Name: **CH04D31**
Unit Type: Count

Description: Number of children aged 0 to 4 years in the household at December 31

Code	Description
0-1	Actual numbers
2	2 or more

Count of persons having age (reference year - year of birth (A:003)) < 5 and person data collection code (A:012) = 1 to 3 and member on December 31 (A:007) = 1

Note: Top-coded at 2 in the public-use file.

Variable Name: **CH517D31**
Unit Type: Count

Description: Number of children aged 5 to 17 years in the household at December 31

Code	Description
0-2	Actual numbers
3	3 or more

Count of persons having age (reference year - year of birth (A:003)) > 4 and < 18 and person data collection code (A:012) = 1 to 3 and member on December 31 (A:007) = 1

Note: Top-coded at 3 in the public-use file.

Variable Name: **Y1824D31**
Unit Type: Count

Description: Number of youths aged 18 to 24 years in the household at December 31

Code	Description
0-1	Actual numbers
2	2 or more

Count of persons having age (reference year - year of birth (A:003)) > 17 and < 25 and person data collection code (A:012) = 1 to 3 and member on December 31 (A:007) = 1

Note: Top-coded at 2 in the public-use file.

Variable Name: **A2564D31**
Unit Type: Count

Description: Number of adults aged 25 to 64 years at December 31

Code	Description
------	-------------

0-1 Actual numbers
2 2 or more

Count of persons having age (reference year - year of birth (A:003)) > 24 and < 65 and person data collection code (A:012) = 1 to 3 and member on December 31 (A:007) = 1

Note: Top-coded at 2 in the public-use file.

Variable Name: **SE65D31**
Unit Type: Count
Description: Number of seniors aged 65 or more at December 31

Code Description
0-1 Actual numbers
2 2 or more

Count of persons having age (reference year - year of birth (A:003)) > 64 and person data collection code (A:012) = 1 to 3 and member on December 31 (A:007) = 1

Note: Top-coded at 2 in the public-use file.

Variable Name: **HHSZTOT**
Unit Type: Count
Description: Household size (number of persons a member sometime in reference year)

Code Description
1-5 Actual numbers
6 6 or more

Count of persons in the household with person data collection code (SHS_A:012) = 1 to 3

Note: Top-coded at 6 in the public-use file.

Variable Name: **AGEYOUNP**
Unit Type: Count
Description: Age of youngest child (member sometime in reference year)

This is the lowest age (reference year - year of birth (SHS_A:003)) of any person in the household with relationship (SHS_A:002) = 3 and marital status (SHS_A:005) = 3 and person data collection code (SHS_A:012) = 1 to 3 if present, otherwise set to 99

Code Description
00 to 24 Actual numbers in years
25 25 years and over
99 Without children

Variable Name: **NUMWKS**
Unit Type: Count
Description: Total number of weeks a member of household (sum for all household members)

SHS_A:009

Code	Description
001-311	Actual numbers
312	312 or more

Note: Divide by 52 to obtain year equivalent household size. Top-coded at 312 in the public-use file.

Variable Name: **NUMFTP**
Unit Type: Code
Description: Number of full-time earners
Count of persons having employment status = 1 and person data collection code (SHS_A:012) = 1 to 3

Weeks worked (full-time weeks (SHS_U:002) + part-time weeks (SHS_U:003)) >= 49 and full-time weeks (SHS_U:002) >= 25

Maximum value of weeks worked is limited to 52.

Code	Description
0	None
1	1
2	2 or more

Variable Name: **NUMPTP**
Unit Type: Code
Description: Number of part-time earners
Count of persons having employment status = 2 and person data collection code (SHS_A:012) = 1 to 3

Weeks worked (full-time weeks (SHS_U:002) + part-time weeks (SHS_U:003)) = 1 to 48 or weeks worked (full-time weeks (SHS_U:002) + part-time weeks (SHS_U:003)) >= 49 and full-time weeks (SHS_U:002) < 25

Maximum value of weeks worked is limited to 52.

Code	Description
0	None
1	1
2	2
3	3 or more

Variable Name: **MAINCSCP**
Unit Type: Code
Description: Household major source of income

0. All sources = 0

Total wages and salaries (U:004) = 0 and total self-employment income (U:005+U:006+U:007) = 0 and total investment income (U:008) = 0 and total government transfer payments (U:009+U:010+U:011+U:012+U:013+U:014+U:015) = 0 and other income (U:016+U:018) = 0

1. Major source is wages and salaries

Total wages and salaries (U:004) not = 0 and >= total self-employment income

(U:005+U:006+U:007) and total investment income (U:008) and total government transfer payments (U:009+U:010+U:011+U:012+U:013+U:014+U:015) and other income (U:016+U:018)

OR Major source is self-employment income

Total self-employment income (U:005+U:006+U:007) not = 0 and >= total wages and salaries (U:004) and total investment income (U:008) and total government transfer payments (U:009+U:010+U:011+U:012+U:013+U:014+U:015) and other income (U:016+U:018)

2. Major source is investment income

Total investment income (U:008) not = 0 and >= total wages and salaries (U:004) and total self-employment income (U:005+U:006+U:007) and total government transfer payments (U:009+U:010+U:011+U:012+U:013+U:014+U:015) and other income (U:016+U:018)

3. Major source is government transfer payments

Total government transfer payments (U:009+U:010+U:011+U:012+U:013+U:014+U:015) not = 0 and >= total wages and salaries (U:004) and total self-employment income (U:005+U:006+U:007) and total investment income (U:008) and other income (U:016+U:018)

4. Major source is other income

Other income (U:016+U:018) not = 0 and >= total wages and salaries (U:004) and total self-employment income (U:005+U:006+U:007) and total investment income (U:008) and total government transfer payments (U:009+U:010+U:011+U:012+U:013+U:014+U:015)

Code	Description
0	All sources = 0
1	Major source is wages and salaries or self-employment income
2	Major source is investment income
3	Major source is government transfer payments
4	Major source is other sources

Variable Name: **HHINCTOT**

Unit Type: Dollar (\$)

Description: Household income before taxes

SHS_U:004 to SHS_U:018 EXCLUDING personal income tax refunds (SHS_U:017)

Sum(SHS_U:004 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)
Sum(SHS_U:005 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)
Sum(SHS_U:006 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)
Sum(SHS_U:007 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)
Sum(SHS_U:008 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)
Sum(SHS_U:009 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)
Sum(SHS_U:010 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)
Sum(SHS_U:011 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)
Sum(SHS_U:012 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)
Sum(SHS_U:013 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)
Sum(SHS_U:014 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)
Sum(SHS_U:015 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)
Sum(SHS_U:016 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)
Sum(SHS_U:018 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)

Note: Includes income for household from earnings, investment, government transfer payments and other sources.

Variable Name: **HHINCEAR**

Unit Type: Dollar (\$)

Description: Household income from earnings

Sum(SHS_U:004 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)

Sum(SHS_U:005 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)

Sum(SHS_U:006 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)

Sum(SHS_U:007 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)

Note: Includes income for household from wages and salaries, net income from self-employment, and gross income from roomers and boarders.

Variable Name: **HHINCINV**

Unit Type: Dollar (\$)

Description: Household income from investment

Sum(SHS_U:008 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)

Note: Includes income for household from dividends, interest, and other investment income such as net rental income or interest received from loans or mortgages.

Variable Name: **HHINCTRA**

Unit Type: Dollar (\$)

Description: Household income from government transfer payments

Sum(SHS_U:009 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)

Sum(SHS_U:010 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)

Sum(SHS_U:011 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)

Sum(SHS_U:012 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)

Sum(SHS_U:013 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)

Sum(SHS_U:014 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)

Sum(SHS_U:015 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)

Note: Includes income for household from Child Tax Benefits, Old Age Security Pension, Guaranteed Income Supplement, Spouse's Allowance, Canada Pension Plan Benefits or Quebec Pension Plan Benefits, Employment Insurance Benefits, Goods and Services Tax Credit, Provincial Tax Credits, Social Assistance, Provincial Income Supplements, Workers' Compensation Benefits, Veterans' Pensions, Civilian War Pensions and Allowances, and Other Income from Government Sources.

Variable Name: **HHINCOTH**

Unit Type: Dollar (\$)

Description: Household income from other sources

Sum(SHS_U:016 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)

Sum(SHS_U:018 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)

Note: Includes household income from retirement pensions, superannuation, annuities, RRIF withdrawals, and other income such as alimony, child support, retirement

allowance, scholarships, and income from outside Canada.

Variable Name: **TOTHMONR**

Unit Type: Dollar (\$)

Description: Total other money receipts (includes net winnings from games of chance)

Sum(SHS_U:019 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987) (SHS_T:008 + SHS_T:010 + SHS_T:012 + SHS_T:014) - ((SHS_T:007 + SHS_T:009 + SHS_T:011 + SHS_T:013) - 1); If (SHS_T:008 + SHS_T:010 + SHS_T:012 + SHS_T:014) >= (SHS_T:007 + SHS_T:009 + SHS_T:011 + SHS_T:013), otherwise set to 0

Note: Includes other money received by households such as gifts received from persons outside household, cash inheritances, life insurance settlements, or net winnings from games of chance if greater than losses.

Variable Name: **MONFLOWS**

Unit Type: Dollar (\$)

Description: Money flows (assets, loans and other debts)

SHS_W:001 - SHS_W:002

SHS_W:003 - SHS_W:004

SHS_W:005 - SHS_W:006

SHS_W:007 - SHS_W:008

SHS_W:009 - SHS_W:010

SHS_W:011 - SHS_W:012

(SHS_W:013 + SHS_L:018 + SHS_L:052) * (-1)

(SHS_G:008 * SHS_G:009) + (SHS_G:010 * SHS_G:011) + (SHS_G:012 * SHS_G:013)

(SHS_G:018 + SHS_G:019 + SHS_G:020 + SHS_G:021) * (-1)

SHS_F:003

SHS_F:006 * (-1)

SHS_H:002 + SHS_H:004 + SHS_H:006

SHS_H:009 + SHS_H:012 + SHS_H:015

SHS_K:005

SHS_K:003

SHS_K:004 * (-1)

SHS_K:008 * (-1)

SHS_K:009

SHS_K:019

SHS_K:017

SHS_K:018 * (-1)

SHS_K:024 * (-1)

SHS_K:020

SHS_X:002

SHS_X:003

SHS_X:005 * (-1)

SHS_X:006 * (-1)

SHS_X:004 * (-1)

SHS_X:007 - SHS_X:008

SHS_X:010 - SHS_X:009

Sum(SHS_Y:015 for each loan)

(Sum(SHS_Y:014 + SHS_Y:017 for each loan)) * (-1)

SHS_Y:114 - SHS_Y:115

SHS_Y:117 - SHS_Y:118

SHS_Y:111 - SHS_Y:112

SHS_Y:120 - SHS_Y:121
SHS_Y:116
SHS_Y:119
SHS_Y:113
SHS_Y:122

Note: Money flows are net changes during the survey year in bank balances; money on hand; money owed to the household; money owed by the household; purchase and sale of stocks and bonds, personal property, and real estate; expenditures on home additions, renovations and new installations; and contributions to and withdrawals from registered retirement savings plans.

"Net change in assets and liabilities" was the term used in 1996 and earlier Family Expenditure Surveys.

See note under G001.

Variable Name: **RRSPCHNG**
Unit Type: Dollar (\$)
Description: Registered Retirement Savings Plan (RRSP) change
SHS_W:007 – SHS_W:008

Note: Contributions to RRSP minus withdrawals from RRSP at the household level.

Variable Name: **EIFLAG**
Unit Type: Code
Description: Employment insurance benefit (EI) indicator
SHS_U:012

Code	Description
0	Employment insurance benefit = 0
1	Employment insurance benefit > 0

3.6 Household Equipment (at December 31)

Variable Name: **WASHER**
Unit Type: Code
Description: Washing machine
0 (If SHS_C:011 = No)
1 (If SHS_C:011 = Yes)

Code	Description
0	No
1	Yes

Note: Washing machines located outside the dwelling and shared with other households are excluded.

Variable Name: **DRYERP**
Unit Type: Code
Description: Clothes dryer

0 (If SHS_C:012 = 3)
1 (If SHS_C:012 = 1)
2 (If SHS_C:012 = 2)

Code	Description
0	None
1	Electric
2	Gas

Note: Dryers may be electric or gas.

Clothes dryers located outside the dwelling and shared with other households are excluded.

Variable Name: **DSHWASH**
Unit Type: Code
Description: Dishwasher

0 (If SHS_C:010 = No)
1 (If SHS_C:010 = Yes)

Code	Description
0	No
1	Yes

Note: Dishwashers may be built-in or portable.

Variable Name: **NMFRIDGP**
Unit Type: Count
Description: Number of refrigerators

0 (If SHS_C:001 = 0)
1 (If SHS_C:001 = 1)
2 (If SHS_C:001 = 2)
3 (If SHS_C:001 = 3 OR >3)

Code	Description
0	None
1	1
2	2
3	3 or more

Variable Name: **FREEZER**
Unit Type: Code
Description: Freezer

0 (If SHS_C:009 = No)
1 (If SHS_C:009 = Yes)

Code	Description
0	No
1	Yes

Note: A freezer is an individual piece of equipment and not part of a refrigeration unit such as the freezer in a refrigerator.

Variable Name: **MICROWV**
Unit Type: Code
Description: Microwave oven

0 (If SHS_C:008 = No)
1 (If SHS_C:008 = Yes)

Code	Description
0	No
1	Yes

Variable Name: **AIRCONP**
Unit Type: Code
Description: Air conditioner

0 (If SHS_C:013 = 3)
1 (If SHS_C:013 = 1)
2 (If SHS_C:013 = 2)

Code	Description
0	None
1	Window type
2	Central

Note: A central air conditioner is designed to cool the air in the entire building and may be located either inside or outside this dwelling unit, e.g., in the basement of an apartment block. A window-type air conditioner is installed in a window or through a wall to cool the air in a room.

Variable Name: **NMPHONP**
Unit Type: Count
Description: Number of telephones

0 (If SHS_C004 = 0)
1 (If SHS_C004 = 1)
2 (If SHS_C004 = 2)
3 (If SHS_C004 = 3)
4 (If SHS_C004 = 4)
5 (If SHS_C004 = 5)
6 (If SHS_C004 = 6 OR >6)

Code	Description
0	None
1	1
2	2
3	3
4	4
5	5
6	6 or more

Note: Telephones used for business are included if the business is conducted in the dwelling. Cordless phones are included. Cellular telephones are excluded.

Variable Name: **NMPHNUMP**
Unit Type: Count

Description: Number of telephone numbers

0 (If SHS_C006 = 0)
1 (If SHS_C006 = 1)
2 (If SHS_C006 = 2)
3 (If SHS_C006 = 3 OR >3)

Code	Description
0	None
1	1
2	2
3	3 or more

Variable Name: **CELLPHON**

Unit Type: Code

Description: Cellular telephone

0 (If SHS_C:007 = No)
1 (If SHS_C:007 = Yes)

Code	Description
0	No
1	Yes

Note: Cordless phones are excluded.

Variable Name: **CDPLYER**

Unit Type: Code

Description: Compact disc player

0 (If SHS_C:016 = No)
1 (If SHS_C:016 = Yes)

Code	Description
0	No
1	Yes

Note: A compact disc player may be a separate unit, part of a component or built in (as in a receiver/cassette recorder/compact disc combination unit).

Variable Name: **CABLETV**

Unit Type: Code

Description: Cablevision

0 (If SHS_C:014 = No)
1 (If SHS_C:014 = Yes)

Code	Description
0	No
1	Yes

Variable Name: **SATELLIT**

Unit Type: Code

Description: Satellite dish

0 (If SHS_C:015 = No)
1 (If SHS_C:015 = Yes)

Code	Description
0	No
1	Yes

Note: New for 2001.

