



SPSD/M 

Release 9.1 Update

This guide is designed to provide SPSPD/M users with new information relating to the release of Version 9.1 algorithms and software.



Statistics
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Canada

WARNING

This software is complex. It is designed to be easy to use. However, the institutions and programs it models are themselves complex. **It is thus easy to make subtle mistakes that may result in significant estimation errors.**

To make the best use of the SPSPD/M, please read the available documentation. Then if you have any problems or you are unsure of the simulation approach or results, please phone us at (613) 951-3774.

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Overview

This document outlines the modifications that the SPSPD/M has undergone subsequent to the version 9.0 release. This current release is called version 9.1 and users will note that the chapter headings in this Addendum correspond to guides in the manuals.

Users experiencing difficulties updating their black-box or glass-box applications to version 9.1 should contact Statistics Canada at (613) 951-3774.

This guide gives instructions pertaining to the installation of the SPSPD/M on your system. The SPSPD/M program and database files are stored in a compressed format. This means that the files are decompressed as part of the installation process. Be patient, installation time could be up to 15 minutes.

If you are a new SPSPD/M user, you should look at the *Introduction and Overview* Manual first, since much of the material here will be incomprehensible without some familiarity with SPSPD/M concepts.

RELATIONSHIP TO EXISTING DOCUMENTATION

This Addendum is a guide to the changes in SPSPD/M software between 9.0 and 9.1. This Addendum is intended to be used in conjunction with the other SPSPD/M Guides included as part of the 9.1 release. The information in this Addendum supersedes the information in the documentation released with version 9.0.

It is worth noting that the examples in the *Introduction and Overview* will still function. However the screen images and the exact results may vary.

SUMMARY OF MAJOR CHANGES

DATABASE and GROWTH

- New weight files correct an underestimation of single parents
- The most recent economic growth projections are incorporated into the parameter files

TAX/TRANSFER ALGORITHMS AND PARAMETERS

- Parameter files updated through 2001 Tax forms and 2002 Budgets
- Tax Algorithms updated through 2001 Tax forms and 2002 Budgets
- The interactions between the National Child Benefit Supplement and provincial Social Assistance benefits have now been implemented in the model.

FACILITIES

- After Tax LICO parameters and variables have been added to the other low income analysis facilities

LEGISLATIVE CHANGES MODELED

The changes in tax transfer legislation that have been incorporated into the SPSPD/M

9.1 are detailed in this section.

Federal Changes

There were no changes to the Federal legislation in this release.

Provincial Changes

The changes reported in this section are derived from the 2002 provincial budgets and press releases.

Newfoundland

- Effective in 2002, the Newfoundland and Labrador Child Benefit income threshold for full benefits increased to \$17,397 while the income phase out threshold also increased to \$22,397.
- Introduction of the Newfoundland and Labrador Mother-Baby Nutrition Supplement which provides \$45 per month to low income pregnant women and families with children under the age of 1.

Prince Edward Island

- There were no changes in this release.

Nova Scotia

- There were no changes in this release.

New Brunswick

- Effective for the 2002 taxation year, the Low-Income Tax Reduction will be enhanced to ensure that all single tax filers with incomes up to \$11,000 and families earning up to \$18,000 will no longer pay provincial income tax.
- Effective for the 2003 taxation year, the Low-Income Tax Reduction will be enhanced to ensure that all single tax filers with incomes up to \$12,500 and families earning up to \$20,000 will no longer pay provincial income tax.
- NB to continue to provide the \$100 Low-income Seniors Benefit as well as the NB Child Tax Benefit and Working Income Supplement in 2002.

Quebec

- All spouses will be entitled to transfer between themselves that portion of the non-refundable tax credits (other than that attributable to the deduction for alternative minimum tax carried forward) they do not need in order to reduce their income tax payable to zero.
- Beginning in the 2003 taxation year, the following deductions and non-refundable credits will be granted under the simplified tax system, in addition to the flat amount: the deduction for support payments; deductions for residents of designated remote areas; non-refundable tax credits for medical expenses and a series of deductions including the deduction for moving expenses and the deduction for certain expenses incurred to earn investment income, and other tax credits such as the foreign tax credit. Furthermore, the new deductions that can be claimed under the simplified tax system will be taken into account in the calculation of family income. This change will improve the tax credits and transfer programs that are calculated on the basis of family income.

Ontario

- A one-time payment of \$100 to low- and middle-income working families for each child under 7, payments targeted to be made in December 2001. Families receiving the Ont. Child Care Working Income Supplement will receive the extra amount.
- The tax cuts announced for 2002 have been accelerated to be effective October 1, 2001. The resulting tax rates for the 2001 taxation year have been reduced to 6.16% for the first \$30,814, the second rate is now 9.22% on the next \$30,815. The credit rate for charitable donations is reduced to 6.16% as well as the Ontario non-refundable tax credit rate. For the calculation of Alternative Minimum Tax, the percent of additional federal tax is reduced to 38.5% for 2001 in Ontario.
- The tax cuts announced for 2003 have been delayed one year.
- The Ontario Tax Reduction basic reduction is increased from \$161 to \$178 plus an increase for inflation effective January 1, 2003.

