

# Release 18.1 Update

This guide is designed to provide SPSD/M users with new information relating to the release of Version 18.1 algorithms and software.



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### 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 possible to make subtle mistakes that may result in significant estimation errors. To make the best use of the SPSD/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 SPSD/M has undergone subsequent to the version 18.0 release. This current release is called version 18.1 and users will note that the chapter headings in this Addendum correspond to guides in the manuals.

This version of the SPSD/M is only fully compatible with Windows XP/2000. Microsoft Vista users will be able to use the SPSD/M once they download a file from the Microsoft website which will allow them to view the help system. See <u>http://go.microsoft.com/fwlink/?LinkID=82148</u>. Users of older operating systems should contact Statistics Canada at (613) 951-3774 to find out if an unsupported version can be used with their operating system.

Users experiencing difficulties updating their black-box or glass-box applications to version 18.0 should contact Statistics Canada at (613) 951-3774.

If you are a new SPSD/M user, you should look at the <u>Introduction and Overview</u> manual first, since much of the material here will be incomprehensible without some familiarity with SPSD/M concepts.

#### **RELATIONSHIP TO EXISTING DOCUMENTATION**

This Addendum is a guide to the changes in SPSD/M software between 18.0 and 18.1. This Addendum is intended to be used in conjunction with the other SPSD/M Guides included as part of the 18.1 release. The information in this Addendum supersedes the information in the documentation released with version 18.0.

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

#### SUMMARY OF MAJOR CHANGES

DATABASE and GROWTH

The most recent economic growth projections from the Parliamentary Budget Office are incorporated.

Parameter and weight files are now provided to 2016.

#### TAX/TRANSFER ALGORITHMS AND PARAMETERS

Parameter files updated with 2011 federal and provincial TD1 forms.

Parameter files updated through 2010 Tax forms.

The Alberta specific Working Income Tax Benefit program has been implemented.

The Ontario Property Tax Credit was modified to include the energy component in

the calculation of the tax credit.

Removed algorithms, variables and parameters related to pre-1997 programs.

The Quebec Child Assistance amount has been removed from provincial refundable tax credits and is now included in provincial family programs (impfp).

#### LEGISLATIVE CHANGES MODELED

The changes in tax transfer legislation that have been incorporated into the SPSD/M 18.1 are detailed in this section.

#### Federal Changes

The Alberta specific Working Income Tax Benefit program has been implemented.

#### Provincial Changes

#### Ontario

The Ontario Property Tax Credit was modified to include the energy component in the calculation of the tax credit.

#### COMTAX

The Commodity Tax Model includes Input–Output data up to and including the 2006 final and 2007 preliminary tables. Subsequent year estimates are based upon economic data up to and including 2009 and legislative amendments back to 2008.

The Commodity Tax Model will now be grown using Personal Income growth instead of Gross Domestic Product (GDP) growth.

How to Run the SPSM guide

Please see the Visual SPSM Release Notes found under the Help menu for information on enhancements that have been made and problems that may be encountered in the current version of the Visual SPSM interface.

User's guide

There were no changes in this release.

Tool User's guide

There were no changes in this release.

Programmer's Guide

The version of C++ which is needed to create a glass box executable is Visual

Studio.net 2008. Users can compile glass box executables using the Express, Pro or Developer's version of Visual Studio.net 2008.

The Programmer's Guide has been updated with revised examples.

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

Commodity Tax User's Guide

There were no changes in this release.

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.)

#### **OVERVIEW OF ALGORITHM CHANGES**

#### Federal

Removed algorithms, variables and parameters related to pre-1997 programs.

### Provincial

The table look-up parameter for the Quebec Refundable Child Care Expense (QCCETCR) has been reformatted to match the tax form values.

The table look-up parameter for the Quebec Health Services Fund contribution has been replaced with separate parameters for the income thresholds, inclusion rates and maximum contribution levels for the 2 levels of the table. This was changed to allow for proper indexing of the income thresholds.

The Ontario Property Tax Credit was modified to include the energy component in the calculation of the tax credit. This credit can now be calculated on a calendar year basis beginning in 2011, to reflect the change in the program cycle for the 2011 Ontario Energy and Property Tax Credit.

Removed algorithms, variables and parameters related to pre-1997 programs.

A parameter bug in the HST Low Income Tax Credit has been fixed.

#### CHANGES BY FUNCTION

### famod Compute family allowance

The federal family allowances has been removed, a pre-1997 program.

### gist Compute provincial GIS top-ups for elderly

Removed algorithms and parameters related to pre-1997 programs.

The flag ASBFLAG now replaces the ALTASOPT parameter to activate the Alberta Seniors Benefit program.

#### memo1 Compute memo items for reporting

The Quebec Child Assistance amount has been removed from provincial refundable tax credits and is now included in provincial family programs (impfp).