Variable Name: **DVD**
Unit Type: Code
Description: DVD player

0 (If SHS_C:017 = No)
1 (If SHS_C:017 = Yes)

Code	Description
0	No
1	Yes

Note: New for 2001.

Variable Name: **CDWRITER**
Unit Type: Code
Description: CD writer

0 (If SHS_C:018 = No)
1 (If SHS_C:018 = Yes)

Code	Description
0	No
1	Yes

Note: New for 2001.

Variable Name: **NMVCRP**
Unit Type: Count
Description: Number of video cassette recorders

0 (If SHS_C003 = 0)
1 (If SHS_C003 = 1)
2 (If SHS_C003 = 2)
3 (If SHS_C003 = 3 OR >3)

Code	Description
0	None
1	1
2	2
3	3 or more

Note: Video cassette recorder (VCR) is a unit which plays videocassettes when attached to a television or monitor.

Variable Name: **COMPUTER**
Unit Type: Code
Description: Home computer

0 (If SHS_C:019 = No)
1 (If SHS_C:019 = Yes)

Code	Description
0	No
1	Yes

Note: Computers used exclusively for business purposes are excluded.

Variable Name: **INTERNET**
Unit Type: Code
Description: Internet use from home

0 (If SHS_C:020 = No)
1 (If SHS_C:020 = Yes)

Code	Description
0	No
1	Yes
9	No computer

Note: This variable indicates whether or not the household accesses the Internet via a computer in the home. It includes cases where a home computer is used to link to a business located outside the dwelling for access to the Internet.

Excluded are cases where the Internet is accessed directly through a computer located outside the dwelling (e.g., work).

Variable Name: **NETCONEC**
Unit Type: Code
Description: Internet connection

1 (If SHS_C:021 = 1)
2 (If SHS_C:021 = 2)
3 (If SHS_C:021 = 3)
4 (If SHS_C:021 = 4)
5 (If SHS_C:021 = 5)

Code	Description
0	No Internet connection
1	Regular telephone connection to a computer
2	High-speed telephone connection to a computer
3	Cable connection to a computer
4	Telephone line connected to a television
5	Other type of connection

Note: New for 2001.

Variable Name: **NMCOLTVP**
Unit Type: Count
Description: Number of colour televisions

0 (If SHS_C002 = 0)
1 (If SHS_C002 = 1)
2 (If SHS_C002 = 2)
3 (If SHS_C002 = 3)
4 (If SHS_C002 = 4)
5 (If SHS_C002 = 5 OR >5)

Code	Description
0	None
1	1
2	2
3	3
4	4
5	5 or more

Variable Name: **NMVEHONP**
Unit Type: Count
Description: Number of vehicles owned at December 31

0 (If Count (vehicles where SHS_Q:023 = 1) = 0)
1 (If Count (vehicles where SHS_Q:023 = 1) = 1)
2 (If Count (vehicles where SHS_Q:023 = 1) = 2)
3 (If Count (vehicles where SHS_Q:023 = 1) = 3)
4 (If Count (vehicles where SHS_Q:023 = 1) = 4 OR >4)

Note: This variable gives the number of vehicles (car, van/mini-van, truck/sport utility vehicle) owned by members of the household on December 31 completely or partially for private use, excluding those leased.

Variable Name: **VEHLEASP**
Unit Type: Code
Description: Vehicles leased at December 31

0 (If Count (vehicles where SHS_Q:023 = 2) = 0)
1 (If Count (vehicles where SHS_Q:023 = 2) = 1 or more)

Code	Description
0	No
1	Yes

3.7 Expenditure - Food

Variable Name: **F001**
Unit Type: Dollar (\$)
Description: Total food

SHS_N:001 - SHS_N:002 + SHS_N:003 + SHS_N:004
SHS_N:005
SHS_N:014
SHS_N:015
SHS_N:008

Variable Name: **F002**
Unit Type: Dollar (\$)
Description: Food purchased from stores

SHS_N:001 - SHS_N:002 + SHS_N:003 + SHS_N:004
SHS_N:005

Note: Stores include frozen food provisioners, outdoor farmers' markets and stands, and all other non-service establishments. ("Food prepared at home" was the term

used in the 1978 and earlier family expenditure surveys.)

Variable Name: **F008**
Unit Type: Dollar (\$)
Description: Food purchased from restaurants
SHS_N:008

Note: Restaurants include refreshment stands, snack bars, vending machines, mobile canteens, caterers, and coffee wagons. ("Food in eating places" was the term used in the 1978 and earlier family expenditure surveys.)

3.8 Expenditure - Shelter

Variable Name: **G001**
Unit Type: Dollar (\$)
Description: Total shelter
$$\begin{aligned} & ((\text{SHS_I:002} + \text{SHS_I:003}) * (100 - \text{PctRentAgainstBusiness_I:011})/100) - (\text{SHS_I:004} * \\ & (100 - \text{PctRentAgainstBusiness_I:011})/100) \\ & \text{SHS_I:006} * (100 - \text{PctRentAgainstBusiness_I:011})/100 \\ & \text{SHS_I:007} * (100 - \text{PctRentAgainstBusiness_I:011})/100 \\ & (\text{SHS_G:002} * \text{SHS_G:003}) + (\text{SHS_G:004} * \text{SHS_G:005}) + (\text{SHS_G:006} * \text{SHS_G:007}) - \\ & (\text{SHS_E:003} * (100 - \text{PctExpAgainstBusiness_E:009}) / 100 \text{ if SHS_G:014} = '1') - \\ & (\text{SHS_G:016} \text{ if SHS_G:015} = '1') \\ & \text{SHS_H:008} + \text{SHS_H:011} + \text{SHS_H:014} + \text{SHS_H:017} + \text{SHS_H:019} + \text{SHS_H:021} \\ & \text{SHS_E:006} * (100 - \text{PctExpAgainstBusiness_E:009})/100 \\ & \text{SHS_E:003} * (100 - \text{PctExpAgainstBusiness_E:009})/100 \\ & \text{SHS_E:005} * (100 - \text{PctExpAgainstBusiness_E:009})/100 \\ & \text{SHS_F:007} \\ & \text{SHS_F:008} \\ & \text{SHS_G:016} \\ & \text{SHS_F:009} \\ & \text{SHS_F:004} \\ & \text{SHS_J:001} \\ & \text{SHS_J:003} \\ & \text{SHS_J:002} \\ & \text{SHS_K:010} \\ & \text{SHS_K:011} \\ & \text{SHS_K:012} \\ & \text{SHS_K:013} \\ & \text{SHS_K:014} \\ & \text{SHS_J:005} \\ & \text{SHS_J:006} \end{aligned}$$

Note: Shelter includes expenditures on principal accommodation (either owned or rented) and on other accommodation such as vacation homes or accommodation while travelling.

Prior to 1997 in the Family Expenditure Survey, mortgage interest payments were reported in the "Shelter" category under both "Owned living quarters" and "Owned vacation homes". (Mortgage principal payments were reported under "Net change in assets and liabilities" since they were considered to pertain to a change in the

value of household assets.)

For the Survey of Household Spending (starting with the 1997 reference year), interest payments are not available separately from principal. "Regular mortgage payments" on "Owned living quarters" (including both principal and interest) are included under "Shelter". However, the entire mortgage payments for owned vacation homes is included under "Money flows—assets, loans and other debts". Caution should therefore be used when comparing these data to data from previous years. Categories affected include: Total expenditure, Total current consumption, Principal accommodation, Owned living quarters, Regular mortgage payments, Other accommodation, Owned vacation home, and Money flows (assets, loans, and other debts).

Variable Name: **G002**

Unit Type: Dollar (\$)

Description: Principal accommodation

$$\begin{aligned} & ((SHS_I:002 + SHS_I:003) * (100 - PctRentAgainstBusiness_I:011)/100) - (SHS_I:004 * \\ & (100 - PctRentAgainstBusiness_I:011)/100) \\ & SHS_I:006 * (100 - PctRentAgainstBusiness_I:011)/100 \\ & SHS_I:007 * (100 - PctRentAgainstBusiness_I:011)/100 \\ & (SHS_G:002 * SHS_G:003) + (SHS_G:004 * SHS_G:005) + (SHS_G:006 * SHS_G:007) - \\ & (SHS_E:003 * (100 - PctExpAgainstBusiness_E:009) / 100 \text{ if } SHS_G:014 = '1') - \\ & (SHS_G:016 \text{ if } SHS_G:015 = '1') \\ & SHS_H:008 + SHS_H:011 + SHS_H:014 + SHS_H:017 + SHS_H:019 + SHS_H:021 \\ & SHS_E:006 * (100 - PctExpAgainstBusiness_E:009)/100 \\ & SHS_E:003 * (100 - PctExpAgainstBusiness_E:009)/100 \\ & SHS_E:005 * (100 - PctExpAgainstBusiness_E:009)/100 \\ & SHS_F:007 \\ & SHS_F:008 \\ & SHS_G:016 \\ & SHS_F:009 \\ & SHS_F:004 \\ & SHS_J:001 \\ & SHS_J:003 \\ & SHS_J:002 \end{aligned}$$

Note: See note under G001.

Variable Name: **G003**

Unit Type: Dollar (\$)

Description: Rented living quarters

$$\begin{aligned} & ((SHS_I:002 + SHS_I:003) * (100 - PctRentAgainstBusiness_I:011)/100) - (SHS_I:004 * \\ & (100 - PctRentAgainstBusiness_I:011)/100) \\ & SHS_I:006 * (100 - PctRentAgainstBusiness_I:011)/100 \\ & SHS_I:007 * (100 - PctRentAgainstBusiness_I:011)/100 \end{aligned}$$

Variable Name: **G004**

Unit Type: Dollar (\$)

Description: Rent

$$\begin{aligned} & ((SHS_I:002 + SHS_I:003) * (100 - PctRentAgainstBusiness_I:011)/100) - (SHS_I:004 * \\ & (100 - PctRentAgainstBusiness_I:011)/100) \end{aligned}$$

Note: The net household expense for rent after adjusting for rebates and for any use of the dwelling for business. No adjustment for partial subletting to non-household members is made. Receipts from this activity are considered part of household income.

Variable Name: **G007**

Unit Type: Dollar (\$)

Description: Owned living quarters

$(SHS_G:002 * SHS_G:003) + (SHS_G:004 * SHS_G:005) + (SHS_G:006 * SHS_G:007) -$
 $(SHS_E:003 * (100 - PctExpAgainstBusiness_E:009) / 100 \text{ if } SHS_G:014 = '1') -$
 $(SHS_G:016 \text{ if } SHS_G:015 = '1')$
 $SHS_H:008 + SHS_H:011 + SHS_H:014 + SHS_H:017 + SHS_H:019 + SHS_H:021$
 $SHS_E:006 * (100 - PctExpAgainstBusiness_E:009) / 100$
 $SHS_E:003 * (100 - PctExpAgainstBusiness_E:009) / 100$
 $SHS_E:005 * (100 - PctExpAgainstBusiness_E:009) / 100$
 $SHS_F:007$
 $SHS_F:008$
 $SHS_G:016$
 $SHS_F:009$
 $SHS_F:004$

Note: See note under G001.

Variable Name: **G040**

Unit Type: Dollar (\$)

Description: Regular mortgage payments for owned living quarters

$(SHS_G:002 * SHS_G:003) + (SHS_G:004 * SHS_G:005) + (SHS_G:006 * SHS_G:007) -$
 $(SHS_E:003 * (100 - PctExpAgainstBusiness_E:009) / 100 \text{ if } SHS_G:014 = '1') -$
 $(SHS_G:016 \text{ if } SHS_G:015 = '1')$

Note: See note under G001.

Variable Name: **G008**

Unit Type: Dollar (\$)

Description: Maintenance, repairs and replacements for owned living quarters

$SHS_H:008 + SHS_H:011 + SHS_H:014 + SHS_H:017 + SHS_H:019 + SHS_H:021$

Note: Expenditures on the total of contracts, labour, and materials for all types of maintenance, repairs and replacements. Includes all expenditures on the dwelling such as those for built-in appliances and other equipment and fixtures. Prior to the 1996 Family Expenditure Survey, expenditures "on contract and labour cost" and "materials purchased separately" were available separately. Costs of additions, renovations, and new installations are considered increases in assets and are included in "Money flows—assets, loans and other debts".

An annual data series showing household expenditures on repairs and renovations is available from the Homeowner Repair and Renovation Survey. See "Homeowner Repair and Renovation Expenditures in Canada", Catalogue no. 62-201.

Variable Name: **G009**

Unit Type: Dollar (\$)
Description: Condominium charges for owned living quarters
SHS_E:006 * (100 - PctExpAgainstBusiness_E:009)/ 100

Variable Name: **G010**
Unit Type: Dollar (\$)
Description: Property taxes for owned living quarters
SHS_E:003 * (100 - PctExpAgainstBusiness_E:009)/ 100

Note: This is the amount billed, excluding any rebates. Special service charges (e.g., garbage, sewage, etc.), local improvements, and water charges are included if these are part of the property tax bill.

Property taxes that are included in condominium charges are excluded.

Variable Name: **G011**
Unit Type: Dollar (\$)
Description: Homeowners' insurance premiums for owned living quarters
SHS_E:005 * (100 - PctExpAgainstBusiness_E:009)/ 100

Note: Premiums paid in the reference year for fire and comprehensive policies. Premiums covering more than the survey year were not prorated.

Variable Name: **G019**
Unit Type: Dollar (\$)
Description: Water, fuel and electricity for principal accommodation
SHS_J:001
SHS_J:003
SHS_J:002

Variable Name: **G020**
Unit Type: Dollar (\$)
Description: Water and sewage for principal accommodation
SHS_J:001

Variable Name: **G022**
Unit Type: Dollar (\$)
Description: Fuel for principal accommodation (for example, oil, gas, propane, wood)
SHS_J:003

Variable Name: **G024**
Unit Type: Dollar (\$)
Description: Electricity for principal accommodation
SHS_J:002

Variable Name: **G025**

Unit Type: Dollar (\$)
Description: Other accommodation
SHS_K:010
SHS_K:011
SHS_K:012
SHS_K:013
SHS_K:014
SHS_J:005
SHS_J:006

Variable Name: **G026**
Unit Type: Dollar (\$)
Description: Owned vacation home
SHS_K:010
SHS_K:011
SHS_K:012
SHS_K:013
SHS_K:014

Variable Name: **G032**
Unit Type: Dollar (\$)
Description: Traveller accommodation
SHS_J:005
SHS_J:006

Note: Travellers' accommodation excludes accommodation that was part of a travel tour (which are included in "Package travel tours").