Manitoba

- For eligible political contributions made in 2002 and subsequent years, an individual may claim a Tax Credit equal to 75% of the first \$200, an increase from \$100. Contributions above \$200 and up to \$550 continue to be eligible for a 50% Credit, and contributions above \$550 continue to be eligible for a 33.33% Credit. The Manitoba Credit is now comparable to the federal Credit.
- The clawback of the National Child Benefit for all families on Social Assistance with children aged six and under has been phased out. Effective January 2003, all lower-income families with children under 12 will receive benefits.
- The value of the personal non-refundable tax credit amounts will increase by 3%.

Saskatchewan

- Effective for 2002, the Senior Supplement increased to \$750 and the dependent child credit increased to \$2000/child.
- Tax brackets and rates set at 11.25% on first \$30,000, 13.25% on next \$30,000 and 15.5% on remainder for the 2002 taxation year.
- Effective for 2003, the Senior Supplement increased to \$1000 and the dependent child credit increased to \$2500/child.
- Tax brackets and rates set at 11.0% on first \$35,000, 13.0% on next \$65,000 and 15.0% on remainder for the 2003 taxation year.

Alberta

- There were no changes in this release.

British Columbia

- The refundable BC sales tax credit will be increased to \$75 a year from \$50. Single individuals with up to \$18,750 in net income will receive at least some credit and families will receive some credit up to \$25,500 in family net income.
- Increase the personal income tax disability-related tax credits which will be indexed to provincial inflation in future years. The Infirm Dependent Credit increased from \$2,475 to \$3,574; the In-home care of relative increased from \$2,475 to \$3,574; Credit for mental or physical impairment increased from \$4,453 to \$6,126 and the Credit for mental or physical impairment for child under 19 increased from \$3,051 to

\$3,574.

- Effective for 2002 and subsequent taxation years, the rate at which BC alternative minimum tax is charged and the rate at which it is credited is set at the ratio of the BC first tax bracket rate to the federal first tax bracket rate. As a result, the CB AMT rate for 2002 will be reduced to 37.8% from 49.5%. BC AMT is added to regular BC income tax and is calculated as a percentage of the additional federal tax attributable to the federal AMT calculation. BC AMT for 2002 = 37.8% * (Federal AMT - Federal Tax).

COMTAX

-The adjustment to tobacco taxes in PEI, NS, NB, QC, ON and at the Federal level in November 2001.

-The adjustments to tobacco taxes in NB, QC, ON and at the Federal level in June 2002.

-Changes made as a result of the 2002/2003 budgets in NFLD, PEI, NS, NB, MAN, SASK, AB and BC.

- NB increased taxes on gasoline and diesel fuel

PRINTED DOCUMENTATION

Version 9.1 is being shipped with all of its guides in electronic format. All guides can be accessed on-line using the included windows help file. The directory "/Doc" on the CD-ROM contains a printable version of all Guides for those users who wish printed versions of the other guides. These are PDF files and can be read on-line or printed using the Adobe Acrobat reader. The Adobe Acrobat reader can be installed from the /Doc directory on the CD-ROM. The self-extracting installation programs are called ar32e30.exe.

Once you have installed Adobe Acrobat on your system you can simply navigate to the \Doc directory on the CD-ROM using the File Manager or Explorer. Find the guide you wish to view or print and double-click it. Adobe will start up and open the file you selected.

Installation Guide

Release 9.1 is disseminated on one CD-ROM or a demonstration version can be downloaded from the Internet World Wide Web. The CD-ROM contains information for both the SPSPD/M 9.1 as well as for the on-line documentation.

Prior to installation of Release 9.1 it is **strongly** recommended that you either remove any existing \spsm directory from your system or rename it to \spsm90. If you wish to keep running the old version of SPSPM, you should also rename the \spsd directory to \spsd90. SPSPD/M 9.1 should be installed in new \spsm and \spsd directories. Version 9.1 has a \spsm directory structure that allows for ONLY a 32-bit operating system such as Windows NT/2000 or Windows 95/98/ME. The executable files are placed in the \spsm\win32 directory.

Install the SPSPD/M 9.1 CD-ROM using the same general procedure described in the [Installation Guide](#). Please read the entire installation guide and follow the

instructions that apply to your system and the version of the model that you wish to install. The packages contained on the CD-ROM supersede the contents of the 9.0 package and upon installation will overwrite the 9.0 files if left in the default directory. The install.exe program on the CD-ROM should be run to perform the installation of the new version of the model.