Variables specific to pre-1997 programs have been removed from memo variables.

#### mpc Calculate derived model parameters and do edits

An error check on UI specific parameters has been removed.

#### samod Compute social assistance or guarantees

The federal social assistance program, a pre-1997 program, has been removed.

#### txalta Compute provincial taxes for Alberta

The flag ASBFLAG now replaces the ALTASOPT parameter to activate the Alberta Seniors Benefit program.

Program code related to the Alberta Assured Income Plan, a pre-1997 senior benefit program, has been removed.

#### txbc Compute provincial taxes for British Columbia

Program code related to the British Columbia renter's tax reduction, a pre-1997 benefit program, has been removed.

A parameter bug in the HST Low Income Tax Credit has been fixed.

### txcalc Calculate federal income tax

Code modifications were made to protect against the division by 0 for all possible values for the capital gains inclusion rate.

Pre-1997 specific variables were removed from the tax calculations.

The Alberta specific Working Income Tax Benefit program has been implemented.

#### txctc Compute child tax credit

The flag FCBFLAG now replaces the CTCOPT parameter to activate the Federal Child Tax Benefit program.

The Federal Child Tax Credit, a pre-1997 program, has been removed.

### txhstr Compute family-related deductions or credits

Program code related to the Tax Credit for Dependent Children, a pre-1997 program, has been removed.

### txinet Compute net income

Code modifications were made to protect against the division by 0 for all possible values for the contribution rate for QPIP premiums for the self-employed.

Removed pre-1997 program code related to family allowances and unemployment insurance.

### txitax Compute taxable income and individual credits

The program phase-in parameter for the Age Tax Credit, a pre-1997 condition, has been removed.

### txman Compute provincial taxes for Manitoba

Removed algorithms and parameters related to pre-1997 programs.

### txns Compute provincial taxes for Nova Scotia

The Nova Scotia Pharmacare premium option, a pre-1997 condition, has been removed.

### txont Compute provincial taxes for Ontario

Changes were made to the previously announced Ontario property tax credit, now called the Ontario Energy and Property Tax Credit, since it was first implemented based on the 2009 Ontario budget proposal. There are now separate income turndown thresholds for single seniors and senior couples. Also, separate base amounts for the energy and the property components of the tax credit have been implemented. Another option has been added to designate the treatment of the tax credit, either as a refundable credit used to reduce taxes owing (if applicable), or as a refundable credit that is paid in instalments throughout the year. The interaction between the Energy and Property Tax Credit and the Ontario Senior Homeowner's Property Tax Grant has also been implemented for this release.

Removed the pre-1997 specific income concepts, as well as the pre-1997 parameters related to the Ontario Employers Health Tax.

#### txqcalc Calculate income tax (Quebec)

The table look-up parameter for the Quebec Refundable Child Care Expense (QCCETCR) which determines the credit rate based on income has been reformatted to match the values in the tax form. A new parameter has been added (QCCEINCDF) which indicates when to subtract QFAMDED from family income before applying the look up table for the credit rate.

The Quebec Child Assistance amount has been removed from provincial refundable tax credits and is now included in provincial family programs (impfp) in the memo1 function.

Modifications were made to the child care tax credit program with reformatting of look up tables to better match tax forms.

Removed pre-1997 program code and parameters.

#### txqccea Compute child care expense allowance (Quebec)

This module was removed. The Quebec Child Care Expense deduction is no longer modeled, it was replaced with the refundable child care expense tax credit in 1994.

#### txqhstr Compute family-related deductions or credits (Quebec)

Removed pre-1997 program code and parameters.

#### txqinet Compute net income (Quebec)

The table look-up parameter for the Quebec Health Services Fund contribution (QHSC) has been replaced by QHSCL1, QHSCR1, QHSCM1, QHSCL2, QHSCR2 and QHSCM2. This change was implemented to properly index the income threshold levels for the contribution table. The value of the Health Services Fund is estimated here as part of the optimization of the tax form system between simple and general when QSFOPT is set to 3.

#### txqitax Compute taxable income and individual credits (Quebec)

The table look-up parameter for the Quebec Health Services Fund contribution (QHSC) has been replaced by QHSCL1, QHSCR1, QHSCM1, QHSCL2, QHSCR2 and QHSCM2. This change was implemented to properly index the income threshold levels for the contribution table.

#### txsask Compute provincial taxes for Saskatchewan

Removed pre-1997 program code and parameters.

#### ui Compute UI benefits

Removed all Unemployment Insurance specific parameters, variables and code as a result of removing all years prior to 1997 from the model.

## Parameter Guide

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

#### CONTROL PARAMETERS

There were no parameters modified, added or deleted since the last release.