3.9 Expenditure - Household Operation

Variable Name: **H001**
Unit Type: Dollar (\$)
Description: Total household operation
SHS_M:003
SHS_M:001
SHS_M:005
SHS_M:002
SHS_M:004
SHS_M:006
SHS_M:007
SHS_M:008
SHS_M:009
SHS_M:010
SHS_M:015
SHS_M:016
SHS_M:017
SHS_M:018
SHS_M:021
SHS_M:022
SHS_M:023

SHS_M:012
SHS_M:013
SHS_M:014
SHS_M:011
SHS_M:024
SHS_M:025

Variable Name: **H002**
Unit Type: Dollar (\$)
Description: Communications

SHS_M:003
SHS_M:001
SHS_M:005
SHS_M:002
SHS_M:004
SHS_M:006

Variable Name: **H003**
Unit Type: Dollar (\$)
Description: Telephone

SHS_M:003
SHS_M:001
SHS_M:005

Variable Name: **H004**
Unit Type: Dollar (\$)
Description: Purchase of telephones and equipment
SHS_M:003

Variable Name: **H005**
Unit Type: Dollar (\$)
Description: Telephone services
SHS_M:001
SHS_M:005

Variable Name: **H008**
Unit Type: Dollar (\$)
Description: Cellular services
SHS_M:002

Variable Name: **H009**
Unit Type: Dollar (\$)
Description: Internet services
SHS_M:004

Variable Name: **H010**
Unit Type: Dollar (\$)
Description: Postal and other communication services (e.g., fax services, parcel

delivery)

SHS_M:006

Variable Name: **H011**
Unit Type: Dollar (\$)
Description: Child care expenses
SHS_M:007
SHS_M:008
SHS_M:009

Variable Name: **H016**
Unit Type: Dollar (\$)
Description: Domestic and other custodial services (excluding child care)
SHS_M:010

Variable Name: **H017**
Unit Type: Dollar (\$)
Description: Pet expenses
SHS_M:015
SHS_M:016
SHS_M:017
SHS_M:018

Variable Name: **H022**
Unit Type: Dollar (\$)
Description: Household cleaning supplies
SHS_M:021

Variable Name: **H023**
Unit Type: Dollar (\$)
Description: Paper, plastic and foil household supplies (e.g., stationery supplies, paper towels, foil and plastic wraps)
SHS_M:022
SHS_M:023
SHS_M:024

Variable Name: **H026**
Unit Type: Dollar (\$)
Description: Garden supplies and services
SHS_M:012
SHS_M:013
SHS_M:014
SHS_M:011

3.10 Expenditure - Household Furnishings and Equipment

Variable Name: **I001**
Unit Type: Dollar (\$)
Description: Total, household furnishings and equipment

SHS_L:001
SHS_L:004
SHS_L:005
SHS_L:006
SHS_L:007
SHS_L:002
SHS_L:049
SHS_L:041
SHS_L:042
SHS_L:043
SHS_L:048
SHS_L:061
SHS_L:044
SHS_L:045
SHS_L:047
SHS_L:046
SHS_L:063
SHS_L:050
SHS_L:084
SHS_L:085
SHS_L:081
SHS_L:082
SHS_L:083
SHS_L:003
SHS_L:072
SHS_L:071
SHS_L:086
SHS_L:087
SHS_L:088
SHS_L:089
SHS_L:008
SHS_L:051
SHS_L:090
SHS_J:004
SHS_L:091

Variable Name: **I002**
Unit Type: Dollar (\$)
Description: Household furnishings

SHS_L:001
SHS_L:004
SHS_L:005
SHS_L:006
SHS_L:007
SHS_L:002

Variable Name: **I003**
Unit Type: Dollar (\$)
Description: Furniture for indoor or outdoor use
SHS_L:001

Variable Name: **I004**
Unit Type: Dollar (\$)
Description: Rugs, mats and underpadding
SHS_L:004

Variable Name: **I005**
Unit Type: Dollar (\$)
Description: Window coverings and household textiles
SHS_L:005

Variable Name: **I006**
Unit Type: Dollar (\$)
Description: Art, antiques and decorative ware
SHS_L:006
SHS_L:007
SHS_L:002

Variable Name: **I010**
Unit Type: Dollar (\$)
Description: Household equipment
SHS_L:049
SHS_L:041
SHS_L:042
SHS_L:043
SHS_L:048
SHS_L:061
SHS_L:044
SHS_L:045
SHS_L:047
SHS_L:046
SHS_L:063
SHS_L:050
SHS_L:084
SHS_L:085
SHS_L:081
SHS_L:082
SHS_L:083
SHS_L:003
SHS_L:072
SHS_L:071
SHS_L:086
SHS_L:087
SHS_L:088
SHS_L:089

Variable Name: **I011**
Unit Type: Dollar (\$)
Description: Household appliances

SHS_L:049
SHS_L:041
SHS_L:042
SHS_L:043
SHS_L:048
SHS_L:061
SHS_L:044
SHS_L:045
SHS_L:047
SHS_L:046
SHS_L:063
SHS_L:050

Note: Net purchase price after deducting trade-in allowance and any discount.

Excludes appliances included in the purchase of a home and built-in appliances. Expenditures on household fixtures (e.g., built-in appliances and wall-to-wall carpeting) can be reported under the appropriate expenditure item or, if they were part of a larger job, under "Additions, renovations etc. to a home", or "Maintenance, repairs and replacements".

Variable Name: **I027TOT**
Unit Type: Dollar (\$)
Description: Other household tools, equipment and accessories

SHS_L:084
SHS_L:085
SHS_L:081
SHS_L:082
SHS_L:083
SHS_L:003
SHS_L:072
SHS_L:071
SHS_L:086
SHS_L:087
SHS_L:088
SHS_L:089

Variable Name: **I042**
Unit Type: Dollar (\$)
Description: Maintenance and repairs of furniture and equipment

SHS_L:008
SHS_L:051
SHS_L:090

Variable Name: **I046**
Unit Type: Dollar (\$)
Description: Services related to furnishings and equipment

3.11 Expenditure - Clothing

Variable Name: **J001**

Unit Type: Dollar (\$)

Description: Total clothing

Sum(SHS_O:002 for each Person: If (PersonNo between 01 and 15) and (SHS_A:012 between 1 and 3))

Sum(SHS_O:003 for each Person: If (PersonNo between 01 and 15) and (SHS_A:012 between 1 and 3))

Sum(SHS_O:004 for each Person: If (PersonNo between 01 and 15) and (SHS_A:012 between 1 and 3))

Sum(SHS_O:005 for each Person: If (PersonNo between 01 and 15) and (SHS_A:012 between 1 and 3))

Sum(SHS_O:006 for each Person: If (PersonNo between 01 and 15) and (SHS_A:012 between 1 and 3))

Sum(SHS_O:007 for each Person: If (PersonNo between 01 and 15) and (SHS_A:012 between 1 and 3))

SHS_O:141

Sum(SHS_O:052 for each Person: If (PersonNo between 01 and 15) and (SHS_A:012 between 1 and 3))

Sum(SHS_O:053 for each Person: If (PersonNo between 01 and 15) and (SHS_A:012 between 1 and 3))

Sum(SHS_O:054 for each Person: If (PersonNo between 01 and 15) and (SHS_A:012 between 1 and 3))

Sum(SHS_O:055 for each Person: If (PersonNo between 01 and 15) and (SHS_A:012 between 1 and 3))

Sum(SHS_O:056 for each Person: If (PersonNo between 01 and 15) and (SHS_A:012 between 1 and 3))

Sum(SHS_O:057 for each Person: If (PersonNo between 01 and 15) and (SHS_A:012 between 1 and 3))

SHS_O:142

Sum(SHS_O:102 for each Person: If (PersonNo between 01 and 15) and (SHS_A:012 between 1 and 3))

Sum(SHS_O:104 for each Person: If (PersonNo between 01 and 15) and (SHS_A:012 between 1 and 3))

SHS_O:143 + (SHS_O:102: If PersonNo = 00) + (SHS_O:104: If PersonNo = 00)

SHS_O:144

SHS_O:145

SHS_O:146

SHS_M:019

SHS_M:020

SHS_O:147

Variable Name: **J002**

Unit Type: Dollar (\$)

Description: Women's and girls' wear (4 years and over)

Sum(SHS_O:002 for each Person: If (PersonNo between 01 and 15) and (SHS_A:012 between 1 and 3))

Sum(SHS_O:003 for each Person: If (PersonNo between 01 and 15) and (SHS_A:012 between 1 and 3))

Sum(SHS_O:004 for each Person: If (PersonNo between 01 and 15) and (SHS_A:012 between 1 and 3))
Sum(SHS_O:005 for each Person: If (PersonNo between 01 and 15) and (SHS_A:012 between 1 and 3))
Sum(SHS_O:006 for each Person: If (PersonNo between 01 and 15) and (SHS_A:012 between 1 and 3))
Sum(SHS_O:007 for each Person: If (PersonNo between 01 and 15) and (SHS_A:012 between 1 and 3))
SHS_O:141

Variable Name: **J007**

Unit Type: Dollar (\$)

Description: Clothing gifts to non-household members, women and girls aged 4 years and over

SHS_O:141

Variable Name: **J008**

Unit Type: Dollar (\$)

Description: Men's and boys' wear (4 years and over)

Sum(SHS_O:052 for each Person: If (PersonNo between 01 and 15) and (SHS_A:012 between 1 and 3))
Sum(SHS_O:053 for each Person: If (PersonNo between 01 and 15) and (SHS_A:012 between 1 and 3))
Sum(SHS_O:054 for each Person: If (PersonNo between 01 and 15) and (SHS_A:012 between 1 and 3))
Sum(SHS_O:055 for each Person: If (PersonNo between 01 and 15) and (SHS_A:012 between 1 and 3))
Sum(SHS_O:056 for each Person: If (PersonNo between 01 and 15) and (SHS_A:012 between 1 and 3))
Sum(SHS_O:057 for each Person: If (PersonNo between 01 and 15) and (SHS_A:012 between 1 and 3))
SHS_O:142

Variable Name: **J013**

Unit Type: Dollar (\$)

Description: Clothing gifts to non-household members, men and boys aged 4 years and over

SHS_O:142

Variable Name: **J014**

Unit Type: Dollar (\$)

Description: Children's wear (under 4 years)

Sum(SHS_O:102 for each Person: If (PersonNo between 01 and 15) and (SHS_A:012 between 1 and 3))
Sum(SHS_O:104 for each Person: If (PersonNo between 01 and 15) and (SHS_A:012 between 1 and 3))
SHS_O:143 + (SHS_O:102: If PersonNo = 00) + (SHS_O:104: If PersonNo = 00)

Variable Name: **J017**
Unit Type: Dollar (\$)
Description: Clothing gifts to non-household members, children under 4 years
SHS_O:143 + (SHS_O:102: If PersonNo = 00) + (SHS_O:104: If PersonNo = 00)

Variable Name: **J019TOT**
Unit Type: Dollar (\$)
Description: Clothing material and notions
SHS_O:144
SHS_O:145

Variable Name: **J021**
Unit Type: Dollar (\$)
Description: Clothing services
SHS_O:147
SHS_M:019
SHS_M:020

Variable Name: **J023TOT**
Unit Type: Dollar (\$)
Description: Laundry and dry-cleaning services, laundromats and self-service dry-cleaning

SHS_M:019
SHS_M:020

3.12 Expenditure - Transportation

Variable Name: **K001**
Unit Type: Dollar (\$)
Description: Total transportation
Sum (SHS_Q:015 for each vehicle: If SHS_Q:012 = 1)
Sum (SHS_Q:015 for each vehicle: If SHS_Q:012 = 2 or 3)
Sum(SHS_Q:025 * (-1) for each vehicle)
Sum(SHS_Q:031 * (100 - PctVehExpAgainstBus_Q:039)/100 for each Vehicle)
SHS_Q:201
SHS_Q:202
SHS_Q:203
SHS_Q:204
SHS_Q:205
SHS_Q:206
Sum(SHS_Q:017 for each vehicle)
Sum(SHS_Q:018 for each vehicle)
Sum(SHS_Q:030 * (100 - PctVehExpAgainstBus_Q:039)/100 for each vehicle)
Sum(SHS_Q:032 * (100 - PctVehExpAgainstBus_Q:039)/100 for each vehicle)
Sum(SHS_Q:033 * (100 - PctVehExpAgainstBus_Q:039)/100 for each vehicle)
SHS_I:008 * (100 - PctRentAgainstBusiness_I:011)/100
Sum(SHS_Q:036 * (100 - PctVehExpAgainstBus_Q:039)/100 for each vehicle)
SHS_Q:302
SHS_Q:301

Sum(SHS_Q:035 * (100 - PctVehExpAgainstBus_Q:039)/100 for each vehicle)
 Sum(SHS_Q:034 * (100 - PctVehExpAgainstBus_Q:039)/100 for each vehicle)
 Sum(SHS_Q:037 * (100 - PctVehExpAgainstBus_Q:039)/100 for each vehicle)
 SHS_R:092
 SHS_R:093
 SHS_R:094
 SHS_R:095
 SHS_R:096
 SHS_R:097
 SHS_R:098

Variable Name: **K002**
 Unit Type: Dollar (\$)
 Description: Private transportation
 Sum (SHS_Q:015 for each vehicle: If SHS_Q:012 = 1)
 Sum (SHS_Q:015 for each vehicle: If SHS_Q:012 = 2 or 3)
 Sum(SHS_Q:025 * (-1) for each vehicle)
 Sum(SHS_Q:031 * (100 - PctVehExpAgainstBus_Q:039)/100 for each vehicle)
 SHS_Q:201
 SHS_Q:202
 SHS_Q:203
 SHS_Q:204
 SHS_Q:205
 SHS_Q:206
 Sum(SHS_Q:017 for each Vehicle)
 Sum(SHS_Q:018 for each Vehicle)
 Sum(SHS_Q:030 * (100 - PctVehExpAgainstBus_Q:039)/100 for each vehicle)
 Sum(SHS_Q:032 * (100 - PctVehExpAgainstBus_Q:039)/100 for each vehicle)
 Sum(SHS_Q:033 * (100 - PctVehExpAgainstBus_Q:039)/100 for each vehicle)
 SHS_I:008 * (100 - PctRentAgainstBusiness_I:011)/100
 Sum(SHS_Q:036 * (100 - PctVehExpAgainstBus_Q:039)/100 for each vehicle)
 SHS_Q:302
 SHS_Q:301
 Sum(SHS_Q:035 * (100 - PctVehExpAgainstBus_Q:039)/100 for each vehicle)
 Sum(SHS_Q:034 * (100 - PctVehExpAgainstBus_Q:039)/100 for each vehicle)
 Sum(SHS_Q:037 * (100 - PctVehExpAgainstBus_Q:039)/100 for each vehicle)

Variable Name: **K003**
 Unit Type: Dollar (\$)
 Description: Purchase of automobiles and trucks/vans
 Sum (SHS_Q:015 for each vehicle: If SHS_Q:012 = 1)
 Sum (SHS_Q:015 for each vehicle: If SHS_Q:012 = 2 or 3)
 Sum(SHS_Q:025 * (-1) for each vehicle)

Note: Net purchase price, including extra equipment, accessories, and warranties bought when the vehicle was purchased, after deducting any trade-in allowance or separate sales. (Separate sales occur when a vehicle is sold independently by the owner, e.g., not traded-in when purchasing or leasing another vehicle.)