Directory names may now be longer than 8 characters as the install.exe program has been converted to a 32-bit environment.

VERSION 9.1 PACKAGE CONTENTS

This section describes each package in the installation kit. The SPSPD/M version 9.1 installation kit contains the following packages:

Package Name	Function	Directory
SPSM	The package contains all the executable programs and language-specific dialogue files. It also contains a directory of example control parameter include files described in the SPSPD/M manuals.	\spsm
SPSD (5%)	This package contains the 5% sub-sample demographic weight files for the years 1988 through 2005.	\spsd
PARAMETERS	This package contains the control, database adjustment, and tax/transfer parameter files. Also included is the factors.txt file that contains the growth factors used to statically age the SPSPD.	\spsd
GLASS_BOX	This package includes all necessary files, including template files for standard and alternate algorithms, for the 'glass box' user. Please see the <u><i>Programmer's Guide</i></u> for information on using SPSM in 'glass box' mode.	\spsm
SPSD (100%)	This package contains demographic weight files for 1988 through 2005.	\spsd
HELP	This package contains on-line documentation. This documentation will only work under Windows NT/2000 or Windows 95/98/ME.	\spsm

ON-LINE DOCUMENTATION INSTALLATION

The SPSPD/M documentation is now installed as a package within the main SPSPD/M installation. The documentation will ONLY work for 32-bit operating systems such as Windows NT/2000 or Windows 95/98/ME. The English version of the help file is called spsme.hlp and found in the spsm folder. Use the help facilities by navigating to the proper directory (e.g. by using the Explorer) and double clicking on the spsme.hlp file.

User's Guide

LOW-INCOME LINE ANALYSIS

Prior to release 9.1, only before-tax analysis was included in SPSM facilities. The SPSD/M now facilitates low income analysis by providing the means to examine both before-tax and after-tax low income. This can be done either with a built-in table or by using UVAR user variables, or both.

The Low Income thresholds provided with the SPSD/M are Statistics Canada's before-tax and after-tax LICOs – PTF and PTFAT respectively. They are considered adjustment parameters and can be found in the .apr files. During the execution of the model the appropriate low-income threshold for a given family size and urbanization class is placed in the family level variables `efpovthr` (for before tax) and `efpvthat` (after tax).

Similarly a family's income that will be compared to these thresholds is cumulated and stored in the individual variables `impovinc` (total income for comparing to the before tax LICO) and `imatpinc` (total income for comparing to the before tax LICO). To avoid double counting, these variables contain economic family income, but only for the first person in the economic family. Note that the after tax value `imatpinc` is based on consumable income. Should a user wish to compare disposable income to the after-tax LICO they would have to disable the calculation of commodity taxes with the CTMOD tax/transfer parameter.

These four variables are available for use in the user variable facility. An expression of the form `btppoor=EF:impovinc < efpovthr;` would identify individuals in families below the before-tax low income threshold. The expression `atppoor=EF:imatpinc < efpvthat;` would identify individuals in families below the after-tax low income threshold. Then an XTSPEC of `IN:{btppoor,atppoor}` would give a count of individuals below both the before and after tax LICOs. Alternately an expression of `EF:btppoor=EF:impovinc < efpovthr;` would flag the head of a low-income economic family and then an XTSPEC of `EF:{btppoor,btppoor/units};` would give a count and incidence of economic families below the LICO.

SPSD/M can also produce a 'built-in' table showing the distribution of many variables by a grouping of the ratio of a household's income to a specified LICO threshold. The table is requested with the T4FLAG and T4AFLAG control parameters. Additionally one must specify whether the Table 4 results are to be based on the before tax LICO or after-tax LICO. This is done with the LICOOPT control parameter.

Note that because the SPSD safeguards confidentiality and attempts to correct certain under-reporting problems present in its data sources, as well as the possible inclusion of commodity taxes in consideration of after-tax low-income, low-income counts and figures may differ from those published elsewhere.

Tools User's Guide

spsmiter

The Newton algorithm was changed to reduce the size of the adjustments at each iteration, in order to reduce cycling solutions. This forces the selection of one solution.

An error message is now produced when spsmiter is unable to launch the shell or command prompt.

Programmer's Guide

Please **call** the SPSM hotline at (613) 951-3774 if you have any questions about using SPSM in glass-box mode.

Algorithm Guide

The following section titled "Overview of algorithm changes" provides a list of the major changes organized by level of government and tax/transfer program. The following sections present the changes organized by the C++ language functions which were required to implement the programs. (A change in tax/transfer legislation may require changes to multiple functions.)

Note that the conversion from the C language to C++ has meant that the headers of all the files have changed and that the glass box code is now contained in *.cpp files.

