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**MICRODATA FILE**

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**KEY FILE**

**Survey of Consumer Finances 1987**  
**Survey of Household Facilities and Equipment, 1987**

**1986 INCOME**

**Statistics Canada**  
**Household Surveys Division**

**REVISED WEIGHTS - 1991 CENSUS BASED**

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TECHNICAL CHARACTERISTICS OF THIS MICRODATA FILE				CARACTÉRISTIQUES TECHNIQUES DE CE FICHIER DE MICRODONNÉES			
SURVEY YEAR ▶		1987		• ANNÉE D'ENQUÊTE			
INCOME YEAR ▶		1986		• ANNÉE DE REVENU			
INDIVIDUALS, AGED 15 YEARS AND OVER, WITH AND WITHOUT INCOME				PARTICULIERS, AGÉS DE 15 ANS ET PLUS, AVEC ET SANS REVENU			
ECONOMIC FAMILIES				FAMILLES ÉCONOMIQUES			
CENSUS FAMILIES				FAMILLES DE RECENSEMENT			
HOUSEHOLD INCOME, FACILITIES AND EQUIPMENT				ÉQUIPEMENT MÉNAGER SELON LE REVENU			
KEY OR LINK FILE				FICHER CLÉ OU FICHER DE RACCORDEMENT			
TOTAL WEIGHTED NUMBER OF UNITS ▶		Not Applicable		Sans objet		• NOMBRE TOTAL PONDÉRÉ D'UNITÉS	
NUMBER OF RECORDS ▶		86,378				• NOMBRE DES DOSSIERS	
SPECIFICATIONS				SPÉCIFICATIONS			
9 TRACK TAPE				BANDES À 9 PISTES			
DATA SET NAME				NOM DE FICHIER			
VOLUME SERIAL NUMBER				VOLUME/NUMÉRO DE SÉRIE			
DENSITY		1600 BPI		1600 BPP		DENSITÉ	
		6250 BPI		6250 BPP			
LABELS		NONE		AUCUNE		ÉTIQUETTES	
		IBM STANDARD (EBCDIC)		STANDARD IBM (EBCDIC)			
		ASCII		ASCII			
FORMAT		EBCDIC		EBCDIC		FORMAT	
		ASCII		ASCII			
		RECORD SIZE		54		TAILLE D'EN-REGISTREMENTS	
		BLOCK FACTOR				FACTEUR DE BLOC	
CARTRIDGE 3480				CARTOUCHE 3480			
DATA SET NAME				NOM DE FICHIER			
VOLUME SERIAL NUMBER				VOLUME/NUMÉRO DE SÉRIE			
DENSITY		NOCOMPRESS		NOCOMPRESS		DENSITÉ	
		COMPRESS		COMPRESS			
LABELS		NONE		AUCUNE		ÉTIQUETTES	
		IBM STANDARD (EBCDIC)		STANDARD IBM (EBCDIC)			
		ASCII		ASCII			
PC DISKETTE		FORMAT ASCII		DISKETTE POUR MICRO-ORDINATEUR			
HIGH DENSITY - 3½" (1.4 MB)				HAUTE DENSITÉ - 3½" (1.4 MB)			
HIGH DENSITY - 5¼" (1.2 MB)				HAUTE DENSITÉ - 5¼" (1.2 MB)			
DOUBLE DENSITY - 3½" (720 K)				DOUBLE DENSITÉ - 3½" (720 K)			

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**PURPOSE OF THE FILE**

The purpose of this file is to enable users to combine the other Survey of Consumer Finances and Household Income, Facilities and Equipment files into custom-tailored household and sub-household units. This file consists of one record for each child and adult in the sample. Each record has the household (HH), economic family (EF), census family (CF), and the individual 15+ microdata tape identification numbers of the individual. In order to combine lower level units such as census families into their higher level units (economic families or households) one could do the following:

1. Sort the Key file and the Census family (CF) file by the CF sequence number
2. Append the EF and HH numbers from each CF head (from the key file) to each CF record.
3. Sort this file by HH and EF number. All CFs in the same HH and EF will now be adjacent on the resulting file.

Using similar procedures individuals can be grouped into CFs, EFs, Households, etc.