Variable Name: **K007**
 Unit Type: Dollar (\$)
 Description: Purchase of automotive accessories

Sum(SHS_Q:031 * (100 - PctVehExpAgainstBus_Q:039)/ 100 for each vehicle)

Variable Name: **K008**
Unit Type: Dollar (\$)
Description: Rented and leased automobiles and trucks/vans
SHS_Q:201
SHS_Q:202
SHS_Q:203
SHS_Q:204
SHS_Q:205
SHS_Q:206
Sum(SHS_Q:017 for each vehicle)
Sum(SHS_Q:018 for each vehicle)

Variable Name: **K019**
Unit Type: Dollar (\$)
Description: Operation of owned and leased automobiles and trucks/vans
Sum(SHS_Q:030 * (100 - PctVehExpAgainstBus_Q:039)/100 for each vehicle)
Sum(SHS_Q:032 * (100 - PctVehExpAgainstBus_Q:039)/100 for each vehicle)
Sum(SHS_Q:033 * (100 - PctVehExpAgainstBus_Q:039)/100 for each vehicle)
SHS_I:008 * (100 - PctRentAgainstBusiness_I:011)/100
Sum(SHS_Q:036 * (100 - PctVehExpAgainstBus_Q:039)/100 for each vehicle)
SHS_Q:302
SHS_Q:301
Sum(SHS_Q:035 * (100 - PctVehExpAgainstBus_Q:039)/100 for each vehicle)
Sum(SHS_Q:034 * (100 - PctVehExpAgainstBus_Q:039)/100 for each vehicle)

Variable Name: **K020**
Unit Type: Dollar (\$)
Description: Gasoline and other fuels for owned and leased automobiles and trucks/vans
Sum(SHS_Q:030 * (100 - PctVehExpAgainstBus_Q:039)/ 100 for each vehicle)

Variable Name: **K022**
Unit Type: Dollar (\$)
Description: Maintenance and repair for owned and leased automobiles and trucks/vans
Sum(SHS_Q:033 * (100 - PctVehExpAgainstBus_Q:039)/ 100 for each vehicle)

Variable Name: **K023**
Unit Type: Dollar (\$)
Description: Garage rent and parking
SHS_I:008 * (100 - PctRentAgainstBusiness_I:011)/100
Sum(SHS_Q:036 * (100 - PctVehExpAgainstBus_Q:039)/100 for each vehicle)

Variable Name: **K028**
Unit Type: Dollar (\$)
Description: Private and public vehicle insurance premiums
Sum(SHS_Q:035 * (100 - PctVehExpAgainstBus_Q:039)/ 100 for each vehicle)

Variable Name: **K031**
Unit Type: Dollar (\$)
Description: Public transportation
SHS_R:092
SHS_R:093
SHS_R:094
SHS_R:095
SHS_R:096
SHS_R:097
SHS_R:098

Variable Name: **K032TOT**
Unit Type: Dollar (\$)
Description: Local and commuter transportation
SHS_R:092
SHS_R:093

Note: Includes city or commuter bus, subway, street car, commuter train, and taxi.

Variable Name: **K034TOT**
Unit Type: Dollar (\$)
Description: Inter-city transportation
SHS_R:094
SHS_R:095
SHS_R:096

Note: Includes airplane, train and highway bus.

Variable Name: **K037**
Unit Type: Dollar (\$)
Description: Other passenger transportation (e.g., carpooling, airport, bus or limousine service, ferry service, sightseeing tours and travel insurance)
SHS_R:097

Variable Name: **K038**
Unit Type: Dollar (\$)
Description: Household moving, storage and delivery services
SHS_R:098

3.13 Expenditure - Health Care

Variable Name: **L101**
Unit Type: Dollar (\$)
Description: Total health care
SHS_P:032

SHS_P:030
SHS_P:031
SHS_P:026
SHS_P:021
SHS_P:022
SHS_P:023
SHS_P:024
SHS_P:025
SHS_P:028
SHS_P:027
SHS_P:029
SHS_P:010
SHS_P:011
SHS_P:012
SHS_P:013

Variable Name: **L102**
Unit Type: Dollar (\$)
Description: Direct health care costs to household

SHS_P:032
SHS_P:030
SHS_P:031
SHS_P:026
SHS_P:021
SHS_P:022
SHS_P:023
SHS_P:024
SHS_P:025
SHS_P:028
SHS_P:027
SHS_P:029

Variable Name: **L103**
Unit Type: Dollar (\$)
Description: Health care supplies (e.g., first aid kits, wheelchairs)
SHS_P:032

Variable Name: **L104**
Unit Type: Dollar (\$)
Description: Medicinal and pharmaceutical products
SHS_P:030
SHS_P:031

Variable Name: **L105**
Unit Type: Dollar (\$)
Description: Prescription medicines
SHS_P:030

Variable Name: **L106**
Unit Type: Dollar (\$)

Description: Other non-prescription medicines and pharmaceutical products
SHS_P:031

Variable Name: **L107**
Unit Type: Dollar (\$)
Description: Physicians' care
SHS_P:026

Variable Name: **L108**
Unit Type: Dollar (\$)
Description: Eye-care goods and services
SHS_P:021
SHS_P:022
SHS_P:023
SHS_P:024

Variable Name: **L112**
Unit Type: Dollar (\$)
Description: Dental services
SHS_P:025

Variable Name: **L114**
Unit Type: Dollar (\$)
Description: Hospital care
SHS_P:028

Variable Name: **L116**
Unit Type: Dollar (\$)
Description: Health care practitioners other than physicians
SHS_P:027

Variable Name: **L117**
Unit Type: Dollar (\$)
Description: Other medical services (e.g., ambulances, nursing homes)
SHS_P:029

Variable Name: **L118**
Unit Type: Dollar (\$)
Description: Health insurance premiums
SHS_P:010
SHS_P:011
SHS_P:012
SHS_P:013

Variable Name: **L119**
Unit Type: Dollar (\$)

Description: Public hospital, medical and drug plans
SHS_P:010

Variable Name: **L120**
Unit Type: Dollar (\$)
Description: Private health insurance plans
SHS_P:011
SHS_P:012
SHS_P:013

3.14 Expenditure - Personal Care

Variable Name: **L201**
Unit Type: Dollar (\$)
Description: Total personal care
SHS_P:003
SHS_P:004
SHS_P:005
SHS_P:006
SHS_P:007
Sum(SHS_O:103 for each Person: If (PersonNo between 01 and 15) and (SHS_A:012 between 1 and 3)) +
(SHS_O:103: If PersonNo = 00)
SHS_L:062
SHS_P:008
SHS_P:001
SHS_P:002

Variable Name: **L202**
Unit Type: Dollar (\$)
Description: Personal care supplies and equipment
SHS_P:003
SHS_P:004
SHS_P:005
SHS_P:006
SHS_P:007
Sum(SHS_O:103 for each Person: If (PersonNo between 01 and 15) and (SHS_A:012 between 1 and 3)) +
(SHS_O:103: If PersonNo = 00)
SHS_L:062
SHS_P:008

Variable Name: **L207**
Unit Type: Dollar (\$)
Description: Personal care services
SHS_P:001
SHS_P:002

3.15 Expenditure - Recreation

Variable Name: **M101**

Unit Type: Dollar (\$)

Description: Total recreation

SHS_S:001

SHS_S:011

SHS_S:009

SHS_S:008

SHS_S:007

SHS_L:019

SHS_L:020

SHS_L:022

SHS_L:023

SHS_S:003

SHS_S:004

SHS_S:005

SHS_S:006

SHS_S:012

SHS_S:002

SHS_S:013

SHS_S:015

SHS_S:014

SHS_R:001

Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 4)

Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 3)

Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 1)

Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 2)

Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 8)

Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 5)

Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 6)

Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 7)

Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 9)

SHS_R:002

SHS_R:091

Sum(SHS_R:016 * (100 - PctOtherVehExpAgainstBus_R:022)/100 for each recreation vehicle)

Sum(SHS_R:015 * (100 - PctOtherVehExpAgainstBus_R:022)/100 for each recreation vehicle)

Sum(SHS_R:017 * (100 - PctOtherVehExpAgainstBus_R:022)/100 for each recreation vehicle)

Sum(SHS_R:018 * (100 - PctOtherVehExpAgainstBus_R:022)/100 for each recreation vehicle)

Sum(SHS_R:019 * (100 - PctOtherVehExpAgainstBus_R:022)/100 for each recreation vehicle)

Sum(SHS_R:020 * (100 - PctOtherVehExpAgainstBus_R:022)/100 for each recreation vehicle)

SHS_L:011

SHS_L:012

SHS_L:014

SHS_L:016

SHS_L:015

SHS_L:017

SHS_L:013

SHS_L:018

SHS_L:031
SHS_L:032
SHS_L:036
SHS_L:033
SHS_S:016
SHS_S:019
SHS_S:017
SHS_S:018
SHS_L:034
SHS_L:035
SHS_S:021
SHS_S:022
SHS_S:023
SHS_S:024
SHS_S:025
SHS_S:020
SHS_S:026
SHS_R:100
SHS_S:027

Variable Name: **M102**
Unit Type: Dollar (\$)
Description: Recreation equipment and associated services

SHS_S:001
SHS_S:011
SHS_S:009
SHS_S:008
SHS_S:007
SHS_L:019
SHS_L:020
SHS_L:022
SHS_L:023
SHS_S:003
SHS_S:004
SHS_S:005
SHS_S:006
SHS_S:012
SHS_S:002
SHS_S:013
SHS_S:015
SHS_S:014

Variable Name: **M103**
Unit Type: Dollar (\$)
Description: Sports and athletic equipment
SHS_S:001

Variable Name: **M106TOT**
Unit Type: Dollar (\$)
Description: Toys, electronic games and art/hobby materials
SHS_S:007, S:008, S:009

Note: In 1997 this variable included spending on computer equipment and supplies.

Variable Name: **M110**
Unit Type: Dollar (\$)
Description: Computer equipment and supplies
SHS_L:019
SHS_L:020
SHS_L:022
SHS_L:023

Variable Name: **M116**
Unit Type: Dollar (\$)
Description: Photographic goods and services
SHS_S:003
SHS_S:004
SHS_S:005

Variable Name: **M126**
Unit Type: Dollar (\$)
Description: Recreational vehicles and associated services
SHS_R:001
Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 4)
Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 3)
Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 1)
Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 2)
Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 8)
Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 5)
Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 6)
Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 7)
Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 9)
SHS_R:002
SHS_R:091
Sum(SHS_R:016 * (100 - PctOtherVehExpAgainstBus_R:022)/100 for each recreation vehicle)
Sum(SHS_R:015 * (100 - PctOtherVehExpAgainstBus_R:022)/100 for each recreation vehicle)
Sum(SHS_R:017 * (100 - PctOtherVehExpAgainstBus_R:022)/100 for each recreation vehicle)
Sum(SHS_R:018 * (100 - PctOtherVehExpAgainstBus_R:022)/100 for each recreation vehicle)
Sum(SHS_R:019 * (100 - PctOtherVehExpAgainstBus_R:022)/100 for each recreation vehicle)
Sum(SHS_R:020 * (100 - PctOtherVehExpAgainstBus_R:022)/100 for each recreation vehicle)

Variable Name: **M127**
Unit Type: Dollar (\$)
Description: Purchase of recreational vehicles
SHS_R:001
Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 4)
Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 3)
Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 1)

Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 2)
Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 8)
Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 5)
Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 6)
Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 7)
Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 9)

Variable Name: **M128**
Unit Type: Dollar (\$)
Description: Purchase of bicycles, parts and accessories
SHS_R:001

Variable Name: **M129**
Unit Type: Dollar (\$)
Description: Recreational vehicles and outboard motors (excluding bicycles)
Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 4)
Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 3)
Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 1)
Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 2)
Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 8)
Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 5)
Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 6)
Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 7)
Sum(SHS_R:014 - SHS_R:023 for each recreation vehicle: If SHS_R:012 = 9)

Variable Name: **M139**
Unit Type: Dollar (\$)
Description: Operation of recreational vehicles
SHS_R:002
SHS_R:091
Sum(SHS_R:016 * (100 - PctOtherVehExpAgainstBus_R:022)/100 for each recreation vehicle)
Sum(SHS_R:015 * (100 - PctOtherVehExpAgainstBus_R:022)/100 for each recreation vehicle)
Sum(SHS_R:017 * (100 - PctOtherVehExpAgainstBus_R:022)/100 for each recreation vehicle)
Sum(SHS_R:018 * (100 - PctOtherVehExpAgainstBus_R:022)/100 for each recreation vehicle)
Sum(SHS_R:019 * (100 - PctOtherVehExpAgainstBus_R:022)/100 for each recreation vehicle)
Sum(SHS_R:020 * (100 - PctOtherVehExpAgainstBus_R:022)/100 for each recreation vehicle)

Variable Name: **M140**
Unit Type: Dollar (\$)
Description: Bicycle maintenance and repairs
SHS_R:002

Variable Name: **M142TOT**
Unit Type: Dollar (\$)
Description: Other recreation vehicle operation

$\text{Sum}(\text{SHS_R:016} * (100 - \text{PctOtherVehExpAgainstBus_R:022})/100$ for each recreation vehicle)
 $\text{Sum}(\text{SHS_R:015} * (100 - \text{PctOtherVehExpAgainstBus_R:022})/100$ for each recreation vehicle)
 $\text{Sum}(\text{SHS_R:017} * (100 - \text{PctOtherVehExpAgainstBus_R:022})/100$ for each recreation vehicle)
 $\text{Sum}(\text{SHS_R:018} * (100 - \text{PctOtherVehExpAgainstBus_R:022})/100$ for each recreation vehicle)
 $\text{Sum}(\text{SHS_R:019} * (100 - \text{PctOtherVehExpAgainstBus_R:022})/100$ for each recreation vehicle)
 $\text{Sum}(\text{SHS_R:020} * (100 - \text{PctOtherVehExpAgainstBus_R:022})/100$ for each recreation vehicle)

Variable Name: **M180**
 Unit Type: Dollar (\$)
 Description: Expenses for rented and leased recreational vehicles
 SHS_R:091

Variable Name: **M148**
 Unit Type: Dollar (\$)
 Description: Home entertainment equipment and services
 SHS_L:011
 SHS_L:012
 SHS_L:014
 SHS_L:016
 SHS_L:015
 SHS_L:017
 SHS_L:013
 SHS_L:018
 SHS_L:031
 SHS_L:034
 SHS_L:032

Variable Name: **M150**
 Unit Type: Dollar (\$)
 Description: Audio equipment (for example, radios, CD players, speakers)
 SHS_L:011
 SHS_L:012

Variable Name: **M151**
 Unit Type: Dollar (\$)
 Description: Pre-recorded audio and video cassette tapes, compact discs and DVDs
 SHS_L:014
 SHS_L:016

Variable Name: **M152**
 Unit Type: Dollar (\$)
 Description: Blank audio and video tapes
 SHS_L:015

SHS_L:017

Variable Name: **M153**
Unit Type: Dollar (\$)
Description: Televisions, video cassette recorders (VCRs), camcorders and other television/video components

SHS_L:013

Variable Name: **M156**
Unit Type: Dollar (\$)
Description: Rental of videotapes, DVDs and videodiscs

SHS_L:031

SHS_L:032

Variable Name: **M157**
Unit Type: Dollar (\$)
Description: Rental of home entertainment equipment and other services

SHS_L:036

Variable Name: **M159**
Unit Type: Dollar (\$)
Description: Recreation services

SHS_S:016

SHS_S:019

SHS_S:017

SHS_S:018

SHS_L:034

SHS_L:035

SHS_S:021

SHS_S:022

SHS_S:023

SHS_S:024

SHS_S:025

SHS_S:020

SHS_S:026

SHS_R:100

SHS_R:027

Variable Name: **M160**
Unit Type: Dollar (\$)
Description: Entertainment

SHS_S:016

SHS_S:019

SHS_S:017

SHS_S:018

SHS_L:034

SHS_L:035

Variable Name: **M161**
Unit Type: Dollar (\$)

Description: Movie theatres
SHS_S:016

Variable Name: **M162**
Unit Type: Dollar (\$)
Description: Live sports events
SHS_S:019

Variable Name: **M163**
Unit Type: Dollar (\$)
Description: Live performing arts
SHS_S:017

Variable Name: **M165**
Unit Type: Dollar (\$)
Description: Rental of cablevision and satellite services
SHS_L:034
SHS_L:035

Variable Name: **M408**
Unit Type: Dollar (\$)
Description: Rental of cablevision services

SHS_L:034

Note: New for 2001.

Variable Name: **M409**
Unit Type: Dollar (\$)
Description: Rental of satellite services
SHS_L:035

Note: New for 2001.

Variable Name: **M166**
Unit Type: Dollar (\$)
Description: Use of recreation facilities
SHS_S:021
SHS_S:022
SHS_S:023
SHS_S:024
SHS_S:025
SHS_S:020
SHS_S:026

Variable Name: **M167**
Unit Type: Dollar (\$)
Description: Membership fees for sports and recreation facilities

SHS_S:021
SHS_S:022
SHS_S:023
SHS_S:024
SHS_S:025

Note: Combined variable for 2001.