OVERVIEW OF ALGORITHM CHANGES

Federal

There were no Federal changes in this release.

Provincial

The interactions between the National Child Benefit Supplement and provincial Social Assistance benefits have now been implemented in the model.

Changes were made to the Quebec tax system resulting from budget announcements regarding a fairer personal tax system with new tax breaks. More credits will be allowed under the simplified tax system, spouses will be able to transfer credits regardless of the tax system used and the calculation of family net income will be equivalent under both tax systems beginning in 2003.

The new Newfoundland Mother-Baby Nutrition Supplement is modeled.

CHANGES BY FUNCTION

cceopt **zero CCE for young kids if optimal**

The values of the National Child Benefit Supplement (imfcbene) and the Saskatchewan Child Benefit (imscb) were added to the optimization code to be used in the clawback of social assistance benefits.

memo1 Compute memo items for reporting

The Alberta shelter increase amount (imashelt) for social assistance recipients under NCBS clawback rules was added to Provincial Family Programs (impfp).

The Newfoundland Mother-Baby Nutrition Supplement (imnmbns) was added to Provincial Family Programs (impfp).

mpc Calculate derived model parameters and do edits

An edit test was added to the parameter SAMNTHPR[province] to ensure that users do not try to allocate more than 12 months of social assistance received in the year.

samod Compute social assistance

The interaction between the National Child Benefit Supplement and social assistance benefits is now implemented in the model.

txnfld Compute income tax (Newfoundland)

The new Newfoundland and Labrador Mother-Baby Nutrition Supplement is now modeled. This program becomes effective in July 2002 and provides \$45 per month (annual amount NMBNS) to low income families (net income less than NCBTD) with children under the age of 1. The program is phased in for 2002 with the parameter NMBNSPI.

txont Compute income tax (Ontario)

The one time extra benefit of \$100 per child for families eligible for the Ontario Child Care Working Income Supplement in 2001, as announced in the 2001 Ontario Economic Outlook and Fiscal Review has been added to the model. The value of the benefit per eligible child is contained in the parameter OCCSEXT and the amount of the extra benefit per family is saved in the variable imoccext.

txqcalc Compute income tax (Quebec)

The parameter QSFDED was added to represent the Quebec 2002 Budget announcement of changes made to the simplified tax system. When QSFDED is set to one, the family income concept used in the calculation of some Quebec family tax credits will relate to net income less the family deduction (QFAMDED) since the value of net income will be the same under both tax systems.

The calculation of imqtottc (total tax credits) under the simplified tax system was revised to include the medical expense tax credit when QSFMEDFLAG is activated.

The transfer of credits between spouses was revised to allow transfer of credits between spouses regardless of the tax system used by either spouse when QSFTXCR is activated.

txqinet Compute net income (Quebec)

The test to determine which tax form to use (general or simplified) has been corrected to reflect the inclusion of the CPP/QPP contribution tax credit for self-employed workers.

The test to determine which tax form to use was also revised to incorporate the medical expense tax credit and the transfer of unused credits between spouses regardless of the tax system used by either as announced in the Quebec 2002 Budget.

The calculation of deductions from total income was revised to incorporate the northern deduction as indicated in the Quebec 2002 Budget.

The calculation of net income under the either tax system has been revised to equal total income less deductions from total income beginning in 2003 as announced in the Quebec 2002 Budget.

txqitax Compute taxable income and individual credits (Quebec)

The calculation of deductions from net income was revised to only include the northern deductions when QNORTHDED is set to 0. Beginning in 2003, QNORTHDED will be set to 1 and northern deductions will be added to the deductions from total income as announced in the Quebec 2002 Budget.

Parameter Guide

This section describes new parameters as well as conceptual changes that have occurred to SPSM tax/transfer parameters. Parameters which have been deleted, or whose interpretations have changed, are identified in this section by a preceding asterisk.

CONTROL PARAMETERS

New Parameters

LICOOPT: Table 4 LICO definition 1=BeforeTax 2=AfterTax

This option determines whether the before-tax or the after-tax LICOs will be applied to results for built-in table number 4. When LICOOPT is set to 1 the before-tax LICO PTF will be used and when LICOOPT is set to 2 the after-tax LICO PTFAT will be used.

Further details on low-income analysis with the SPSM can be found in the SPSPD/M

User's Guide in the miscellaneous facilities section.

ADJUSTMENT PARAMETERS

New Parameters

PTFAT: Low Income Cut-off After Tax [size, urban]

This parameter, defined in the database adjustment parameter file, is a two dimensional array giving a user-supplied "After-tax income threshold" for families by number of persons and urban area, thus allowing the use of Statistics Canada's after-tax Low Income Cut-offs in SPSM. The default values in parameter files are Statistics Canada's after-tax low-income cut-offs.