#### **ADJUSTMENT PARAMETERS**

There were no parameters modified since the last release.

#### TAX/TRANSFER PARAMETERS

**Modified Parameters** 

#### New Parameters

#### ASBFLAG: Alberta seniors benefit activation flag

This flag activates the Alberta Seniors Benefit program.

#### AWITBFAM: Alberta Working Income Tax Benefit amount for couples/single parents

This is the maximum Alberta Working Income Tax Benefit (WITB) refundable credit amount for couples and single parents who are at least 19 years of age, who are not full-time students for more than 3 months in the taxation year and who are residents of Alberta.

Individuals in a couple or single parent family will have their benefit calculated as AWITBPIR of each dollar of earned income in excess of AWITBMINE to this maximum. The credit may be reduced by AWITBRR for each dollar of their net income in excess of AWITBFPO.

#### AWITBFPO: Alberta WITB family net income phase-out threshold

This parameter contains the income threshold at which the maximum Alberta Working Income Tax Benefit (WITB) refundable credit begins to be reduced for couples or single parent families who are residents of Alberta. Their maximum credit amount AWITBFAM will be reduced by AWITBRR for each dollar of their family net income in excess of this amount.

#### AWITBMINE: Alberta Working Income Tax Benefit minimum earnings threshold

This parameter contains the minimum earnings threshold required for eligibility for the Alberta refundable Working Income Tax Benefit (WITB).

#### AWITBPIR: Alberta Working Income Tax Benefit Phase in Rate

This parameter contains the phase in rate for the Alberta refundable Working Income Tax Benefit (WITB) for Alberta individuals/families with earnings in excess of AWITBMINE, until the respective maximum benefit is attained. Single individuals are eligible for a maximum benefit amount of AWITBSNG while individuals in a couple or single parent family are eligible for a maximum benefit amount of AWITBFAM.

#### AWITBRR: Alberta Working Income Tax Benefit reduction rate

This parameter contains the reduction rate for the Alberta refundable Working Income Tax Benefit (WITB). Single individuals who are residents of Alberta will see their maximum benefit amount of AWITBSNG reduced by this rate for every dollar of net income in excess of AWITBSPO. Alberta families and single parents will see their maximum benefit amount of AWITBFAM reduced by this rate for every dollar of family net income in excess of AWITBFPO.

#### AWITBSAMT: Alberta WITB Supplement for Disabilities Amount

This is the maximum Alberta Working Income Tax Benefit (WITB) Supplement for Disabilities refundable credit amount for non-student individuals who are at least 19 years of age, who are eligible for the disability tax credit in the taxation year and who are residents of Alberta.

Individuals will have their benefit calculated as AWITBSPIR of each dollar of earned income in excess of AWITBSMINE to this maximum. The credit may be reduced by AWITBSRR for each dollar of their net income in excess of the turndown threshold. For single individuals, or those in a couple where the other spouse is ineligible for the Alberta WITB based on the spouse's student status, the turndown threshold is AWITBSSPO. For couples where both are Alberta WITB eligible and for single parent families, the threshold is AWITBSFPO.

# AWITBSCRR: Alberta WITB Supplement for Disabilities Reduction Rate for eligible couples

This parameter contains the reduction rate for the Alberta refundable Working Income Tax Benefit (WITB) Supplement for Disabilities where both individuals in a couple are eligible for the disability tax credit. Eligible individuals will see their maximum benefit amount of AWITBSAMT reduced by this rate for every dollar of family net income in excess of AWITBSFPO.

# AWITBSFPO: Alberta WITB Supplement for Disabilities Family Net Income Phase-out Threshold

This parameter contains the income threshold at which the maximum Alberta Working Income Tax Benefit (WITB) Supplement for Disabilities refundable credit begins to be reduced for couples and single parent families. Their maximum credit amount AWITBSAMT will be reduced by AWITBSRR for each dollar of their family net income in excess of this amount.

#### AWITBSMINE: Alberta WITB Supplement for Disabilities Minimum Earnings Threshold

This parameter contains the minimum earnings threshold required for eligibility for the Alberta refundable Working Income Tax Benefit (WITB) Supplement for Disabilities.

#### AWITBSNG: Alberta Working Income Tax Benefit amount for singles

This is the maximum Alberta Working Income Tax Benefit (WITB) refundable credit amount for single individuals who are at least 19 years of age without dependents, who are not full-time students for more than 3 months in the taxation year and who are residents of Alberta.

Individuals will have their benefit calculated as AWITBPIR of each dollar of earned income in excess of AWITBMINE to this maximum. The credit may be reduced by AWITBRR for each dollar of their net income in excess of AWITBSPO.