Size	Position	Type	Variable Titles and Codes
5	1-5	N	SEQUENCE NUMBER
5	6-10	N	INDIVIDUAL NUMBER (Individual aged less than 15 will have an Individual Number of 99999)
3	11-13	N	INDIVIDUAL WEIGHT (Individual aged less than 15 will have a zero Weight Value.)
1	14	N	INDIVIDUAL PUBLICATION INDICATOR 0 Not included 1 Included
2	15-16	N	INDIVIDUAL AGE 00-79 actual age 80 years or more
1	17	N	INDIVIDUAL SEX 1 Male 2 Female
5	18-22	N	CENSUS FAMILY NUMBER
3	23-25	N	CENSUS FAMILY WEIGHT
1	26	N	CENSUS FAMILY PUBLICATION INDICATOR 0 Not included 1 Included

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Size	Position	Type	Variable Titles and Codes
1	27	N	<b>CENSUS FAMILY RELATIONSHIP TO HEAD</b>  1 Head of two parent family 2 Person not in family or head of lone parent family 3 Wife of two parent family 4 All other individuals
1	28	N	<b>PRIMARY CENSUS FAMILY WITHIN THE ECONOMIC FAMILY INDICATOR</b>  1 Primary Census Family 2 Not Primary Census Family
5	29-33	N	<b>ECONOMIC FAMILY NUMBER</b>
3	34-36	N	<b>ECONOMIC FAMILY WEIGHT</b>
1	37	N	<b>ECONOMIC FAMILY PUBLICATION INDICATOR</b>  0 Not included 1 Included
1	38	N	<b>ECONOMIC FAMILY RELATIONSHIP TO HEAD</b>  1 Head 2 Wife 3 Child (child-in-law) 4 Other relative
1	39	N	<b>PRIMARY ECONOMIC FAMILY WITHIN THE HOUSEHOLD INDICATOR</b>  1 Primary Economic Family 2 Not Primary Economic Family

Size	Position	Type	Variable Titles and Codes
5	40-44		HOUSEHOLD NUMBER
3	45-47	N	HOUSEHOLD WEIGHT (Records not in household publication will have a zero Weight Value.)
1	48	N	HOUSEHOLD PUBLICATION INDICATOR 0 Not included 1 Included
1	49	N	HOUSEHOLD RELATIONSHIP TO HEAD 1 Head 2 Spouse of household head 3 Other relative of head 4 Not related to head
5	50-54	N	REVIS <sup>1</sup> ED WEIGHT (1991 base)

<sup>1</sup> See page7A for description of Revised Weight (1991 base).

## SEQUENCE NUMBER

Description

This variable is a unique five-digit number which identifies each record on the file. The numbers begin with 00001 and increment by one for each new record in the sample up to a maximum of 86378.

## INDIVIDUAL NUMBER

Description

This variable is the microdata tape sequence number for each individual 15 years of age and over. All records where the individual is less than 15 years of age are coded 99999.

## CENSUS FAMILY NUMBER

Description

This variable is the microdata tape sequence number of the Census family to which the Individual belongs.

## ECONOMIC FAMILY NUMBER

Description

This variable is the microdata tape sequence number of the Economic family to which the Individual belongs.

## HOUSEHOLD NUMBER

Description

This variable is the microdata tape sequence number of the Household to which the Individual belongs. If the Individual record is not on the Household microdata file this variable will be coded 99999.



## WEIGHT

Description

This is a three-digit variable which is computed to provide weights to inflate the sample to pre-determined population totals. It is actually 10% of the true weight so any aggregate calculated should be multiplied by 10. This weight must be used to produce valid statistics from this tape.

However, all estimated numbers and aggregates obtained from this survey should be treated as only approximate. The reliability of the survey's estimates depends in part on the quality of independent population estimates used to determine the weights. Sampling errors are another factor in determining data quality. For further information see "Sample Design and Implications" in this documentation and Catalogue No. 13-207. The survey has to use estimates which are available at the time when the survey is processed. Frequently only preliminary figures are available then. Better estimates become available later but, due to the time lag and for other reasons, the survey is not re-weighted.

For information on the principle behind weighting and on the actual calculation of these weights see "Sources, Methods and Estimation Procedures" in Catalogue No. 13-207, and "Weighting" in Catalogue No. 13-218.

For information on the sample design see the feature article in the Labour Force, January 1985, Catalogue No. 71-001.