See also PTF for the before-tax LICOs. Further details on low-income analysis with the SPSM can be found in the SPSPD/M User's GuideUD_1 in the miscellaneous facilities section.

Deleted Parameters

There were no deleted adjustment parameters in this release.

TAX/TRANSFER PARAMETERS

New Parameters

ASHELTER: Alberta Shelter Increase by number of persons in household

This parameter represents the monthly shelter allowance increase to be applied to families in Alberta who are in receipt of the National Child Benefit Supplement. It will only be applied when SACLAWFLAG is set to 1 (to activate the NCBS clawback from social assistance) and when the SACLAWPR provincial vector is set to 1 for Alberta along with ASHELTFLG set to 1. This parameter is a table of monthly amounts dependent upon the number of persons in the household.

The annual amount of the increase will be determined by the number of months of social assistance received by the family which is set by supplying an average number of months of social assistance by province with the parameter SAMNTHPR[prov]. The value of the shelter increase is retained in the variable imashelt and is added to impfp (provincial family programs).

ASHELTFLG: Alberta Shelter Increase under NCBS clawback flag

When this parameter is set to 1, social assistance recipients with kids who are in receipt of the National Child Benefit Supplement in Alberta will receive a monthly shelter allowance increase that is dependent upon the number of persons in the household as determined by the parameter ASHELTER. The shelter allowance increase will only be provided when SACLAWFLAG is set to 1 and SACLAWPR provincial vector is also turned on (set to 1). The annual amount of the increase will be determined by the number of months of social assistance received by the family which is set by supplying an average number of months of social assistance by province with the parameter SAMNTHPR[prov]. The value of the shelter increase is retained in the variable imashelt and is added to impfp (provincial family programs).

The shelter allowance increase can be turned off by setting this parameter to 0.

MCLAWPCT: Manitoba SA Clawback Percentage Kids over flow-through age in families [# kids][# kids<age]

This parameter represents the percentage of the National Child Benefit Supplement (NCBS) to be clawed back from social assistance when the parameter MCLAWSA6 is set to 0 or MCLAWSA12 is set to 0. This is a table lookup parameter based on the number of kids under a certain age and the number of kids in the family representing the percentage of NCBS allocated to the children in the family who are above a specified age that is to be clawed back. The province of Manitoba does not clawback the entire amount of NCBS when either MCLAWSA6 or MCLAWSA12 is set to 0. When MCLAW6 is set to 0, Manitoba will not claw back the NCBS allocated to children under the age of 7 from social assistance benefits, however will reduce SA by the percentage of NCBS represented by MCLAWPCT[cfnkids][# kids < 7]. When MCLAW12 is set to 0, social assistance will be reduced by MCLAWPCT[cfnkids][# kids < 13] times NCBS for the months of social assistance received.

The NCBS clawback of social assistance in Manitoba will occur when SACLAWFLAG is set to 1 and SACLAWPR provincial vector for Manitoba is set to 1.

MCLAWSA6: Manitoba Social Assistance NCBS Clawback for children 6 and under flag

Manitoba claws back the National Child Benefit Supplement (NCBS) from Social Assistance amounts. Beginning in 2000, the National Child Benefit Supplement for kids under 7 is not clawed back from Social Assistance. The parameter MCLAWSA6 controls the clawback for kids under 7. When this parameter is set to 1, NCBS amounts allocated to children under 7 are clawed back from social assistance. When set to 0, supplement benefits allocated to kids under 7 will not be clawed back, the parameter MCLAWPCT is used to calculate the amount of the clawback depending on the make up of the family (number of children in family and number of children under 7).

The NCBS clawback of social assistance in Manitoba will occur when SACLAWFLAG is set to 1 and SACLAWPR provincial vector for Manitoba is set to 1.

MCLAWSA12: Manitoba Social Assistance NCBS Clawback for children 12 and under flag

Manitoba claws back the National Child Benefit Supplement (NCBS) from Social Assistance amounts. Beginning in 200?, the National Child Benefit Supplement for kids under 13 will not be clawed back from Social Assistance. The parameter MCLAWSA12 controls the clawback for kids 12 years of age and under. When this parameter is set to 1, NCBS amounts allocated to children under 13 are clawed back from social assistance. When set to 0, supplement benefits allocated to kids under 13 will not be clawed back. The amount of the clawback will be equal to the percentage of NCBS allocated to children older than 12 using the parameter MCLAWPCT.

The NCBS clawback of social assistance in Manitoba will occur when SACLAWFLAG is set to 1 and SACLAWPR provincial vector for Manitoba is set to 1.