#### AWITBSPIR: Alberta WITB Supplement for Disabilities Phase-in Rate

This parameter contains the phase in rate for the Alberta refundable Working Income Tax Benefit (WITB) Supplement for Disabilities for individuals who are eligible for the disability tax credit with earnings in excess of AWITBSMINE, until the respective maximum benefit of AWITBSAMT is attained.

#### AWITBSPO: Alberta WITB Single Net Income Phase-out Threshold

This parameter contains the income threshold at which the maximum Alberta Working Income Tax Benefit (WITB) refundable credit begins to be reduced for single individuals who are at least 19 years of age, have no dependents and are residents of Alberta. Their maximum credit amount AWITBSNG will be reduced by AWITBRR for each dollar of their net income in excess of this amount.

#### AWITBSRR: Alberta WITB Supplement for Disabilities Reduction Rate

This parameter contains the reduction rate for the Alberta refundable Working Income Tax Benefit (WITB) Supplement for Disabilities. Single individuals will see their maximum benefit amount of AWITBSAMT reduced by this rate for every dollar of net income in excess of AWITBSSPO. Families and single parents will see their maximum benefit amount of AWITBSAMT reduced by this rate for every dollar of family net income in excess of AWITBSFPO.

# AWITBSSPO: Alberta WITB Supplement for Disabilities Single Net Income Phase-out Threshold

This parameter contains the income threshold at which the maximum Alberta Working Income Tax Benefit (WITB) Supplement for Disabilities refundable credit begins to be reduced for single individuals who are at least 19 years of age, have no dependents and are residents of Alberta. Their maximum credit amount AWITBSAMT will be reduced by AWITBSRR for each dollar of their net income in excess of this amount.

#### FCBFLAG: Federal Child Tax Benefit activation flag

When FCBFLAG is set to 1, the Federal Integrated Child Tax Benefit proposed in the 1993 Federal Budget is calculated.

#### **OEHTRR: OEHT - Rate**

The Ontario Employer Health Tax is calculated as OEHTRR times earnings from self-employment which are greater than the exemption OEHTEX.

The Ontario Employer Health Tax is only calculated when OEHTFLAG is equal to 1. The Tax is then reduced by a tax deduction calculated using OEHTDRR.

#### **OEPTCOPT: Ontario Energy and Property Tax Credit option**

When this option is set to 1, the Ontario Energy and Property Tax Credit (imoprtxc) are treated as a refundable credit, used to reduce taxes owing.

When set to 2, the Ontario Energy and Property Tax Credit (imoprtxc) are calculated on previous year's income and operate on a July to June program cycle, which in turn means that users can opt to have this credit calculated and paid on the calendar year basis by activating GSTCYFLG.

#### **OEPTCENER:** Ontario Energy component of the Property Tax Credit

This amount can be claimed as the basic energy component amount for the Ontario Energy and Property tax credit when OSPTCOPT is set to 2.

# OEPTCENERP: Ontario Energy component of the Property Tax Credit for 1<sup>st</sup> half of year

This amount can be claimed as the basic energy component amount for the Ontario Energy and Property tax credit when OSPTCOPT is set to 2.

When GSTCYFLG is activated, the July to June programs are calculated on a calendar year basis. This parameter is used to replicate the July to June program for the second half of the year, using the program design from July. The annual benefit will be equal to half the value calculated for the first half of the year and half the value calculated using the current year's parameters, representing the second half of the year. When the flag is turned off, the benefit programs are based on the program values set for July of that year and this parameter will be used since it represents the program design for July.

#### **OPRTCBAS:** Ontario Property Tax Credit base amount (post 2009)

This amount can be claimed as the basic property tax component amount for the Ontario Energy and Property tax credit when OSPTCOPT is set to 2.

#### **OPRTCBASP:** Ontario Property Tax Credit base amount for 1<sup>st</sup> half of year

This amount can be claimed as the basic property tax component amount for the Ontario Energy and Property tax credit when OSPTCOPT is set to 2.

When GSTCYFLG is activated, the July to June programs are calculated on a calendar year basis. This parameter is used to replicate the July to June program for the first half of the year, using the program design from the previous year. The annual benefit will be equal to half the value calculated for the first half of the year and half the value calculated using the current year's parameters, representing the second half of the year. When the GSTCYFLG is turned off, this parameter is not used as it represents the value for the previous year.

# OPRTCOCARP: Ontario Property Tax Credit percent of occupancy cost for 1<sup>st</sup> half of year

This parameter is the proportion of occupancy cost when calculating the Ontario Property Tax Credit, when OSPTCOPT is set to 2 and OEPTCOPT is set to 2.

When GSTCYFLG is activated, the July to June programs are calculated on a calendar year basis. This parameter is used to replicate the July to June program for the first half of the year, using the program design from the previous year. The annual benefit will be equal to half the value calculated for the first half of the year and half the value calculated using the current year's parameters, representing the second half of the year. When the GSTCYFLG is turned off, this parameter is not used as it represents the value for the previous year.