Variable Name: **M171**
Unit Type: Dollar (\$)
Description: Children's camps
SHS_S:026

Variable Name: **M164**
Unit Type: Dollar (\$)
Description: Admission to museums and other activities
SHS_S:018

Variable Name: **M172**
Unit Type: Dollar (\$)
Description: Package travel tours
SHS_R:100

Note: Package trips that included at least two components of a travel tour such as transportation and accommodation, or accommodation with food and beverages.

Variable Name: **M173**
Unit Type: Dollar (\$)
Description: Other recreational services (e.g., fishing and hunting licenses, party planning)
SHS_S:027

3.16 Expenditure - Reading Materials and Other Printed Matter

Variable Name: **M201**
Unit Type: Dollar (\$)
Description: Total reading materials and other printed matter
SHS_S:030
SHS_S:031
SHS_S:032
SHS_S:033
SHS_S:034

Variable Name: **M202**
Unit Type: Dollar (\$)

Description: Newspapers
SHS_S:030

Variable Name: **M203**
Unit Type: Dollar (\$)
Description: Magazines and periodicals
SHS_S:031

Variable Name: **M204**
Unit Type: Dollar (\$)
Description: Books and pamphlets (excluding school books)
SHS_S:032

3.17 Expenditure - Education

Variable Name: **M301**
Unit Type: Dollar (\$)
Description: Total education
SHS_S:042
SHS_S:045
SHS_S:041
SHS_S:044
SHS_S:040
SHS_S:043
SHS_S:046
SHS_S:047

Variable Name: **M302TOT**
Unit Type: Dollar (\$)
Description: Education supplies and textbooks
SHS_S:041
SHS_S:042
SHS_S:044
SHS_S:045

Variable Name: **M308**
Unit Type: Dollar (\$)
Description: Tuition fees
SHS_S:040
SHS_S:043

3.18 Expenditure - Tobacco Products and Alcoholic Beverages

Variable Name: **N101**
Unit Type: Dollar (\$)

Description: Total tobacco products and alcoholic beverages

SHS_T:001

SHS_T:002

SHS_N:011

SHS_N:006

SHS_N:007

Variable Name: **N102**

Unit Type: Dollar (\$)

Description: Tobacco products and smokers' supplies

SHS_T:001

SHS_T:002

Variable Name: **N103**

Unit Type: Dollar (\$)

Description: Cigarettes, cigars and tobacco

SHS_T:001

Variable Name: **N105**

Unit Type: Dollar (\$)

Description: Alcoholic beverages

SHS_N:011

SHS_N:006

SHS_N:007

Variable Name: **N106**

Unit Type: Dollar (\$)

Description: Alcoholic beverages served on licensed premises

SHS_N:011

Variable Name: **N107**

Unit Type: Dollar (\$)

Description: Alcoholic beverages purchased from stores

SHS_N:006

Variable Name: **N108**

Unit Type: Dollar (\$)

Description: Self-made alcoholic beverages

SHS_N:007

3.19 Expenditure - Other

Variable Name: **O101**

Unit Type: Dollar (\$)

Description: Total miscellaneous expenditures

SHS_K:021

SHS_T:018

SHS_T:003

SHS_T:004

SHS_T:005

SHS_T:006

Sum(SHS_V:011 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)

SHS_T:016

SHS_T:015

SHS_T:017

SHS_T:019

SHS_T:021

Note: Includes expenses on other property (not principal accommodation or vacation home), legal services, financial services, dues to unions and professional associations, contributions and dues for social clubs, forfeits of deposits, fines, money lost, and purchase of tools and equipment for work.

Prior to 1997, in the Family Expenditure Survey, interest on personal loans and interest paid on mortgages and loans for other property were reported under "Miscellaneous". (Principal payments for mortgages and loans were reported under "Money flows—assets, loans and other debts" since they were considered to pertain to a change in the value of household assets or debts.)

For the Survey of Household Spending (starting with the 1997 reference year), interest payments are not available separately from principal. Payments for personal loans and mortgages and loans pertaining to other property (including both principal and interest) are reported under "Money flows—assets, loans and other debts".

Also starting in 1997, expenditures for "Games of chance", formerly included under "Miscellaneous" became a separate sub-category. Caution should therefore be used when comparing these data to data from previous years. The categories "Total current consumption" and "Total expenditure" are also affected since "Miscellaneous" is a component of these categories.

Variable Name: **O104**
Unit Type: Dollar (\$)
Description: Financial services

SHS_T:003

SHS_T:004

SHS_T:005

SHS_T:006

Variable Name: **O109**
Unit Type: Dollar (\$)
Description: Dues to unions and professional associations

Sum(SHS_V:011 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)

Variable Name: **N201**
Unit Type: Dollar (\$)
Description: Games of chance (net of winnings)

SHS_T:007
 SHS_T:013
 SHS_T:009
 SHS_T:011
 $(SHS_T:008 + SHS_T:010 + SHS_T:012 + SHS_T:014) * -1$; if $(SHS_T:008 + SHS_T:010 + SHS_T:012 + SHS_T:014) < (SHS_T:007 + SHS_T:009 + SHS_T:011 + SHS_T:013)$,
 otherwise $((SHS_T:007 + SHS_T:009 + SHS_T:011 + SHS_T:013) - 1) * -1$.

Note: "Games of chance (net)" equals the sum of expenditures on all types of games of chance minus the sum of winnings from all types of games of chance. However, if total winnings are greater than total expenditures, the amount to be subtracted from expenditures is set to \$1 less than the expenditures and the value of the remaining winnings is moved to the variable "Other money receipts".

Variable Name: **O201**
 Unit Type: Dollar (\$)
 Description: Personal taxes (net of refunds)

Sum(SHS_V:002 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)
 Sum(SHS_V:003 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)
 Sum(SHS_V:004 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)
 Sum((SHS_U:017 * (-1)) for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)

Note: Personal taxes are income taxes paid in the reference year for that year and on income from previous years if applicable. Also included are other personal taxes (gift taxes, Newfoundland school tax, etc.) minus income tax refunds received in the reference year, except for federal Child Tax Benefits, Goods and Services Tax credits and provincial tax credits. These tax credits are included in "average household income before taxes."

Variable Name: **O301**
 Unit Type: Dollar (\$)
 Description: Total personal insurance payments and pension contributions

Sum(SHS_V:005 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)
 Sum(SHS_V:006 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)
 Sum(SHS_V:007 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)
 Sum(SHS_V:009 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)
 Sum(SHS_V:008 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)
 Sum(SHS_V:010 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)

Note: Payments for life insurance, annuities, employment insurance, public and private pension plans, and similar items. For certain uses of the data, some of these items might be regarded as savings, although the relationship between the expenditure and any increase in savings may not be easily determined. This category of expenditure was called "Security" prior to the 1996 survey. (Registered Retirement Savings Plan contributions are included in "Money flows—assets, loans and other debts".)

Variable Name: **O302TOT**
 Unit Type: Dollar (\$)

Description: Life insurance premiums, annuity contracts and transfers to RRIFs
Sum(SHS_V:005 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)
Sum(SHS_V:006 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)

Variable Name: **O304**
Unit Type: Dollar (\$)
Description: Employment insurance premiums
Sum(SHS_V:007 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)

Variable Name: **O305**
Unit Type: Dollar (\$)
Description: Retirement and pension fund payments
Sum(SHS_V:009 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)
Sum(SHS_V:008 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)
Sum(SHS_V:010 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)

Variable Name: **O306**
Unit Type: Dollar (\$)
Description: Canada and Quebec Pension Plan
Sum(SHS_V:009 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)

Variable Name: **O307**
Unit Type: Dollar (\$)
Description: Other government pension funds
Sum(SHS_V:008 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)

Variable Name: **O308**
Unit Type: Dollar (\$)
Description: Other retirement or pension funds (excluding Registered Retirement Savings Plans (RRSPs))
Sum(SHS_V:010 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)

Variable Name: **O401**
Unit Type: Dollar (\$)
Description: Total gifts of money and contributions
Sum(SHS_V:012 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)
Sum(SHS_V:013 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)
Sum(SHS_V:014 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)
Sum(SHS_V:015 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)
Sum(SHS_V:016 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)

Note: This includes money and support payments given to persons outside the household or to charity. Prior to 1997, money spent on gifts of goods and services to persons outside the household were reported separately. Starting in 1997, these expenditures are included in each category. The following new categories were added under Clothing: clothing gifts to non-household members for women's and girls' wear, men's and boys' wear, and children's wear.

Variable Name: **O403**

Unit Type: Dollar (\$)

Description: Gifts of money and support payments (excluding alimony and child support) to persons living inside Canada

Sum(SHS_V:013 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)

Variable Name: **O404**

Unit Type: Dollar (\$)

Description: Gifts of money and support payments (excluding alimony and child support) to persons living outside Canada

Sum(SHS_V:014 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)

Variable Name: **O406**

Unit Type: Dollar (\$)

Description: Contributions to religious organizations

Sum(SHS_V:015 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)

Variable Name: **O407**

Unit Type: Dollar (\$)

Description: Contributions to non-religious charitable organizations

Sum(SHS_V:016 for each Person: If (SHS_A:012 between 1 and 3) and SHS_A:003 < 1987)

Variable Name: **TOTCUCON**

Unit Type: Dollar (\$)

Description: Total current consumption

Total expenses excluding personal taxes, personal insurance payments, and gifts and contributions.

Note: Expenses incurred during the survey year for food, shelter, household operations, household furnishings and equipment, clothing, transportation, health care, personal care, recreation, reading materials, education, tobacco products and alcoholic beverages, games of chance, and a miscellaneous group of items.

Caution should be used when comparing total current consumption for the Survey of Household Spending (1997 on) to total current consumption from previous years (Family Expenditure Survey). See "Shelter" and "Miscellaneous" for more information. Prior to 1997, expenditures for gifts were not included in total current consumption. Starting in 1997, these expenditures are reported in the appropriate category and, therefore, contribute to total current consumption.

Variable Name: **TOTEXPEN**

Unit Type: Dollar (\$)

Description: Total expenditure

Note: The expenditures included in "Total current consumption" plus personal taxes, personal insurance payments and pension contributions, and gifts of money and contributions to persons outside the household.

Caution should be used when comparing total expenditure for the Survey of

Household Spending (1997 on) to total expenditure from previous years (Family Expenditure Survey). See "Shelter" and "Miscellaneous" for more information.

3.20 Additional Variables

Variable Name: **ADEQUACY**
Unit Type: Code
Description: Housing adequacy indicator

This variable was developed by Statistics Canada for Canada Mortgage and Housing Corporation (CMHC) to identify "any household living in a unit in need of major repairs, and/or lacking hot/cold running water, inside toilet, or a bath/shower".

This variable classifies households according to whether their dwelling has at least one bathroom and is in reasonable repair.

Adequate: SHS_B:004 (need for repairs) = 19 (minor) or 20 (none) AND SHS_B:007 (no. of bathrooms) = 1 or more

Code	Description
0	Adequate
1	Not adequate

Variable Name: **AFFORDAB**
Unit Type: Code
Description: Housing affordability indicator

This variable was developed by Statistics Canada for Canada Mortgage and Housing Corporation (CMHC).

This variable uses a shelter cost-to-income ratio (STIR) to see if households spend more than an accepted amount on shelter: expenditures of 30 per cent or more are considered above the norm.

Rent = SHS_I:002
Regular mortgage = (SHS_G:002 * SHS_G:003) + (SHS_G:004 * SHS_G:005) +
(SHS_G:006 * SHS_G:007) - (SHS_E:003 * (100 - PctExpAgainstBusiness_E:009) / 100
if SHS_G:014 = '1') - (SHS_G:016 if SHS_G:015 = '1')
Condo charges = SHS_E:006
Property taxes = SHS_E:003
Water, fuel and electricity = SHS_J:001 + SHS_J:002 + SHS_J:003
Household income before taxes = SHS_U:004 to SHS_U:018 excluding personal income
tax refunds SHS_U:017

On this file, the housing affordability indicator is calculated as follows:

Affordable: Rent + Regular mortgage payments + Condominium charges + Property taxes
+ Water, fuel and electricity / Household income before taxes = less than 30%

Not affordable: Rent + Regular mortgage payments + Condominium charges + Property
taxes + Water, fuel and electricity / Household income before taxes = 30% or more

Not applicable: Households where household income before taxes = 0 or less, and
households with shelter cost-to-income ratio (STIR) = 1 or more.

Code	Description
0	Affordable
1	Not affordable
9	Not applicable

Variable Name: **SUITABLE**
Unit Type: Code
Description: Housing suitability indicator (formerly Crowded Dwelling Indicator)
This variable was developed by Statistics Canada for Canada Mortgage and Housing Corporation (CMHC) according to the following specifications:

The National Occupancy Standard (NOS), used to measure housing suitability, determines the number of bedrooms a household should have for households of different size and composition. According to the National Occupancy Standard there must be one bedroom for each:

- cohabiting adult couple;
- unattached household member 18 years of age and over;
- same-sex pair of children under age 18;
- additional boy and/or girl in the family, unless there are two opposite sex siblings under 5 years of age, in which case they are expected to share a bedroom.

A household of one individual can occupy a bachelor unit (i.e., no bedroom).

For example, a household composed of a couple and two children (boy aged 4, and girl aged 2) is expected to require 2 bedrooms. When the boy turns 5 years old, the requirement would increase to 3 bedrooms.

Code	Description
0	Not Crowded
1	Crowded

Note: The National Occupancy Standard was developed by CMHC through a formal Federal/Provincial/Territorial consultation process to encompass the commonalities of all the provincial/territorial occupancy standards and to serve as Canada's official housing suitability measure or indicator. See also CMHC Socio-Economic Research Highlights, Issue 55-1, Special Studies on 1996 Census Data: Canadian Housing Conditions, page 1 and footnote 3 (www.cmhc-schl.gc.ca/publications/en/rh-pr/index.html).

Variable Name: **RQNUMBED**
Unit Type: Code
Description: Required number of bedrooms

This variable was developed by Statistics Canada for Canada Mortgage and Housing Corporation (CMHC). This variable represents the number of bedrooms required by the household under the National Occupancy Standard. The calculation of the required number of bedrooms is the first step in the calculation of the variable SUITABLE (formerly CROWDED). According to the National Occupancy Standard there must be one bedroom for each:

- cohabiting adult couple;
- unattached household member 18 years of age and over;
- same-sex pair of children under age 18;
- additional boy and/or girl in the family, unless there are two opposite sex siblings under 5 years of age, in which case they are expected to share a bedroom.

A household of one individual can occupy a bachelor unit (i.e. no bedroom).

For example, a household composed of a couple and two children (boy aged 4, and girl aged 2) is expected to require 2 bedrooms. When the boy turns 5 years old, the requirement would increase to 3 bedrooms.

Code	Description
0	0 (indicates bachelor apartment)
1	1
2	2
3	3
4	4
5	5 or more

Note: The National Occupancy Standard was developed by CMHC through a formal Federal/Provincial/Territorial consultation process to encompass the commonalities of all the provincial/territorial occupancy standards and to serve as Canada's official housing suitability measure or indicator. See also CMHC Socio-Economic Research Highlights, Issue 55-1, Special Studies on 1996 Census Data: Canadian Housing Conditions, page 1 and footnote 3 (www.cmhc-schl.gc.ca/publications/en/rh-pr/index.html).

Variable Name: **MONRENT**
Unit Type: Code
Description: Monthly serviced rental payments
(SHS_I:002 + SHS_J:001 + SHS_J:002 + SHS_J:003) / 12

(Rent + Water + Electricity + Fuel) divided by 12

Calculated for households where:

1. Dwelling tenure during reference year (TENURYRP) = 3 (rented) and
2. Months household occupied a rented dwelling (I:001) = 12 and
3. Reduced rent reason = 3 (no reduced rent) and
4. Dwelling repairs needed = 2 or 3 (minor or no repairs needed)

Households not meeting above criteria have this field set to 000000000.00.