NCLAWSA1: Newfoundland Social Assistance Clawback Amount for the first child

This parameter contains the Newfoundland and Labrador amount to clawback from provincial social assistance (imisa) for the first child in the family who is in receipt of the National Child Benefit Supplement (imfbene). Families with more than one child will have this amount plus NCLAWSA2 for each additional child under 18 clawed back from their social assistance benefits.

The clawback of social assistance in Newfoundland will be activated when SACLAWFLAG is set to 1 and SACLAWPR provincial vector Newfoundland flag is also set to 1.

NCLAWSA2: Newfoundland Social Assistance Clawback Amount for each additional child

This parameter contains the Newfoundland and Labrador amount to clawback from provincial social assistance (imisa) for each additional child in the family who is in receipt of the National Child Benefit Supplement (imfbene) for families with more than one eligible child. Families with more than one child will have NCLAWSA1 plus this amount for each additional child under 18 clawed back from their social assistance benefits.

The clawback of social assistance in Newfoundland will be activated when SACLAWFLAG is set to 1 and SACLAWPR provincial vector Newfoundland flag is also set to 1.

NMBNS: Newfoundland Mother-Baby Nutrition Supplement amount per child

This parameter contains the annual amount for the Newfoundland and Labrador Mother-Baby Nutrition Supplement, which is the amount per child under age 1 to be given to families with net incomes less than NCBTD. The Mother-Baby Nutrition Supplement begins in July 2002. The parameter NMBNSPI controls the phase-in of this new program. The value of the supplement is saved in the variable immmbns and added to impfp (provincial family programs).

NMBNSPI: Newfoundland Mother-Baby Nutrition Supplement program phase-in

This parameter controls the phase in for the Newfoundland and Labrador Mother-Baby Nutrition Supplement, which is the amount per child under age 1 to be given to families with net incomes less than NCBTD. The calculated benefit is multiplied by this parameter. The Mother-Baby Nutrition Supplement begins in July 2002.

OCCSEXT: Ontario Child Care Working Income Supplement One-time Extra Benefit

This parameter contains the amount of the one-time payment per child under 7 to families eligible to receive the Ontario Child Care Working Income Supplement in 2001 as announced in the Ontario Economic Outlook and Fiscal Review (2001). The value of the extra supplement is saved in the variable imoccext and added to

impfp (provincial family programs).

PNCBSFT: P.E.I. Social Assistance NCBS Flow-through Amount per child

Prince Edward Island claws back the National Child Benefit Supplement from Social Assistance amounts. Increases to the National Child Benefit Supplement are flowed through to social assistance recipients in Prince Edward Island. This parameter represents the NCBS annual flow through amount per child. The clawback and flow through amounts will be adjusted based on the number of months of social assistance set using the parameter SAMNTHPR[prov].

The clawback of social assistance in Prince Edward Island will be activated when SACLAWFLAG is set to 1 and SACLAWPR provincial vector P.E.I. flag is also set to 1.

QNCBSFT: Quebec Social Assistance NCBS Flow-through Amount per child

The province of Quebec claws back the National Child Benefit Supplement from Social Assistance amounts. Increases to the National Child Benefit Supplement are flowed through to social assistance recipients in Quebec. This parameter represents the NCBS flow through amount for each eligible child.

The clawback of social assistance in Quebec will be activated when SACLAWFLAG is set to 1 and SACLAWPR provincial vector Quebec flag is also set to 1.

QNORTHDED: Quebec Deduction for residents of designated remote areas – 0=for taxable income, 1=for net income

This parameter determines where the deduction for residents of designated remote areas (idnorth) is to be applied. When set to 0, this deduction is added to imqdedfn, the deductions used in the calculation of net income. Beginning in 2003, this parameter is set to 1, and this deduction is added to imqdedft, deductions used to calculate taxable income.

QSFDED: Quebec Simplified Form – additional deductions for net income calculation flag

Beginning in 2003, the Quebec provincial income tax system will standardize net income calculated under the simplified system with that calculated under the general tax system. When this parameter is set to 0, net income determined under the general system will allow a number of additional deductions, while the net income calculated under the simplified tax system will only include certain deductions, the remaining deductions being replaced by a flat amount as part of non-refundable credits. Setting this parameter to 1 provides the same deductions to be applied in both the general and simplified tax systems in the calculation of net income. The standardization of net income represents an improvement in the concept of family income used for tax credits and transfer programs.

QSFMEDFLAG: Quebec Simplified Form medical expense tax credit inclusion flag

This parameter determines whether or not the non-refundable tax credit for medical

expenses can be used in the simplified tax form. Setting this parameter to 0 does not include the medical tax credit in the calculation of non-refundable tax credits under the simplified tax system. Setting this parameter to 1 allows the calculated amount for the medical expenses tax credit ($imqmeda * QNTCR$) to be applied in the simplified tax system, by adding it to the total non-refundable tax credit amount, $imqtotc$.