# **OPRTCOCMP:** Ontario Property Tax Credit maximum occupancy cost for 1<sup>st</sup> half of year

This parameter is the maximum occupancy cost when calculating the Ontario Property Tax Credit, when OSPTCOPT is set to 2 and OEPTCOPT is set to 2.

When GSTCYFLG is activated, the July to June programs are calculated on a calendar year basis. This parameter is used to replicate the July to June program for the first half of the year, using the program design from the previous year. The annual benefit will be equal to half the value calculated for the first half of the year and half the value calculated using the current year's parameters, representing the second half of the year. When the GSTCYFLG is turned off, this parameter is not used as it represents the value for the previous year.

#### **OPRTCRRP:** Ontario Property Tax Credit reduction rate for 1<sup>st</sup> half of year

This parameter is the reduction rate applied to the Ontario Property Tax Credit (imoprtxc), when OSPTCOPT is set to 2 and OEPTCOPT is set to 2, when adjusted family net income exceeds the turndown level of OPRTCTDS for single individuals or OPRTCTDF for couples and single parents or in the case of seniors, OPRTCSTDS for single individuals and OPRTCSTDF for couples.

#### **OPRTCSBAS:** Ontario Property Tax Credit base amount for seniors (post 2009)

This amount can be claimed as the basic property tax component amount for seniors for the Ontario Energy and Property tax credit when OSPTCOPT is set to 2.

# OPRTCSBASP: Ontario Property Tax Credit base amount for seniors for 1<sup>st</sup> half of year

This amount can be claimed as the basic property tax component amount for seniors for the Ontario Energy and Property tax credit when OSPTCOPT is set to 2.

When GSTCYFLG is activated, the July to June programs are calculated on a calendar year basis. This parameter is used to replicate the July to June program for the first half of the year, using the program design from the previous year. The annual benefit will be equal to half the value calculated for the first half of the year and half the value calculated using the current year's parameters, representing the second half of the year. When the GSTCYFLG is turned off, this parameter is not used as it represents the value for the previous year.

# **OPRTCSOCARP:** Ontario Property Tax Credit percent of occupancy cost for 1<sup>st</sup> half of year

This parameter is the proportion of occupancy cost when calculating the Ontario Property Tax Credit, when OSPTCOPT is set to 2 and OEPTCOPT is set to 2.

When GSTCYFLG is activated, the July to June programs are calculated on a calendar year basis. This parameter is used to replicate the July to June program for the first half of the year, using the program design from the previous year. The annual benefit will be equal to half the value calculated for the first half of the year and half the value calculated using the current year's parameters, representing the second half of the year. When the GSTCYFLG is turned off, this parameter is not used as it represents the value for the previous year.

# **OPRTCSOCMP:** Ontario Property Tax Credit maximum occupancy cost for seniors for 1<sup>st</sup> half of year

This parameter is the maximum occupancy cost when calculating the Ontario Property Tax Credit, when OSPTCOPT is set to 2 and OEPTCOPT is set to 2.

When GSTCYFLG is activated, the July to June programs are calculated on a calendar year basis. This parameter is used to replicate the July to June program for the first half of the year, using the program design from the previous year. The annual benefit will be equal to half the value calculated for the first half of the year and half the value calculated using the current year's parameters, representing the second half of the year. When the GSTCYFLG is turned off, this parameter is not used as it represents the value for the previous year.

# **OPRTCSTDF:** Ontario Property Tax Credit income turndown for senior couples (post 2009)

This parameter is the adjusted net income turndown value for senior single parents and couples, above which the Ontario Property Tax Credit (imoprtxc) will be reduced by OPRTCRR, when OSPTCOPT is set to 2.

#### **OPRTCSTDFP:** Ontario Property Tax Credit income turndown for senior couples for

#### 1<sup>st</sup> half of year

This parameter is the adjusted net income turndown value for senior single parents and couples, above which the Ontario Property Tax Credit (imoprtxc) will be reduced by OPRTCRR, when OSPTCOPT is set to 2.

When GSTCYFLG is activated, the July to June programs are calculated on a calendar year basis. This parameter is used to replicate the July to June program for the second half of the year, using the program design from July. The annual benefit will be equal to half the value calculated for the first half of the year and half the value calculated using the current year's parameters, representing the second half of the year. When the flag is turned off, the benefit programs are based on the program values set for July of that year and this parameter will be used since it represents the program design for July.

# OPRTCSTDS: Ontario Property Tax Credit income turndown for senior single persons (post 2009)

This parameter is the adjusted net income turndown value for single senior individuals, above which the Ontario Property Tax Credit (imoprtxc) will be reduced by OPRTCRR, when OSPTCOPT is set to 2.