Note: Criteria 1 and 2 do not always yield the same records because of the presence of part-year members who may have had a different housing tenure than the reference person. So using the 2 together allows us to eliminate or reduce the number of records with complicated tenure histories. CMHC would prefer to use records with uncomplicated histories since they are interested in the cost of the dwelling units and not the expenditure of household members on rent. A complicated tenure history is usually due to the presence of a part-year member with a different previous tenure from the reference year.

4. TECHNICAL INFORMATION

4.1 Survey Methodology

(For more detailed information, see the *Methodology of the Survey of Household Spending* available free on the Statistics Canada web site at www.statcan.ca).

4.1.1 The Survey Universe

The 2001 Survey of Household Spending was carried out in private households in Canada's ten provinces and three territories.¹

The following groups were excluded from the survey:

- those living on Indian reserves and crown lands;
- official representatives of foreign countries living in Canada and their families;
- members of religious and other communal colonies;
- members of the Canadian Armed Forces living in Military Camps;
- people living in residences for senior citizens;
- people living full time in institutions: for example, inmates of penal institutions and chronic care patients living in hospitals and nursing homes.

The survey covers about 98% of the population in the ten provinces. In the Territories, coverage was restricted to 88% in the Yukon, 92% in the Northwest Territories, and 89% in Nunavut.

Information was not gathered from persons temporarily living away from their families (for example, students at university), because it would be gathered from their families if selected. In this way, double counting of such individuals was avoided.

Data from part-year households were excluded from estimates of average household spending. However, these data were included in the estimates for dwelling characteristics and household equipment and in the calculation of the Survey of Household Spending response rate. Data from part-year households are also required as input into Canada's System of National Accounts. Part-year households are comprised entirely of persons who were members of other households for part of the reference year. There were 516 part-year households in the sample in 2001.

4.1.2 Survey Content and Reference Period

Detailed information was collected about expenditures for consumer goods and services, changes in assets, mortgages and other loans, and annual income. This information was collected for the calendar year 2001 (the survey reference year). Information was also collected about dwelling characteristics (e.g., type and age of heating equipment) and household equipment (e.g., appliances, communications equipment, and vehicles). This type of information was collected as of December 31 of the reference year.

Because the Survey of Household Spending is designed principally to provide detailed information on non-food expenditures, only an overall estimate of food expenditure is recorded. Detailed information on food expenditure is provided by the Food Expenditure

¹ In order to reduce response burden for northern households, the SHS is conducted in the north only every second year, starting in 2001.

Survey, which is conducted every four to five years. It was last conducted in 2001. In January 2003, the results were published in *Food Expenditure in Canada, 2001*, Catalogue no. 62-554-XPB.

4.1.3 The Sample

The sample size for the 2001 Survey of Household Spending was 22,172 eligible households.

This sample was a stratified, multi-stage sample selected from the Labour Force Survey (LFS) sampling frame. Sample selection comprised two main steps: the selection of clusters (small geographic areas) from the LFS frame and the selection of dwellings within these selected clusters. The LFS sampling frame mainly uses 1991 Census geography and 1991 population counts.²

4.1.4 Data Collection

The 2001 Survey of Household Spending was conducted from January to March 2002. Data were collected during a personal interview using a paper questionnaire. A copy of this questionnaire is available on request.

Only a few questions required coding and this was done by the interviewer, checked by the senior interviewer, and, in many cases, checked for consistency with the rest of the information on the questionnaire by an automated batch edit system.

4.1.5 Data Processing and Quality Control

Data entry and automated editing for the 2001 Survey of Household Spending took place in the Statistics Canada regional offices. This allowed respondents to be contacted in the event that more information was required to resolve an inconsistency on their questionnaires.

After data entry, an automated physical edit system checked for data entry errors. Data had to pass a two-tier edit system consisting of "must-pass" edits that checked questionnaires for logic and consistency, and "warnings" that indicated that a particular situation was unusual and could require correction. The invocation of either type of edit resulted in the intervention of a member of one of the specially trained edit resolution teams. Further editing of the data took place in head office where invalid responses were corrected.

Missing responses were imputed using the nearest neighbour method. Statistics Canada's Canadian Census Edit and Imputation System (CANCEIS) was used to insert values from donor records having similar characteristics, chosen specifically to fit the variable. For example, total household income was used for most variables; dwelling type, household size and province were also frequently used.

Tabulation for the 2001 Survey of Household Spending was accomplished using a PC/client server-based system. This system provides tools (database querying, searching, and viewing capabilities) for spotting systematic errors.

² A detailed description of the Labour Force Survey sampling frame can be found in *Methodology of the Canadian Labour Force Survey*, Statistics Canada, Catalogue no. 71-526-XPB.

4.1.6 Weighting

The estimation of population characteristics from a sample survey is based on the premise that each sampled unit represents a certain number of units in the population. A basic survey weight was attached to each record in the sample to reflect this representation. These basic weights were adjusted for non-response for selected metropolitan areas, additional geographical areas and high income strata. The additional geographical areas comprise the remaining metropolitan areas and urban and rural areas based on census definitions but do not necessarily correspond exactly. For definitions of these terms, refer to the *1996 Census Dictionary*, Catalogue no. 92-351-XPE.

To increase the reliability of the estimates, weights were adjusted to ensure that estimates based on relevant characteristics of the population would respect population totals from sources other than the survey. For the ten provinces, there are two sets of totals.

The first set of totals, for age/sex groups, household size and household type at the province level, are based on projections at mid-January 2002 using the 1996 Census of Population (adjusted for net undercoverage). Controls for 18 age/sex groups are used. These are combined with totals for one-person households, two-person households and more than two-person households. There are also totals for the number of single-parent families and couples with never-married children.

Because of their smaller population, only two age/sex groups were used for the three territories (Yukon, Northwest Territories and Nunavut): number of persons under 18, and number of persons 18 and over, combined with the totals for one-person households, two-person households and more than two-person households for Yukon and Northwest Territories and total number of households for Nunavut. For the 14 selected metropolitan areas, only two age groups are used: number of persons under 18, and number of persons 18 and over.

The second set of totals is derived from T4 information from Canada Customs and Revenue Agency (CCRA, formerly Revenue Canada) and is intended to ensure that the weighted distribution of income (based on wages and salaries) in the data set matches that of the Canadian population.

The switch from 1991 to 1996 Census-based population totals and the use of T4 information from CCRA were introduced starting with the 1999 SHS. Revised SHS estimates for earlier survey years are available and should be used for year-over-year comparisons.

4.2 Data Quality

(For more detailed information, see the 2001 *Survey of Household Spending Data Quality Indicators*, free on the Statistics Canada web site at www.statcan.ca.)

4.2.1 Sampling Error

Sampling errors occur because inferences about the entire population are based on information obtained from only a sample of the population. The sample design, the variability of the data, and the sample size determine the size of the sampling error. In addition, for a given sample design, different methods of estimation will result in different sampling errors.

The design for the 2001 Survey of Household Spending was a stratified multi-stage sampling scheme. The sampling errors for multi-stage sampling are usually higher than for a simple random sample of the same size. However, the operational advantages outweigh this disadvantage, and the fact that the sample is also stratified improves the precision of estimates.

Data variability is the difference between members of the population with respect to spending on a specific item or the presence of a specific dwelling characteristic or piece of household equipment. In general, the greater these differences are, the larger the sampling error will be. In addition, the larger the sample size, the smaller the sampling error.

4.2.1.1 Standard Error and Coefficient of Variation

A common measure of sampling error is the standard error (SE). Standard error is the degree of variation in the estimates as a result of selecting one particular sample rather than another of the same size and design. It has been shown that the “true” value of the characteristic of interest lies within a range of ± 1 standard error of the estimate for 68% of all samples, and ± 2 standard errors for 95% of all samples.

The coefficient of variation (CV) is the standard error expressed as a percentage of the estimate. It is used to indicate the degree of uncertainty associated with an estimate. For example, if the estimate of the number of households having a given dwelling characteristic is 10,000 households, and the corresponding CV is 5%, then the “true” value is between 9,500 and 10,500 households, 68% of the time and between 9,000 and 11,000 households, 95% of the time.

Standard errors for the 2001 Survey of Household Spending were estimated using the jackknife technique, which leads to a slight over-estimation and is, thus, conservative. For more information, refer to the Statistics Canada publication, *Methodology of the Canadian Labour Force Survey*, Catalogue no. 71-526XPB.

Coefficients of variation are presented in technical tables 1 and 2 in Appendix E.

4.2.1.2 Data Suppression

For reliability reasons, estimates with CVs greater than 33% should be suppressed. Since CVs are not calculated for all estimates, data suppression for the Survey of Household Spending has been based on a relationship between the CV and the number of households reporting expenditure on an item. Analysis of past survey results indicates that CVs usually reach this level when the number of households reporting an item drops to about 30. Therefore, data have been suppressed in SHS releases for spending on items reported by fewer than 30 households.

However, data for suppressed items do contribute to summary level variables. For example, the expenditure for a particular category of clothing might be suppressed but this amount forms part of the total expenditure estimate for clothing.

4.2.2 Non-Sampling Error

Non-sampling errors occur because certain factors make it difficult to obtain accurate responses or responses that retain their accuracy throughout processing. Unlike sampling error, non-sampling error is not readily quantified. Four sources of non-sampling error can be identified: coverage error, response error, non-response error, and processing error.

4.2.2.1 Coverage Error

Coverage error results from inadequate representation of the intended population. This error may occur during sample design or selection, or during data collection and processing.

4.2.2.2 Response Error

Response error may be due to many factors, including faulty design of the questionnaire, interviewers' or respondents' misinterpretation of questions, or respondents' faulty reporting. In the Survey of Household Spending, the difference between receipts and disbursements is calculated as a check on respondents' recall. This important quality control tool involves the balancing of receipts (income and other money received by the household) and disbursements (total expenditure plus the variable *Money flows—assets, loans, and other debts*) for each questionnaire. If the difference is greater than 10% of the larger of receipts or disbursements, respondents are contacted again for additional information. This ensures that expenditures, at least at the aggregate level, are commensurate with household income and other sources of funds.

Several features of the survey help respondents recall their expenditures as accurately as possible. First, the survey period is the calendar year because it is probably more clearly defined in people's minds than any other period of similar length. Secondly, expenditure on food (about 11% of the average budget in 2001) can be estimated as either weekly or monthly expenses depending on the respondent's purchasing habits. Thirdly, expenses on smaller items purchased at regular intervals are usually estimated on the basis of amount and frequency of purchase. Purchases of large items (automobiles, for example) are recalled fairly easily, as are expenditures on rent, property taxes, and monthly payments on mortgages. However, even with these items, the accuracy of data depends on the respondent's ability to remember and willingness to consult records.

4.2.2.3 Non-Response Error

Non-response error occurs in sample surveys because not all potential respondents cooperate fully. The extent of non-response varies from partial non-response to total non-response.

Total non-response occurs when the interviewer is either unable to contact the respondent, no member of the household is able to provide information, or the respondent refuses to participate in the survey. Total non-response is handled by adjusting the basic survey weight for responding households to compensate for non-responding households. For the 2001 Survey of Household Spending, the overall response rate was 76.2%. See Figure 1 for provincial response rates.

In most cases, partial non-response occurs when the respondent does not understand or misinterprets a question, refuses to answer a question, or is unable to recall the requested information. Imputing missing values compensates for this partial non-response.

The importance of the non-response error is unknown but in general this error is significant when a group of people with particular characteristics in common refuses to cooperate and where those characteristics are important determinants of survey results.

Figure 1
Response Rates, Canada and Provinces/Territories, 2001

	Eligible households (1)	Non- contacts	Refusals	Unusables (2)	Usables	Response rate (3)
Newfoundland and Labrador	1,753	94	189	37	1,433	81.7%
Prince Edward Island	786	36	84	6	660	84.0%
Nova Scotia	2,097	141	313	90	1,553	74.1%
New Brunswick	1,898	85	265	53	1,495	78.8%
Quebec	2,669	173	391	41	2,064	77.3%
Ontario	3,351	245	697	259	2,150	64.2%
Manitoba	1,816	60	220	32	1,504	82.8%
Saskatchewan	1,861	76	250	54	1,481	79.6%
Alberta	2,260	73	363	79	1,745	77.2%
British Columbia	2,677	102	494	83	1,998	74.6%
Yukon	345	13	70	11	251	72.8%
Northwest Territories	412	25	23	6	358	86.9%
Nunavut	247	19	18	1	209	84.6%
Canada	22,172	1,142	3,377	752	16,901	76.2%

(1) Part-year households are included in the calculation of response rates. There were 516 part-year households in 2001.

(2) Rejected at the editing stage.

(3) Usable/eligible*100

4.2.2.4 Processing Error

Processing errors may occur in any of the data processing stages, for example, during data entry, editing, weighting, and tabulation. See Data Processing and Quality Control (Section 4.1.5) for a description of the steps taken to reduce processing error.

4.2.3 The Effect of Large Values

For any sample, estimates can be affected by the presence or absence of extreme values from the population. These extreme values are most likely to arise from positively skewed populations. The nature of the subject matter of the SHS lends itself to such extreme values. Estimates of totals, averages and standard errors may be greatly influenced by the presence or absence of these extremes.

4.2.4 Comparability Over Time

Conducted since 1997, the Survey of Household Spending integrates most of the content found in the Family Expenditure Survey and the Household Facilities and Equipment Survey. Many data from these two surveys are comparable to the Survey of Household Spending data. However, some differences related to the methodology, to data quality and to definitions must be considered before making comparisons.

For more information, refer to the *Note to Former Users of Data from the Family Expenditure Survey*, Catalogue no. 62F0026MIE2000002 and the *Note to Former Users of Data from the*

Household Facilities and Equipment Survey, Catalogue no. 62F0026MIE2000003. Both documents are available free of charge on the Statistics Canada web site (www.statcan.ca). Historical data from the 1997 and 1998 surveys of household spending and the 1996 Family Expenditure Survey have been re-weighted using the new weighting methodology described above under "Weighting". Historical comparisons between data from those surveys and data from recent years of the Surveys of Household Spending should generally be made with re-weighted data, although the differences between survey estimates from the old and new methodologies appear to be minimal at a summary level. Certain populations or variables, however, may be more strongly affected.

For 2001 only, extra questions were included in the survey so that data from the SHS could be used in the weighting of the Consumer Price Index. This change may affect historical comparisons for a few variables. For example, questions were added under "Personal care preparations" to collect specific information about hair care products, makeup, fragrances, deodorants and oral hygiene products. As a result of these extra questions, respondents may have given more precise information and the increase in the estimate for "Personal care preparations" may have been at least partly caused by an improvement in respondent recall. The effect of additional questions on estimates is difficult to quantify.

4.3 Guidelines for Tabulation, Analysis and Dissemination

This section describes the guidelines that users should follow when totalling, analysing, publishing or releasing data taken from the public-use microdata file.

4.3.1 Important Note to Users about Full and Part-year Households

In 1997, the Survey of Family Expenditure (FAMEX) and the Household Facilities and Equipment Survey (HFE) were replaced by the Survey of Household Spending (SHS). FAMEX microdata files included full-year households³ only, as only such households could give a clear picture of income and expenditures over an entire year. HFE microdata, on the other hand, included all households, since data were collected as of December 31. To meet user needs, all households are listed on the SHS file, along with a variable indicating each household's status (full-year, part-year).

To create statistics for average annual expenditures, users should use records for full-year households. To tabulate dwelling characteristics, household equipment or create other types of expenditure statistics such as totals (aggregates) or market share, users should use records for full-year and part-year households.