QSFTXCR: Quebec Simplified Form – transfer unused credits to spouse under either tax system

Beginning in 2003, to ensure that the tax credits are used in full, the mechanism used to transfer non-refundable tax credits between spouses will be extended to all taxpayers, regardless of whether they file under the general or the simplified tax system. This is accomplished by setting the parameter QSFTXCR to 1, which will allow spouses to transfer the remaining non-refundable tax credits that they do not need. When this parameter is set to 0, spouses can transfer certain non-refundable tax credits as long as they both use the same tax system.

SACLAWFLAG: Social Assistance NCBS Clawback Flag

This parameter flag turns on or off the clawback of social assistance benefits. When this parameter is set to 0, no clawback of social assistance is performed. The social assistance clawback schemes are activated when this flag is set to 1. Social assistance benefits are clawed back by the appropriate amount depending on the province and the resulting value of social assistance is then used in the calculation of taxes and other programs where it is included. This parameter must also be used in conjunction with the provincial vector SACLAWPR when the clawback option is activated.

SACLAWPR: Social Assistance Clawback Flag [province]

SACLAWPR is a provincial vector of flags that turn on or off the clawback procedure in their particular province. It is used when SACLAWFLAG is equal to 1. The provincial vector allows the user to turn on or off the clawback procedures in provinces with the values 0 (no clawback) or 1 (clawback activated).

SAMNTHPR: Months of Social Assistance [province]

This vector parameter contains the average number months of receipt of social assistance by province which is used in the calculation of social assistance benefit clawback when SACLAWFLAG is set to 1 and the appropriate flag by province is also activated in the provincial vector SACLAWPR. While the clawback schemes vary by province, in general the clawback of social assistance results in a reduction in SA benefits by the amount of the National Child Benefit Supplement ($imfcbene$) received for those months in which the individual was also receiving social assistance benefits.

This provincial vector allows the user to set an average number of months of social assistance by province. With a value of 12, the entire amount of the National Child Benefit Supplement received during the year is clawed back from social assistance

benefits where applicable (see SACLAWPR).

Deleted Parameters

***IMPINTOPT: Imputation method, Interest [1=none 2=imputed]**

This parameter is no longer needed due to improvements in the data.

Variable Guide

This section includes descriptions of all new variables introduced in version 9.1. Variables which have been deleted, or whose interpretations have changed, are also described and are identified in this section by a preceding asterisk.

ALPHABETICAL LISTING OF VARIABLES

Modified Variables

imgisinc: Individual's income for GIS/SPA reduction

This variable is an individual's income from a specified set of sources which is used to determine the amount of GIS/SPA benefits, if any. The variable is multiplied by the parameter PYINC prior to applying needs testing algorithms.

The sum of all income from employment (idiemp, idisenf, idisefm), investment income (idivid, idiint, idioinv), taxable government transfers (iditogv, imiuib), pensions (idicqp, idipens) and taxable other income (iditoth) less deductions from total income (imdedft), CPP/QPP contributions (imcqppc) and Unemployment Insurance contributions (imuic).

New Variables

efpvthat: Economic Family Low Income Threshold (After Tax)

efpvthat contains the appropriate after-tax Low-Income Cut-off value (i.e. corresponding to the number of persons and degree of urbanization) for the current economic family, as given by the PTFAT parameter.

See also efpovthr for the before-tax LICO analog to this variable

imashelt: Alberta Shelter Increase under NCBS clawback

This variable represents the annual shelter allowance increase to be applied to families in Alberta who are in receipt of the National Child Benefit Supplement. It will only be applied when SACLAWFLAG is set to 1 (to activate the NCBS clawback from social assistance) and when the SACLAWPR provincial vector is set to 1 for Alberta along with ASHELTF LG set to 1. The parameter ASHELTER provides table

of monthly amounts dependent upon the number of persons in the household.

The annual amount of the increase will be determined by the number of months of social assistance received by the family which is set by supplying an average number of months of social assistance by province with the parameter SAMNTHPR[prov]. The value of the shelter increase is added to impfp (provincial family programs).

imatpinc: After Tax Income for Low Income Measurement

This variable contains the value of after-tax income used for low income line analysis. To avoid double-counting, this value contains economic family after-tax income, but only for the first person in the economic family. An expression of the form EF:imatpinc < efpvthat would identify individuals in families below the after-tax low income threshold PTFAT.

The after tax family income for poverty analysis purposes is consumable income. Should a user wish to apply only disposable income they should disable the commodity tax facility by setting CTFLAG to 0.