# OPRTCSTDSP: Ontario Property Tax Credit income turndown for senior single persons for 1<sup>st</sup> half of year

This parameter is the adjusted net income turndown value for single senior individuals, above which the Ontario Property Tax Credit (imoprtxc) will be reduced by OPRTCRR, when OSPTCOPT is set to 2.

When GSTCYFLG is activated, the July to June programs are calculated on a calendar year basis. This parameter is used to replicate the July to June program for the second half of the year, using the program design from July. The annual benefit will be equal to half the value calculated for the first half of the year and half the value calculated using the current year's parameters, representing the second half of the year. When the flag is turned off, the benefit programs are based on the program values set for July of that year and this parameter will be used since it represents the program design for July.

# **OPRTCTDFP:** Ontario Property Tax Credit income turndown for families for 1<sup>st</sup> half of year

This parameter is the adjusted net income turndown value for couples and single parents, above which the Ontario Property Tax Credit (imoprtxc) will be reduced by OPRTCRR, when OSPTCOPT is set to 2 and OEPTCOPT is set to 2.

When GSTCYFLG is activated, the July to June programs are calculated on a calendar year basis. This parameter is used to replicate the July to June program for the first half of the year, using the program design from the previous year. The annual benefit will be equal to half the value calculated for the first half of the year and half the value calculated using the current year's parameters, representing the

second half of the year. When the GSTCYFLG is turned off, this parameter is not used as it represents the value for the previous year.

# **OPRTCTDSP:** Ontario Property Tax Credit income turndown for single persons for 1<sup>st</sup> half of year

This parameter is the adjusted net income turndown value for single individuals, above which the Ontario Property Tax Credit (imoprtxc) will be reduced by OPRTCRR, when OSPTCOPT is set to 2 and OEPTCOPT is set to 2.

When GSTCYFLG is activated, the July to June programs are calculated on a calendar year basis. This parameter is used to replicate the July to June program for the first half of the year, using the program design from the previous year. The annual benefit will be equal to half the value calculated for the first half of the year and half the value calculated using the current year's parameters, representing the second half of the year. When the GSTCYFLG is turned off, this parameter is not used as it represents the value for the previous year.

#### QCCEFLAG: Quebec Refundable Child Care Expense tax credit flag

When QCCEFLAG is set to 1, the refundable child care expense tax credit (imqccetc) will be calculated.

#### **QCCEINCDF:** Quebec Refundable CCE Income Definition Flag

This parameter indicates the income concept used in the table look-up parameter QCCETCR for the Quebec Refundable Child Care Expense Tax Credit. When this parameter is set to 1, the value of QFAMDED is subtracted from the family income before applying the QCCETCR table. This parameter was implemented so that the values in QCCETCR now match the values in the tax form.

#### QHSCL1: Quebec Health Services Fund Contribution Lower Level Income Threshold

This is the lower level income threshold for the Quebec Health Services Fund Contribution. It is calculated when QHSCFLAG is set to 1. When income (see QHSCFLAG for income concept) is greater than this threshold and less than the upper threshold of QHSCL2, the contribution is calculated as follows:

(income – QHSCL1) \* QHSCR1 up to the maximum contribution level of QHSCM1

#### QHSCL2: Quebec Health Services Fund Contribution Upper Level Income Threshold

This is the upper level income threshold for the Quebec Health Services Fund Contribution. It is calculated when QHSCFLAG is set to 1. When income (see QHSCFLAG for income concept) is greater than this threshold, the contribution is calculated as follows: ((income – QHSCL2) \* QHSCR2) + QHSCM1 up to the maximum contribution level of QHSCM2

#### QHSCM1: Quebec Health Services Fund Contribution Lower Level Maximum

This is the lower level maximum value for the Quebec Health Services Fund Contribution. It is calculated when QHSCFLAG is set to 1. When income (see QHSCFLAG for income concept) is greater than QHSCL1 and less than QHSCL2, the contribution is calculated as follows:

(income – QHSCL1) \* QHSCR1 up to this maximum contribution level of QHSCM1

#### QHSCM2: Quebec Health Services Fund Contribution Upper Level Maximum

This is the upper level maximum value for the Quebec Health Services Fund Contribution. It is calculated when QHSCFLAG is set to 1. When income (see QHSCFLAG for income concept) is greater than QHSCL2, the contribution is calculated as follows:

((income – QHSCL2) \* QHSCR2) + QHSCM1 up to this maximum contribution level of QHSCM2

#### QHSCR1: Quebec Health Services Fund Contribution Lower Level Inclusion Rate

This is the lower level inclusion rate for the Quebec Health Services Fund Contribution. It is calculated when QHSCFLAG is set to 1. When income (see QHSCFLAG for income concept) is greater than QHSCL1 and less than QHSCL2, the contribution is calculated as follows:

(income – QHSCL1) \* QHSCR1 up to the maximum contribution level of QHSCM1

QHSCR2: Quebec Health Services Fund Contribution Upper Level Inclusion Rate

This is the upper level inclusion rate for the Quebec Health Services Fund Contribution. It is calculated when QHSCFLAG is set to 1. When income (see QHSCFLAG for income concept) is greater than QHSCL2, the contribution is calculated as follows:

((income – QHSCL2) \* QHSCR2) + QHSCM1 up to the maximum contribution level of QHSCM2

#### **Deleted Parameters**

#### \*OPRTCMAX: Ontario property tax credit maximum (post 2009)

Changes were made to the previously announced Ontario property tax credit, now called the Ontario Energy and Property Tax Credit, since it was first implemented based on the 2009 Ontario budget proposal. As a result, this parameter is no longer necessary

#### \*OPRTCSMAX: Ontario property tax for seniors credit maximum (post 2009)

Changes were made to the previously announced Ontario property tax credit, now called the Ontario Energy and Property Tax Credit, since it was first implemented based on the 2009 Ontario budget proposal. As a result, this parameter is no longer necessary

#### \*QHSC: Quebec Health Services Fund contribution table

This table look-up parameter has been replaced by QHSCL1, QHSCR1, QHSCM1, QHSCL2, QHSCR2 and QHSCM2. This change was implemented to properly index the income threshold levels for the contribution table.

#### **Pre-1997 Deleted Parameters**

The following parameters were removed since they belonged to programs that existed pre-1997. A number of parameters were removed since they were flags that will now always be flagged on for the years modeled.

\*AFAC1: Alberta FA benefit per child aged 0 - 6

\*AFAC2: Alberta FA benefit per child aged 7 – 11

\*AFAC3: Alberta FA benefit per child aged 12 – 15

\*AFAC4: Alberta FA benefit per child aged 16 – 17

\*ALTAMIN: Alberta GIS supplement minimum annual benefit

\*ALTASC: Alberta GIS supplement maximum annual benefit

\*ALTASOPT: Alberta seniors option [1=GIST,2=new seniors benefit 1994]

\*AXPI: Age amount phase in rate for 1994 and beyond

\*CRFLAG: British Columbia rental reduction flag \*CRTRB: British Columbia renter tax reduction basic credit \*CRTRD: British Columbia renter tax reduction credit for other dependants \*CRTRP: British Columbia renter tax reduction proportion of rent allowed \*CRTRPN: British Columbia renter tax reduction proportion of net income \*CRTRS: British Columbia renter tax reduction credit for spouse \*CRTRT: B.C. renter tax reduction base amount turndown [dependants, amount] \*CTCERF: Refundable CTC child care expense reduction fraction \*CTCOPT: Refundable Child tax credit option \*CTCPC: Refundable Child tax credit per child \*CTCREF: Refundable CTC post-reform rules flag \*CTCRR: Refundable Child tax credit reduction rate \*CTCSUP: Refundable CTC young child supplement \*CTCTD: Family income refundable child tax credit turndown \*CTCTUR: Refundable CTC take up rate table [benefit,rate] \*FARR: Family allowance repayment rate \*FATBPI: Family allowance take-back phase in \*FATD: Family allowance turndown income \*NS13: Nova Scotia GIS supplement for 1/3 GIS \*NS23: Nova Scotia GIS supplement for 2/3 GIS \*NSLT13: Nova Scotia GIS supplement for less than 1/3 GIS \*NSMAX: Nova Scotia maximum GIS supplement level \*OEHTRR1: OEHT - Rate 1 \*OEHTRR2: OEHT - Rate 2 \*OEHTRR3: OEHT - Rate 3 \*OEHTTD1: OEHT - Turndown 1 \*OEHTTD2: OEHT - Turndown 2 \*ONTFPTG: Ontario property tax grant (fraction of rent) \*ONTPTG: Ontario property tax grant for seniors \*ONTSTG: Ontario sales tax grant for seniors \*PFACFLAG: Use Provincial Configuration flag \*QAAFA: Quebec availability allowance (supplement) [parity,\$] \*QAAFAFLAG: Availability Allowance: Supplement to Quebec FA \*QAMTCBX: Quebec Alternative Minimum Tax Calculate Basic Exemption \*QAMTNEGTI: Quebec Alternative Minimum Tax Allow Negative Taxable Income

\*QAMTXREF: Quebec alternative minimum tax 1995 reform indicator (flag)

\*QCAPAMTX: Quebec alternative minimum tax taxable capital ratio

\*QCCEOPT: Quebec CCE calculation option [1=deduction,2=refundable credit]

\*QCPPOPT: Quebec CPP/QPP contribution deduction/credit option [1=deduction,2=credit]