For information on implications of the weights and sample design for data usage see "Sample Design and Implications" in this documentation.

**MICRODATA FILE 1986 INCOME**

**KEY FILE**

Description

**REVISED (1991 CENSUS) WEIGHT**

This microdata file contains a revised weight ("Revised 1991 Census Weight") in positions 50-54. The revision reflects the move to the 1991 census base, the adjustment of population estimates for net census undercoverage, and the inclusion of non-permanent residents. This weight replaces the one originally released on the file which was based on 1986 census population projections.

## PUBLICATION INDICATOR

Description This variable indicates whether the individual record was included or not on the file used to create the publication tabulations. A separate publication indicator is given on the file for each universe and respective publication.

Individual - Cat. No. 13-207  
Census Family - Cat. No. 13-208  
Economic Family - Cat. No. 13-207  
Household - Cat. No. 13-218

Code	Classification
0	Not included
1	Included

## RELATIONSHIP TO HEAD OF CENSUS FAMILY

Description

A census family consists of either a husband and wife (with or without children who have never married) or one parent with one or more children (who have never married), who are living together in the same dwelling. Once a son or daughter marries, he or she ceases to be a member of the parents' census family even if continuing to live under the same roof. A child who is living under the care of persons other than its own parents is considered a guardianship child (e.g. a grandchild not living with parents but with grandparents) and is a member of their census family. Foster children and wards of Children's Aid Society are treated as guardianship children. A guardianship child must be under 21 and not have married.

A person who is living alone, with unrelated individuals (as a lodger, employee or partner), or living with relatives but not in a husband-wife or parent-child relationship is a person not in family. If related to the household head, he (or she) may be a widowed parent, a sister or brother, aunt or uncle, a child who has been married and is living with parent or parents or another relative of the head of household.

The head of the census family is always the husband or parent. The head of a one-person census family is the person himself. The head must always be 15 years of age or over. Therefore, in rare cases where a person under 15 lives with non-relatives, this person is classified as a guardianship child in their census family.

Under Labour Force Survey procedures, members of the household are divided into economic families at the time of the interview. The method of selection of the head of each economic family is described on following pages.

## CENSUS FAMILY RELATIONSHIP - [Concluded]

Description  
[Conc.]

During the processing, census families are derived from the economic families according to the individual relationships to the head of each economic family. For the **Survey of Consumer Finances**, in cases of married couples where the female is coded head and the male is coded spouse, the relationships are switched so that, for historical comparability, males will always be heads in married couple situations. This relationship switch is not done for Labour Force Survey statistics.

Please note that the head of the family is not necessarily the major income recipient. In fact, the head may have received no income at all.

Code	Classification
1	Head of two parent family
2	Unattached individual or head of single-parent family
3	Wife of two parent family
4	All other individuals

Source

Household Record Card, Form F03.

## RELATIONSHIP TO HEAD OF ECONOMIC FAMILY

Description

An economic family is defined as a group of individuals sharing a common dwelling unit who are related by blood, marriage or adoption. A person living alone or rooming in a household where he is not related to any other household members is called an "unattached individual" and is treated as an economic family unit by himself.

Under Revised Labour Force Survey procedures, members of the household are divided into economic families at the time of the interview. The head of each family is selected by the person interviewed with only the following restrictions:

If...

Then...

A family group consists of parent(s) and "single" children...

...The respondent selects either one of the parents as the head of the family  
(or if the respondent is unable or unwilling):  
...one of the parents is selected by the interviewer; whoever is the one mainly responsible for the maintenance of the family

A family group consisting of parent(s) and married, widowed, divorced or separated son/daughter or son/daughter-in-law...

...The respondent selects either one of the parents or the son/daughter or son/daughter-in-law  
(or if the respondent is unable or unwilling):  
one of the parents or the son/daughter or son/daughter-in-law is selected by the interviewer, whoever is the one mainly responsible for the maintenance of the family

A family consists of brothers and/or sisters, and/or other group of related persons...

...The respondent selects one person as the head of the family  
(or if the respondent is unable or unwilling):  
...the head of the family is selected by the interviewer as whoever is either the eldest or the one mainly responsible for the maintenance of the family

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**RELATIONSHIP TO HEAD OF ECONOMIC FAMILY - [Concluded]**

During processing of the **Survey of Consumer Finances**, in cases of married couples where the female is coded head and the male is coded spouse, the relationships are switched so that, for historical comparability, males will always be heads in married couple situations. This relationship switch is not done for Labour Force Survey statistics.