Please see the SPSPD/M Users Guide for further details on low-income line analysis in the miscellaneous facilities section. Please see impovinc for a discussion of the before-tax analog to this variable.

imnmbns: Newfoundland Mother-Baby Nutrition Supplement

This variable represents the annual amount of the Newfoundland and Labrador Mother-Baby Nutrition Supplement, which is given to families with children under the age of 1 whose net income is less than NCBTD. The value of the Mother-Baby Nutrition Supplement is added to impfp (provincial family programs).

imoccext: Ontario Child Care Working Income Supplement Extra Benefit

This variable represents the one time payment of the \$100 per child under the age of 7 for families eligible to receive the Ontario Child Care Working Income Supplement in 2001. The value of the extra one-time supplemental benefit is added to impfp (provincial family programs).

Deleted Variables

There were no deleted variables in this release.

Growth and Validation Guide

DATABASE

Database is built on 1997 data.

A new matching procedure was used for SCF and FAMEX/SHS based on

Multivariate analysis. The objective was to create classes of household types with more similar consumption patterns.

In the production of the database, the original SCF weights are modified to represent the Canadian population at December 31, 1997. We also constraint the number of wages and salaries earners to represent the T4 distribution by province and income classes, the number of self-employed –farm and non-farm – to represent the T1 distribution by province and income classes. The household size distribution was also added as a constraint.

WEIGHT FILE UPDATES

New demographic estimates were used for the weight files between 1996 and 1999.

New demographic projections were used to revise the weight files for 2000 up to 2005.

The weights in all years were set in a way to represent the population by province/age group/sex, the employment/population and unemployment/population ratio by province/age group and sex. Except for the household size distribution, all the margins used to reweight the original SCF were used to reweight the database in the base year. Another margin was added to keep the consistency between the number of high income earners added to the database and the final number of high income earners by province.

In the 9.1 release, a new margin was added to update the distribution of families by census family type according to demographic data. This was done to correct the underestimation of single parent families.

GROWTH UPDATES

The database growth parameters were recalculated for the 9.1 release. From 1988 to 2001, growth parameters were adjusted to reflect the growth rates in the System of National Accounts. These adjustments were done provincially. Canada and Quebec Pension Plan benefits were adjusted using data from Human Resources Development Canada and reflect growth rates by age of recipient.

For 2002 and later, the growth rates of the income parameters reflect forecasted personal income. This growth rate is national and comes from an average of private sector forecasts.

The growth methodology for expenditures has changed. The distribution of expenditures is now held constant and all expenditures are grown using GDP. For 2002 and later, the growth in GDP is national and comes from an average of private sector forecasts.

Model parameter projection, which occurs when no official estimate is available, was done using Average Industrial Wage and the Consumer Price Index.

Online Documentation

The SPSPD/M online documentation provides quick access to the full Documentation Guides. These online guides will only work Microsoft Windows 95/98/ME or Windows NT/2000.

The installation is now done as a package within the main SPSPD/M installation. It will result in a file spsme.hlp in the main spsm folder. In order to use the help facility, navigate to the folder and run the file (e.g. using Explorer). You can navigate within the documentation in several ways: you can examine the index, use a full text search to identify which topics contain a given word or phrase or navigate using the hierarchical structure. A help file on using the online documentation is included and can be accessed from the application's help menu.

This product is similar to the standard windows help system and a full text search is supported. If you are having any problems using the online documentation please contact us at (613) 951-3774.

Database Creation Guide

The database is built around 1997 data. Four major adjustment are made to the database to improve consistency with published data: recalibration of the wages and salaries distribution, recalibration of the non-farm self-employed income, recalibration of the farm self-employed income and the population at December 31 adjusted for household size.

SCF wages and salaries produce total wages up to 6% higher than national account. A comparison with T4 file shows an over representation of population in the median group and an under-representation of the low wages population. The T4 file is used to recalibrate the wage distribution.

The count of population within six income classes, by province, from T4 file is used as target value in the recalibration of SCF. The population used to define those classes is all the wage earners in T4 file with income higher or equal to \$1,500. The classes correspond to 25, 50, 65 and 75% of population in T4 with wages and salaries. The last two classes depend on the province: in Newfoundland and PEI it is 95 and 100%; in Quebec and Ontario it is 99 and 100%; in all the other provinces it is 98 and 100%.

Because most of the people with self-employment income also have small amounts of wages within a year, the wage distribution reweighting worsen the distribution of farm and non-farm self-employment incomes. The solution was to calibrate the distribution of farm and non-farm self-employment income in SCF, based on T1 distribution. For non-farm self employment income, two classes by province are used corresponding to 50% of the population with self-employment income larger or

equal to \$500. Negative values were excluded because there are not enough observations in SCF to support calibration.

The same definition of income classes applies to farm self-employment income. Because there are not enough observations in Newfoundland, Prince Edward Island, Nova Scotia, New Brunswick and British Columbia, those provinces were excluded from calibration. They count for less than 6% of all people with farm self-employment income larger than \$500.