\*QCRDFLG: Quebec income credit flag [1=if social contribution are deducted]

\*QDUESOPT: Quebec Dues Tax Credit option

\*QEAMAX: Quebec maximum employment allowance deduction

\*QEAP: Proportion of earnings for Quebec employment allowance deduction

\*QFAIFLAG: Quebec inclusion of federal family allowance in income flag

\*QFFSL: Federal family allowance: Quebec Configuration[parity,\$]

\*QFS: Federal supplement per child 12-17 in Quebec configuration

\*QGIFTOPT: Quebec gifts as tax credit

\*QHSOASFG: Quebec Health Services Fund Contribution OAS Deduction flag

\*QMEDALL: Quebec medical allowance maximum lower limit

\*QMEDOPT: Quebec Medical Tax Credit option

\*QNFSDED: Quebec deduction of net federal supplements (SPA and GIS) from net income flag

\*QPTRGISB: Quebec property tax rebate GIS bonus

\*QSPBFLAG: Quebec inclusion of social program benefits in income flag

\*QTROPT: Quebec Tax Reduction calculation option 1=universal 2=income tested

\*QTRSAFAM: Quebec Social Assistance Included in Family Tax Credit Income flag

\*QTRWCFAM: Quebec Workers Compensation Included in Family Tax Credit Income flag

\*QTUIOPT: Quebec Tuition Tax Credit option

\*QUICOPT: Quebec UI contributions deduction/credit option [1=deduction,2=credit]

\*SAFS: Federal share of social assistance [prov]

\*STDFA: Standard federal family allowance per child

\*UIBASRATE: Benefit rate for basic phase (UI only)

\*UIBRP: UI benefit recovery portion (UI only)

\*UIDEPOPT: UI dependency option [1=normal, 2=Feb'94] (UI only)

\*UIEIOPT: UI Employment Insurance reform option [1=UI, 2=EI Dec'95]

\*UIENSRATE: Enhanced rate for basic phase (UI only)

\*UIENSRTCO: Enhanced rate cutoff (UI only)

\*UIFSHMINWK: Minimum weeks to qualify for fishing benefits (UI only)

\*UIMATMINWK: Minimum weeks to qualify for maternity benefits (UI only)

\*UIMINPCT: Exemption limit (percent of maximum insurable earnings) (UI only) \*UIREGMINWK: Minimum weeks to qualify for regular benefits (UI only) \*UISICMINWK: Minimum weeks to qualify for sickness benefits (UI only) \*VPHOPT: Nova Scotia pharmacare premium option (1=GIS, 2=income) \*YCXM1: Dependent child amount (1st child) \*YCXM2: Dependent child amount (2nd child) \*YCXM3: Dependent child amount (3<sup>rd</sup>, etc.) \*YCXMT: Dependent child exemption/amount turndown level

### Variable Guide

This section includes descriptions of all new variables introduced in version 18.0. Variables which have been deleted, or whose interpretations have changed, are also described and are identified in this section by a preceding asterisk.

#### DELETED VARIABLES

#### Pre-1997 Deleted Variables

The following variables were removed since they belonged to programs that existed prior to 1997.

\*imcchc: Child's non-refundable credit

\*imctc: Child tax credit

\*imctcben: Federal child tax credit and child benefits

\*imctxcs: Dependent children tax credits

\*imfar: Family allowance recovery

\*imffa: Federal portion of family allowances

\*imfsa: Federal social assistance

\*impptg: Provincial property tax grant for seniors

\*impstg: Provincial sales tax grant for seniors

\*imqaafa: Quebec Availability Allowance FA Supplement

\*imqccea: Quebec child care expenses allowed (dedn)

\*imqchara: Quebec allowable charitable donations(calc)

\*imqdedea: Quebec employment allowance

\*imqtfa: Quebec taxable family allowances

\*imtfa: Taxable family allowances

\*imuidpfg: El claimants has dependents flag

### Growth and Validation Guide

#### **GROWTH UPDATES**

The most recent economic growth projections from the Parliamentary Budget Office are incorporated.

Parameter and weight files are now provided to 2016.

Expenditure items will now be grown using Personal Income growth instead of Gross Domestic Product (GDP) growth.

#### Online Documentation

The SPSD/M online documentation provides quick access to the full Documentation Guides. These online guides will only work with Windows 2000/XP. Vista and Windows 7 users will be able to use the SPSD/M once they download a file from the Microsoft website which will allow them to view the help system. See <a href="http://go.microsoft.com/fwlink/?LinkID=82148">http://go.microsoft.com/fwlink/?LinkID=82148</a>. The documentation can be found in the SPSM menu under Start, Programs.

If you are having any problems using the online documentation please contact us at (613) 951-3774.