The head of the family is therefore characterized as follows:

- (1) In families consisting of married couples with or without children, the husband is the head;
- (2) In single-parent families with unmarried children, the parent is the head;
- (3) In single-parent families with married children, the member who is mainly responsible for the maintenance of the family becomes the head;
- (4) In families where the relationships are other than husband-wife or parent-child, normally the eldest is considered the head.

Please note that the head of the family is not necessarily the major income recipient. In fact, the head may have received no income at all.

Codes	Classification
1	Head
2	Wife
3	Child (child-in-law)
4	Other relative

Source

Household Record Card, Form F03.

## RELATIONSHIP TO HEAD OF HOUSEHOLD

Description

A person or a group of persons occupying one dwelling is defined as a household.

The head of the household is always the head of the primary economic family. See variable "Relationship to Head of Economic Family".

Code	Classification
1	Head
2	Wife
3	Other relative
4	Not related

Source

Household Record Card, Form 03.



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**SAMPLE DESIGN AND IMPLICATIONS**

The sample employed for the **Survey of Consumer Finances and Household Facilities and Equipment Survey** is the Labour Force Survey sample. This multi-stage stratified clustered probability sample is described in detail in Methodology of the Canadian Labour Force Survey, 1976, Catalogue No. 71-526 and the feature article in The Labour Force, January 1985, Catalogue No. 71-001. For a more general description, see Guide to Labour Force Survey Data, Catalogue No. 71-528.

Briefly, this sample is designed to represent approximately 98% of the population. Excluded population groups are:

1. residents of the Yukon and Northwest Territories
2. residents of Indian reserves
3. residents of military barracks
4. inmates of institutions such as prisons, penitentiaries, jails, reformatories, mental hospitals, tuberculosis hospitals, sanatoria, orphanages and homes for the aged.

Because of varying sampling and response rates each record on the file has a weight attached to it. This weighting factor reflects the sample design and incorporates the inverse of the sampling ratio (which varies significantly by geographic area) and differential response rates for households, among other things. For further information on the weighting procedure see "Sources, Methods and Estimation Procedures" in Catalogue No. 13-207 (as well as Catalogues No. 71-526, 71-528 and the January 1985 issue of Catalogue No. 71-001 mentioned above).

The sample design and weighting procedure have important implications for data use. Each variable on the file must be multiplied by the weight in order to produce valid statistical estimates of population parameters such as means, medians, modes, estimated numbers and aggregates. However, the appropriateness of using these sample survey weights in regression analysis is a complete issue. A useful summary of the issue is presented in DuMouchel and Duncan (1983) "Using Sample Survey Weights in Multiple Regression Analysis of Stratified Samples". *Journal of the American Statistical Association* Volume 78, December 1983, pp 535-543.

Since a multi-stage stratified clustered sample design was employed, standard error estimates based on the usual simple random formula generally underestimate the true standard errors. For an illustration of the differences, see the uncatalogued paper "An Investigation of Variance Estimation in Family Expenditure Surveys". See also the standard errors of average incomes (which estimate the sampling error) published in Survey of Consumer Finance, catalogues No. 13-207 and 13-208. Standard errors of percentage distributions for individuals and family units by size are published in 13-207.

The information necessary to estimate the standard errors is not given on this file. Most regression programs are not capable of considering design effects, even if the relevant information were available. However, generalized programs such as SAS, BMDP and SPSS produce coefficients using weighted least squares. The standard errors calculated by SPSS are much too low because the sum of the weights is used for the degrees of freedom. This can be corrected by dividing the weight on each record by the sum of the weights and multiplying by the sample size. This transformation will produce standard errors equivalent to those produced by SAS and BMDP. Specific requests to produce standard errors of estimates can be handled on a cost-recoverable basis. If this procedure is not followed, we suggest that users of regression packages be generally conservative in interpreting measures of statistical significance from these packages - perhaps using a factor of 2-3 to inflate the standard errors produced, since the standard errors in these packages are generally of the simple random type.

For further information on sampling and non-sampling errors associated with the survey, see Catalogue No. 13-207.