4.3.2 Guidelines for Rounding

To ensure that estimates from this microdata file intended for publication or any other type of release correspond to estimates that would be obtained by Statistics Canada, we strongly recommend that users comply with the following guidelines for rounding estimates.

- a) Estimates in the body of a statistical table must be rounded to the nearest hundredth using the traditional rounding technique, i.e., if the first or only number to be eliminated is between 0 and 4, the preceding number does not change. If the first or only number to be eliminated is between 5 and 9, the value of the last number to be retained increases by 1. For example, when using the traditional technique of rounding to the nearest

³ A *full-year household* has at least one member present throughout the year. A *part-year household* consists entirely of members present only part of the year. A member present for part of the year is a member of a household who has been present less than 52 weeks. Income and expenditure data for members present just part of the year are collected for only that part of the year they were included in the household.

- hundredth, if the last two numbers are between 00 and 49, they are replaced by 00 and the preceding number (denoting hundredths) stays as is. If the last two numbers are between 50 and 99, they are replaced with 00 and the preceding number increased by 1.
- b) Total partial sub-totals and total sub-totals in statistical tables must be calculated using their unrounded corresponding components, then rounded in turn to the closest hundredth using the traditional rounding technique.
 - c) Means, ratios, rates and percentages must be calculated using unrounded components (i.e., numerators and/or denominators), and then rounded to a decimal using the traditional rounding technique.
 - d) Totals and differences in aggregates (or ratios) must be calculated using their corresponding unrounded components, then rounded to the nearest hundredth (or decimal place) using the traditional rounding technique.
 - e) If, due to technical or other limitations, a technique other than traditional rounding is used, with the result that the estimates to be published or released differ in any form from the corresponding estimates that would be obtained by Statistics Canada using this microdata file, we strongly advise users to indicate the reasons for the differences in the documents to be published or released.
 - f) Unrounded estimates cannot under any circumstances be published or released in any way whatsoever by users. Unrounded estimates give the impression that they are much more precise than they actually are.

4.3.3 Guidelines for the Weighting of the Sample for Totalling Purposes

The sample design used for the SHS is not self-weighted, meaning that the households in the sample do not all have the same sampling weight. To produce simple estimates, including standard statistical tables, users must use the appropriate sampling weight. Otherwise, the estimates calculated using the microdata files cannot be considered as representative of the observed population and will not correspond to those that would be obtained by Statistics Canada using this microdata file. See Section 4.1.6, "Weighting."

Users should also note that depending on the method they use to process the weight field, some software packages may not produce estimates that correspond exactly to those of Statistics Canada using this microdata file.

4.3.4 Types of Estimates: Categorical Versus Quantitative

Before discussing how SHS data can be totalled and analysed, it is useful to describe the two main types of estimations that may be produced from the microdata file for the Survey of Household Spending.

4.3.4.1 Categorical estimates

Categorical estimates are estimates of the number or percentage of households in the survey's target population that have certain characteristics or belong to a defined category. The number of households reporting a particular expenditure is an example of this type of estimate. The expression 'aggregate estimate' can also be used to refer to an estimate of the number of individuals with a given characteristic.

Examples of categorical questions:

Did you have a cellular telephone for personal use? _yes _no

When was your residence built?

- _ 1920 or earlier
- _ 1921-1945
- _ 1946-1960
- _ 1961-1970
- _ 1971-1980
- _ 1981-1990
- _ 1991-2000
- _ 2001

As of December 31, 2001, was your residence:

- _ Owned mortgage-free by your household?
- _ Owned with one or more mortgages by your household?
- _ Rented by your household?
- _ Occupied rent-free by your household?

Totalling of categorical estimates

Estimates of the number of persons with a given characteristic can be obtained from the microdata file by adding the final weights of all records containing the desired characteristic or characteristics. Percentages and ratios in the X/Y form are obtained as follows:

- a) by adding the final weights of records containing the desired characteristic for the numerator X;
- b) by adding the final weights of records containing the desired characteristic for the denominator Y;
- c) by dividing the estimate for the numerator by the estimate for the denominator.

4.3.4.2 Quantitative estimates

Quantitative estimates are estimates of totals or means, medians or other central tendency measurements of quantities based on all members of the observed population or based on some of them. They also explicitly include estimates in the form X/Y where X is an estimate of the total quantity for the observed population and Y is an estimate of the number of individuals in the observed population who contribute to that total quantity.

An example of a quantitative estimate is mean annual expenditure for personal and health care per household in the target population. The numerator corresponds to an estimate of total annual expenditure for personal and health care, and the denominator corresponds to an estimate of the number of households in the population.

Example of quantitative question:

In 2001, how much did your household spend for telephone service? _____

Totalling of quantitative estimates

Quantitative estimates can be obtained from the microdata file by multiplying the value of the desired variable by the final weight of each record, and then adding this quantity for all records of interest. For example, to obtain an estimate of total expenditure by households that were owners on December 31 for electricity, the value reported for the question "In 2001, how much did your household spend on electricity?" is multiplied by the final weight of the record, and then that result is summed over all records with a positive response to the

question “On December 31, 2001, was your house: ‘Owned mortgage-free by your household’ or ‘Owned with one or more mortgages by your household’.”

To obtain a weighted mean expressed by the formula X/Y , the numerator X is calculated as a quantitative estimate and the denominator Y as a categorical estimate. For example, to estimate mean household expenditures for electricity by owners, you must:

- a) estimate the total expenditure for electricity for households where the residence is owned, using the method described above;
- b) estimate the number of owned households by adding the final weights for all records with a positive response to the question “As at December 31, 2001, was your house: ‘Owned mortgage-free by your household’ or ‘Owned with one or more mortgages by your household’”; and then,
- c) divide the estimate obtained in a) by the one calculated in b).

Note: Because average expenditures are being estimated, “part-year” households must first be excluded from calculations (for further details, see Section 4.3.1, *Important Note to Users about Full and Part-year Households*).

4.3.5 Guidelines for Statistical Analysis

The Survey of Household Spending is based on a complex survey design that includes stratification and multiple stages of selection, as well as uneven respondent selection probabilities. The use of data from such complex surveys poses problems for analysts, because the survey design and the selection probabilities influence the estimation and variance calculation methods to be used.

Although numerous analytical methods in statistical software packages allow for the use of weights, the meaning or definition of weights differs from that suitable for a sample survey. As a result, although the estimates done using those packages are in many cases accurate, **the variances calculated have almost no significance.**

For numerous analytical techniques (for example, linear regression, logistic regression, variance analysis), there is a way to make the application of standard packages more significant. If the weights of the records contained in the file are converted so that the mean weight is (1), the results produced by standard packages will be more reasonable and will take into account uneven selection probabilities, although they still cannot take into account the stratification and the cluster distribution of the sample. The conversion can be done using in the analysis a weight equal to the original weight divided by the mean of original weights for sampling units (households) that contribute to the estimator in question. However, because this method still does not take into account sample design stratification and clusters, the estimates of the variance calculated in this way will very likely be underestimates of true values.

4.3.6 Guidelines for Release

Before releasing and/or publishing estimates taken from the microdata file, users must first determine the level of reliability of the estimates. The quality of the data is affected by the sampling error and the non-sampling error as described above. However, the level of reliability of estimates is determined solely on the basis of sampling error, as evaluated using the coefficient of variation (CV) as shown in the table below. In addition to calculating CVs, users should also read the section of this document regarding the characteristics of data quality.

Whatever CV is obtained for an estimate from this microdata file, users should determine the number of sampled respondents who contribute to the calculation of the estimate. If this

number is less than 30, the weighted estimate should not be released regardless of the value of the CV for this estimate. For weighted estimates based on sample sizes of 30 or more, users should determine the CV of the rounded estimate following the guidelines below.

Figure 2
Sampling Variability Guidelines

Type of Estimate	CV (in %)	Guidelines
1. Acceptable	0.0 – 16.5	Estimates can be considered for general unrestricted release. Requires no special notation.
2. Marginal	16.6 – 33.3	Estimates can be considered for general unrestricted release but should be accompanied by a warning cautioning subsequent users of the high sampling variability associated with the estimates. Such estimates should be identified by the letter M (or in some other similar fashion).
3. Unacceptable	Greater than 33.3	Statistics Canada does not recommend the release of estimates of unacceptable quality. However, if the user chooses to do so then estimates should be flagged with the letter U (or in some other similar fashion) and the following warning should accompany the estimates: “The user is advised that . . . (specify the data) . . . do not meet Statistics Canada’s quality standards for this statistical program. Conclusions based on these data will be unreliable and most likely invalid.”

4.3.6.1 Computation of approximate CVs

In order to provide a way of assessing the quality of estimates, Statistics Canada has produced a coefficient of variation table (CV table) which is applicable to estimates of averages, ratios and totals obtained from this public use microdata file for the major variables of the SHS by province, by territory and at the Canada level (see Appendix E). The CV of an estimate is defined to be the square root of the variance of the estimate divided by the estimate itself and expressed as a percentage. The numerator of the CV is a measure of the sampling error of the estimate, called the standard error, and is calculated at Statistics Canada with the Jackknife method. This method requires, among other things, information about the strata and the clusters, which can't be given on the public use microdata file for reasons of confidentiality. So that users may estimate CVs for variables not included in the CV tables, Statistics Canada has produced a set of rules to obtain approximate CVs for a wide variety of estimates. It should be noted that these rules provide approximate and, therefore, unofficial CVs. The quality of the approximation, however, is quite satisfactory, especially for the most reliable estimates. Note that accuracy of this approximation is reduced when the domains become smaller. Therefore, the CV approximation method must be used prudently when the domains are small. The document on data quality for the 1997 SHS contains the results of the evaluation of the performance of the CV approximation method.

How to obtain approximate CVs

The following rules should enable the user to determine the approximate coefficients of variation for estimates of totals, means or proportions, ratios and differences between such estimates for sub-populations (domains) for which the Jackknife CV is not provided in the CV tables.

Important: If the number of observations on which an estimate is based is less than 30, the weighted estimate should not be released regardless of the value of the CV for this estimate.

Rule 1: Approximating CVs for estimates of totals (aggregates)

All the steps below must be followed to obtain an approximate CV (ACV) for an estimate of a total (either a number of households possessing a certain characteristic (categorical estimate) or a total of some expense for all households (quantitative estimate)) for a sub-population (domain) of interest:

- 1) Create a binary variable for each household, say I, equalling 1 if the household is part of the domain of interest, i.e. possesses the desired characteristic and 0 otherwise;
- 2) To estimate a quantitative variable, create a variable Y representing the product of the binary variable I and the variable of interest. To estimate a categorical variable, create a variable Z equal to 1 if the categorical variable is equal to the value of interest, and equal to 0 otherwise. Define variable Y as the product of I and Z;
- 3) Do step (4) to step (9) for each province separately;
- 4) Calculate the sum over all the households of the product of the final weight (section Weighting), and Y (this sum represents the estimate of the total for the domain of interest in the province under consideration);
- 5) Calculate the sum over all the households of the product of the final weight and the household size;
- 6) Divide the result obtained in step (4) by the result obtained in step (5);
- 7) For each household, multiply the result obtained in step (6) by the household size;
- 8) For each household, define a variable, say E, by the subtraction of the result obtained in step (7) from Y;
- 9) Calculate the sum over all the households of the product of the final weight minus 1, the final weight and E squared; (this sum represents the estimated variance of the total estimated at step 4);
- 10) Add up the result obtained in step (9) for each province;
- 11) The ACV is defined to be 100 times the square root of the result obtained in step (10), divided by the estimate. The estimate is the sum over all the provinces of the result obtained in step (4).

More formally, steps 1 to 10 above can be obtained with the following formula:

$$\sum_{p=1}^{12} \sum_{k \in S_p} (w_k - 1) w_k \left(Y_k - m_k \sum_{k \in S_p} w_k Y_k / \sum_{k \in S_p} w_k m_k \right)^2$$

where the index p corresponds to provinces, S_p is the sample of respondents for the province p , the index k corresponds to households, w_k is the final weight for the k^{th} household, m_k is the household size for the k^{th} household and Y_k is the value of the variable Y, defined in step (2) above, for the k^{th} household. As you can see, index p , the province indicator, takes values ranging from 1 to 12. Twelve distinct province codes appear on the microdata file: one for each of the ten provinces, one for the Territories and a "00" province code assigned to a set

of records for reasons of confidentiality (See *To Protect Confidentiality*, Section 4.4).

Note: Two household size variables appear in the microdata file. To calculate approximate CVs, the variable used to define household size is “Household size at December 31,” rather than “Household size (number of persons a member sometime in reference year).”

Important: When estimating variance for a given domain, do not limit yourself to units belonging to the domain. The entire sample should always be used to estimate variance. Units that do not belong to the domain of interest are not considered when computing the point estimate of the total, but do contribute when estimating the variance.

Rule 2: Approximating CV for estimates of averages or proportions

An estimated mean or proportion is obtained by the ratio of two estimated totals. For a proportion, the numerator is an estimate that is a sub-set of the denominator, for example the proportion of expenditures for households in Manitoba compared to all Canadian households. The CV of an estimated mean or proportion tends generally to be slightly lower than the corresponding CV of the numerator. The CV of an estimated mean or proportion can thus be approximated with the CV of the numerator and the technique described in rule (1) can be used.

Rule 3: Approximating CV for estimates of ratios

Ratio refers to the relationship between two estimates of totals. Calculations of approximate CVs for averages, proportions or any other types of ratio, may be approximated using the following formula:

$$ACV_R = \sqrt{ACV_N^2 + ACV_D^2}$$

where ACV_R is the approximate CV of the ratio, ACV_N is the approximate CV of the numerator of the ratio and ACV_D is the approximate CV of the denominator of the ratio. The formula will tend to overestimate the CV if the two estimates forming the ratio are positively correlated and underestimate the CV if these two estimates are negatively correlated.

Rule 4: Approximating CVs for estimates of differences

The approximate CV of a difference between any two estimates ($EST_{DIFF} = EST_1 - EST_2$) is given by:

$$ACV_{DIFF} = \frac{\sqrt{(EST_1 ACV_1)^2 + (EST_2 ACV_2)^2}}{|EST_{DIFF}|}$$

where ACV_1 is the approximate CV associated with EST_1 and ACV_2 is the approximate CV associated with EST_2 . The formula will tend to overestimate the CV if the two estimates forming the difference are positively correlated and underestimate the CV if these two estimates are negatively correlated.

Examples

Detailed calculations of approximate CVs used for estimating totals are initially presented using fictional cases. Then actual cases of estimating totals, averages (or proportions) ratios and differences, based on microdata file data, will be presented so users can check results

and ensure that the method used was valid.

Part 1: Fictional case: details of calculating an approximated CV for estimating a total

A) Quantitative variable

Let us assume we wanted to estimate the total for a (quantitative) expenditure variable X, for households containing at least one person less than 17 years of age. To illustrate this procedure, we will use a fictional sample (see Figure 3) on which we will present calculation details (see Figure 4) for each of the eleven steps described above. As this procedure is applied independently within each province, we shall merely describe calculations for one province.

Let us use the following sample for Ontario:

Figure 3
Fictional example

Initial Data						
Identifier	Province	Entire year	Weight	Household size	Number of children aged 0-17	Variable of Interest X
00001	Ontario	Yes	5	3	2	30
00002	Ontario	Yes	20	5	3	0
00003	Ontario	Yes	25	2	1	20
00004	Ontario	No	5	4	2	50
00005	Ontario	Yes	15	3	0	20
00006	Ontario	Yes	10	1	0	10
00007	Ontario	Yes	15	4	0	15

In step 1, we define the domain of interest by creating a binary variable equal to 1 for all units belonging to the domain. In the present case, these are households with at least one child between the ages of 0 and 17 years. We then proceed to steps 2 through 9 to estimate variance, which will lead to calculation of the CV. We thus obtain the following results:

Figure 4
Calculation details for approximating the CV of a total (steps 1 to 9)

	Step 1	Step 2	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9
Ident.	Binary variable I	Quantitative variable Y	Weighted Y	Variable K		Step 6 * size	(Y - step 7)	(Weight - 1) * Weight * (Step 8) ²
		(X * I)	(Weight * Y)	(Weight * size)				
00001	1	30 * 1 = 30	5 * 30 = 150	5 * 3 = 15		3 * 3 = 9	30 - 9 = 21	(4 * 5 * 21 * 21) = 8,820
00002	1	0 * 1 = 0	20 * 0 = 0	20 * 5 = 100		3 * 5 = 15	0 - 15 = -15	(19 * 20 * (-15) * (-15)) = 85,500
00003	1	20 * 1 = 20	25 * 20 = 500	25 * 2 = 50		3 * 2 = 6	20 - 6 = 14	(24 * 25 * 14 * 14) = 117,600
00004	1	50 * 1 = 50	5 * 50 = 250	5 * 4 = 20		3 * 4 = 12	50 - 12 = 38	(4 * 5 * 38 * 38) = 28,880
00005	0	20 * 0 = 0	15 * 0 = 0	15 * 3 = 45		3 * 3 = 9	0 - 9 = -9	(14 * 15 * (-9) * (-9)) = 17,010
00006	0	10 * 0 = 0	10 * 0 = 0	10 * 1 = 10		3 * 1 = 3	0 - 3 = -3	(9 * 10 * (-3) * (-3)) = 810
00007	0	15 * 0 = 0	15 * 0 = 0	15 * 4 = 60		3 * 4 = 12	0 - 12 = -12	(14 * 15 * (-12) * (-12)) = 30,240
			Total: 900	Total: 300	900 / 300 = 3			Total = 288,860

If we wanted to know the CV for Ontario, we would perform the following calculation:

$$CV_{ONT} = 100 * \frac{\sqrt{Variance_{ONT}}}{Estimation_{ONT}} = 100 * \frac{\sqrt{Step\ 9_{ONT}}}{Step\ 4_{ONT}} = 100 * \frac{\sqrt{288860}}{900} = 59.7$$

If we wanted to know the CV for Canada, we would proceed in similar manner, by totalling the results for each province. In other words,

$$CV_{CAN} = 100 * \frac{\sqrt{Variance_{CAN}}}{Estimation_{CAN}}$$

$$= 100 * \frac{\sqrt{Variance_{NF} + + Variance_{BC} + Variance_{TERR} + Variance_{PROV00}}}{Estimation_{NF} + + Estimation_{BC} + Estimation_{TERR} + Estimation_{PROV00}}$$

Comment: In this example, we wanted to estimate the total for expenditure variable X. If, for example, we had wanted to use this total to calculate average expenditure X per household, the approach would have been slightly different. As unit 00004 was a “part-year” household, it would not have been considered part of the domain of interest. Binary variable I would thus have taken the value of 0 and the final result would have been different (for further details, see Section 4.3.1., *Important Note to Users about Full and Part-year Households*).

B) Qualitative variable (categorical)

In the event a categorical variable is estimated, the steps in calculating approximate CVs will be the same as in the quantitative variable example presented. Instead of a quantitative value for variable of interest X, we would create a dichotomous variable that would be equal to 1 if the household has the features we want to estimate. If not, it would be equal to 0.

To estimate categorical variables, various approaches may be used for defining the domain and the variable of interest, both of which will produce the same results.

Let us assume we want to estimate the number of households consisting of more than one person living in a single-family dwelling. We could proceed in different ways:

- 1) Binary variable I is equal to 1 for all households and variable X is equal to 1 for households consisting of more than one person living in a single-family dwelling.
- 2) Binary variable I is equal to 1 for all households consisting of at least one person and variable X is equal to 1 for all households the members of which live in a single-family dwelling.
- 3) Binary variable I is equal to 1 for all households the members of which live in a single-family dwelling and variable X is equal to 1 for all households made up of more than one person.
- 4) Binary variable I is equal to 1 for all households made up of more than one person living in a single-family dwelling and X is equal to 1 for all households.

Whatever approach is used, the resulting Y variable (step 2) will be equal to 1 if the household possesses all the necessary features (more than one person and living in a single-family dwelling). If not, it will be equal to 0. Results in terms of point estimates and estimates of variance (CV) will thus be the same.

Part 2: Actual cases based on the microdata file

Example 1a: Approximation of CV for estimates of totals (quantitative variable)

Let us assume that we have estimated that household furnishings and equipment expenditures for one-person households in Manitoba total \$85,578,325. We have to estimate the approximate CV for this estimate. Users must therefore follow steps (1) to (11) of rule 1.

- 1) Create a binary variable I whose value is 1 if the household is a one-person household and resides in Manitoba, otherwise I equals 0.
- 2) Y is defined for each household as the product of the binary variable I and the 'total household furnishing and equipment expenditures' variable.

Note that the estimate of spending on household furnishings and equipment is obtained by adding the product of variable Y defined in 2) and the final weight of the household.

Figure 5 shows the results of some of the steps in the approximate CV calculation.

Figure 5
Calculation of ACV

Step	Total spending on household furnishings and equipment for one-person households in Manitoba
4	85,578,325
5	1,058,704
6	80.83
9	$7,9661 \times 10^{13}$
10	$7,9661 \times 10^{13}$
11	10.43

Example 1b: Approximation of CV for estimates of totals (qualitative variable)

Let us assume we now want to estimate the total number of Canadian one-person households, as well as the total number of Canadian households made up of one person living in different types of accommodations.

In this case, variable I is defined as having the value 1 if the household is one-person. If not, it is 0. We must create five Z variables: Z1 with a value of 1 if the type of residence occupied is a "single-family dwelling," and 0 if not; Z2 equals 1 if the type of residence is semi-detached, and 0 if it is not. Z3 equals 1 if the type of residence is a townhouse, and 0 if it is not. Z4 equals 1 if the type of residence is a row house, and 0 if it is not. Finally, Z5 equals 1 if the type of house is "other," and 0 if it is not. Y1 is defined as the product of I and Z1, Y2 as the product of I and Z2, etc.

The estimates obtained are 3,082,028 for the set of one-person households, 952,142 for single-family dwellings,⁴ 98,563 for semi-detached houses,⁵ 161,883 for town houses⁶ and 1,869,440 for "other."⁷ We want to calculate the approximate CVs for these estimates.

Figure 6 shows the results for some steps in the calculation of the approximate CV. The results presented for steps 4 to 9 are the results for Manitoba (presented as an example, for a

⁴ Single family = single detached

⁵ Semi-detached = double

⁶ Town houses = row or terrace

⁷ Other = duplex, apartment, hotel, mobile home, other

province, they will be used for comparison in the next example), while those presented for steps 10 and 11 are Canada-wide.

Figure 6
Calculation of ACV

Step	Number of one-person households	Number of one-person households living in a single-family dwelling	Number of one-person households living in a semi-detached dwelling	Number of one-person households living in a townhouse	Number of one-person households living in other housing
4	117,448	51,994	1,822	6,584	57,048
5	1,058,704	1,058,704	1,058,704	1,058,704	1,058,704
6	0.11	0.05	0.00	0.01	0.05
9	43,163,783	17,530,371	544,174	1,872,191	19,029,838
10	5,757,809,507	1,431,273,896	206,119,879	245,917,101	3,551,605,161
11	2.46	3.97	14.57	9.69	3.19

Example 1c: Approximation of CV for estimates of totals used in the calculation of average expenditure

Let us assume we want to estimate average expenditure on furnishings and household equipment for one-person households in Manitoba. To do so, we would have to estimate the number of one-person households in Manitoba, as well as the total of their expenditure on furnishings and household equipment.

Because we are interested here in calculating average expenditures, “part-year” households are outside the domain of interest. (For further details, see section 4.3.1, *Important Note to Users about Full and Part-year Households*). This is why estimates of totals are slightly different than those obtained in the prior two examples.

Figure 7
Calculation of ACV

Step	Number of one-person households in Manitoba	Total expenditure on furnishings and household equipment for households consisting of one person in Manitoba
4	112,257	80,618,608
5	1,058,704	1,058,704
6	0.11	76.15
9	41,082,576	$7,4135 \times 10^{13}$
10	41,082,576	$7,4135 \times 10^{13}$
11	5.71	10.68

Example 2: Approximation of CV for estimating ratios

Let us assume we want to estimate the ratio between the average expenditures on furnishings and household equipment for one-person households in urban Manitoba and rural Manitoba.

Figure 8
Calculation of ACV

Step	Total expenditure on furnishings and household equipment for households consisting of one person in Manitoba (urban)	Total expenditure on furnishings and household equipment for households consisting of one person in Manitoba (rural)
4	66,925,919	18,652,406
5	1,058,704	1,058,704
6	63.21	17.62
9	6.3178×10^{13}	1.5257×10^{13}
10	6.3178×10^{13}	1.5257×10^{13}
11	11.88	20.94

The estimate of the ratio would be equal to $\$66,925,919/\$18,652,406 = 3.59$ (one-person households in urban Manitoba spend 3 times more on furnishing than those in rural Manitoba). How does the user determine the CV of this estimate?

We have already calculated CVs for each of the two estimates involved in estimating the ratio. We would thus apply rule (3) to obtain the desired CV:

$$CVA_R = \sqrt{CVA_N^2 + CVA_D^2} = \sqrt{11.88^2 + 20.94^2} = 24.08$$

This CV should be identified as “Marginal” (see section 4.3.6 *Guidelines for Release*) as it is quite high, being between 16.6% and 33.3%.

Example 3: Approximation of CV for estimating differences

Let us assume we wanted to estimate the difference between total expenditures on furnishings and household equipment in Alberta and in Manitoba, as well as the CV for this difference.

We would estimate total expenditures on furnishings and household equipment, along with their respective CVs for Manitoba (total = 615,196,964; CV = 3.77) and for Alberta (total = 2,218,711,878; CV = 3.85).

Estimation of the difference would thus be $2,218,711,878 - 615,196,964 = 1,603,514,914$. Rule (3) can be applied to obtain the desired CV.

$$CVA_{DIFF} = \frac{\sqrt{(EST_1 CVA_1)^2 + (EST_2 CVA_2)^2}}{|EST_{DIFF}|}$$

$$= \frac{\sqrt{(2,218,711,878 * 3.85)^2 + (615,196,964 * 3.77)^2}}{|1,603,514,914|} = 5.52$$

4.3.6.2 How to obtain confidence limits

Although coefficients of variation are widely used, a more intuitively meaningful measure of sampling error is the confidence interval of an estimate. A confidence interval constitutes a statement on the level of confidence that the true value for the population lies within a specified range of values. For example a 95% confidence interval can be described as follows.

If sampling of a population is repeated many times, each sample leading to a new confidence interval for an estimate, then in 95% of the samples the interval will cover the true population value.

Using the CV of an estimate, its confidence intervals may be obtained assuming that, under repeated sampling of the population, the various estimates obtained for a characteristic are normally distributed around the true population value. Using this assumption, 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 about 99 out of 100 that the differences would be less than three standard errors. These different degrees of confidence are referred to as the confidence levels.

Confidence intervals for an estimate, EST, are generally expressed as two numbers, one below the estimate and one above the estimate, as $(EST - k, EST + k)$ where k is determined depending on the level of confidence desired and the sampling error of the estimate.

Confidence intervals for an estimate can be calculated by first determining the ACV of the estimate and then using the following formula to convert to a confidence interval CI:

$$(EST - z \times EST \times ACV / 100, EST + z \times EST \times ACV / 100)$$

where

- $z = 1$ if a 68% confidence interval is desired,
- $z = 1.6$ if a 90% confidence interval is desired,
- $z = 2$ if a 95% confidence interval is desired,
- $z = 3$ if a 99% confidence interval is desired.

Note: Release guidelines, which apply to the estimate, also apply to the confidence interval. For example, if the estimate is not releasable, then the confidence interval is not releasable either.

Example 4

A 95% confidence interval for the estimated mean of spending on household furnishings and equipment for one-person households in Manitoba would be calculated as follows:

$$EST = 718.16$$

$$z = 2$$

$$ACV = 12.11$$

$$CI = (718.16 - 2 \times 718.16 \times 12.11/100 ; 718.16 + 2 \times 718.16 \times 12.11/100) = (544.22; 892.10)$$

4.3.6.3 How to do a Z-test

Coefficients of variation may also be used to perform hypothesis testing, a procedure for distinguishing between population parameters using sample estimates. The sample estimates can be totals, averages, ratios, etc. Tests may be performed at various levels of

significance, where a level of significance is the probability of concluding that the characteristics are different when, in fact, they are identical.

Let EST_1 and EST_2 be sample estimates for 2 characteristics of interest. Let the approximate CV of the difference $EST_1 - EST_2$ be ACV_{DIFF} .

If $z = 1 / ACV_{DIFF}$ is less than 2, then no conclusion about the difference between the characteristics is justified at the 5% level of significance. If however, this ratio is larger than 2, the observed difference is significant at the 5% level.

Example 5

Let us suppose we wish to test, at the 5% level of significance, the hypothesis that there is no difference between the total of spending on furnishings and equipment in Alberta and the same total in Manitoba. From example 3, the approximate CV of the difference between these two estimates was found to be 5.52 and $z = 18.1$. Since this value is greater than 2, it must be concluded that there is significant difference between the two estimates at the 0.05 level of significance.

4.4 Confidentiality of the Public-use Microdata

Microdata files for public use differ in many ways from the master file of the survey held by Statistics Canada. These variations are due to measures taken to preserve the anonymity of respondents to the survey.

The confidentiality of this file is ensured mainly by reducing information, i.e., deleting variables or suppressing or collapsing some of their detail.

To protect confidentiality

- All explicitly identifying information, such as identification numbers, was removed from the file. (Names and addresses are not data captured).
- 203 records had their *province codes set to 0* due to special characteristics (e.g., exceedingly high or low expenditure values). These records were reweighted.
- The three territories are grouped under the same code.
- There was *top-coding and collapsing* of code sets for non-spending variables.
- Income values at the household, reference person and spouse of reference person levels were *rounded* in the following manner:

For income values between \$1 and \$9,999: round to the nearest \$100

For income values between \$10,000 and \$99,999: round to the nearest \$1,000

For income values between \$100,000 and \$999,999: round to the nearest \$10,000

For income values between \$1,000,000 and \$9,999,999: round to the nearest \$100,000

For income values between \$10,000,000 and \$99,999,999: round to the nearest \$1,000,000 (there are no such values on the 2001 file).

The variables "Purchase price of dwelling" and "Selling price of dwelling" were also rounded.

5. APPENDICES – SEE EXCEL FILE

APPENDIX A

Frequency Counts – Public-use Microdata File – SHS 2001

APPENDIX B

Part 1 of 3

**Averages, Aggregates, Minimum and Maximum Values
Public-use Microdata File – SHS 2001
(Full-year and Part-year Households)**

Part 2 of 3

**Averages, Aggregates, Minimum and Maximum Values
Public-use Microdata File – SHS 2001
(Full-year Households)**

Part 3 of 3

**Averages and Aggregates
Unsuppressed Survey File – SHS 2001
(Full-year and Part-year Households)**

APPENDIX C

Inclusion of Spending Variables in Past Microdata Files

APPENDIX D

Comparison of Variables from the 2000 and the 2001 SHS

APPENDIX E

Technical Table 1

**Coefficients of Variation for Average Household
Expenditures, 2001**

Technical Table 2

**Coefficients of Variation for Dwelling Characteristics and
Household Equipment, 2001**