

Nova Scotia Living Wage

Making Paid Work Meet Basic
Family Needs in Nova Scotia

Calculation Guide

A technical appendix to the report, *Working for a Living, Not Living for Work: Living Wage for Halifax 2015*, for those seeking to calculate the living wage in their own communities

Note: While this guide is most appropriate for communities in Nova Scotia, its methodology could be adapted fairly easily for other communities.

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Introduction

THIS GUIDE EXPLAINS HOW TO calculate a living wage for communities in Nova Scotia. It is based on the CCPA-BC Office's 2014 Living Wage Calculation Guide,¹ but has been adjusted to account for the different tax system and cost of living in Nova Scotia.

Below you'll find a step-by-step guide to determining the hourly living wage for a Nova Scotia community. This wage is meant to cover the necessities, such as food, shelter, clothing, child care, and a contingency fund for emergencies. The background and theory behind the idea of a living wage are explained in the CCPA-NS Living Wage report. A family of two adults and two children would require two adult earners working full time at the living wage in order to cover all of their costs.

An Excel spreadsheet containing the actual formulas and calculations necessary to determine the living wage accompanies this guide. The Family Expenses and other information can be updated to reflect the specific costs in the relevant community.

TIMING OF THE LIVING WAGE CALCULATION

This calculation guide will give the living wage for 2015, which is based on 2014 data. Amounts and rates for government taxes and transfers change frequently, so the following should be checked for accuracy before the calculation is completed:

- Family expenses amounts nearest to December 2014;
- Government transfer amounts for the July 2014 to June 2015 time period; and
- Government deductions and taxes for the 2014 tax year.

The living wage amount should only be updated once a year, and ideally, released 12 months after the last time it was released, preferably in April.

Overview of the Calculation Process

Stage 1: Calculate Family Expenses;

Stage 2: Calculate Government Transfers: CCTB, UCCB, GST/HST credits;

Stage 3: Calculate Government Deductions and Taxes;

Stage 4: Determine the Living Wage Amount;

Stage 5: Verify the Calculations.

¹ BC-CCPA, "Working for a Living Wage 2014," & "Living Wage Calculation Guide 2014," CCPA-BC, <https://www.policyalternatives.ca/livingwage2014>.

Mechanics of the Excel Spreadsheet

Table I: Family Expenses;

Table II: Non-Wage Income (Government Transfers);

Table III: Family Income less Family Expenses;

Table IV: The Living Wage and Government Deductions and Taxes; and

Table V: Family Income less Government Deductions and Taxes plus Government Transfers.

Table I, II and IV each calculate one element of the formula presented above. Table III compares family income with family expenses; the wage in Table IV is adjusted based on the expenses in Table III to calculate the living wage. The details of this are as follows.

- Cell C20 in Table I is the amount of the family's total annual expenses.
- Cell C31 in Table II is the total annual amount of government transfers received by the family.
- Cells B41 and C41 in Table IV are the hours per week of employment for each parent.
- Cells B42 and C42 in Table IV are the hourly wages for each parent. These are set to be equal.
- Cells B43 and C43 in Table IV are the annual incomes from employment for each parent.
- Cell D45 in Table IV is the total annual amount of employment income available for the family after government deductions and taxes have been subtracted.
- Cell C35 in Table III is the family's total annual income: the sum of government transfers and employment income after government deductions and taxes.
- Cell C36 in Table III reproduces the family's total annual expenses.
- Cell C37 in Table III indicates the gap between the family's annual income and its annual expenses.

Table V summarizes the family's overall finances, presenting its income from employment, total government taxes, total government transfers, and its annual net surplus.

Step 1: Calculating Family Expenses

THE HOURLY LIVING WAGE amount has been calculated based on the expenses of a reference family, following the Canadian Living Wage Framework.²

Table 1: Family Characteristics and Assumptions in the Living Wage Calculation 2015

Adults	
Number	2
Sex	1 female, 1 male
Age	between 31 and 50
Number of parents in paid work	2
Hours of paid work	35 hours each
Hourly wage	equal for both
Children	
Number	2
Sex	1 male, 1 female
Age	boy aged 7, girl aged 4

The expenses are based on those of a reference family consisting of two parents and two children. The children are aged four (born 2011) and seven (born in 2007). The ages of the children ensure that the cost of child care, which is a major expense for families, is captured. This reference family also allows the living wage to cover most other family types³—the amount used for child care expenses can be used to cover different expenses across the lifespan (such as for investing in children’s education or saving for the purchase of a home, or saving for retirement).

Expenses are divided into eleven categories:

1. Food;
2. Clothing and Footwear;
3. Shelter;
4. Utilities;
5. Transportation;
6. Child Care;
7. Health Care Expenses (not provincially insured);

² Living Wage Canada, Canadian Living Wage Framework <http://livingwagecanada.ca/index.php/about-living-wage/about-canadian-living-wage-framework/>

³ The hourly living wage would also cover the expenses of a single parent with one child, however if the child is under 5 the family must have access to a full child care subsidy.

8. Contingency/Emergency Amount;
9. Parent Education;
10. Household Expenses;
11. Social Inclusion

Four of the categories above (clothing & footwear, transportation, social inclusion and household expenses) are based on the figures in the Market Basket Measure (MBM), which are calculated based on the Survey of Household Spending using median⁴ expenditures for clothing and footwear, and below median expenditures for transportation and ‘other’ expenses (which we have divided into social inclusion and household expenses). According to Statistics Canada, “the MBM is a measure of low income based on the cost of a specific basket of goods and services representing a modest, basic standard of living.”⁵ It is the most accurate measure we have for a wide range of local family expenses.

The MBM is calculated for two specific communities in Nova Scotia (Halifax and Cape Breton) and then by community size based on census population: for Census Agglomerations (CAs) (communities 30,000-99,999), for communities under 30,000 and for rural areas, which includes communities with a population of less than 1,000 or with a population density less than 400 persons per square kilometer that are located outside of Census Metropolitan Areas (CMAs) or CAs. In order to gather sufficient data to determine a living wage that is consistent with the Canadian Living Wage Framework, the MBM is supplemented by other data sources or, in some cases, by performing price surveys.

DATA REQUIRED FOR FAMILY EXPENSES:

You will need the most recent data sources for your community and CPI (Consumer Price Index) data. See the “CPI” tab in the Excel spreadsheet, or retrieve from Statistics Canada here: <http://www5.statcan.gc.ca/cansim/a26?lang=eng&retrLang=eng&id=2020809&paSer=&pattern=&stByVal=1&p1=-1&p2=50&tabMode=dataTable&csid>.

You will also need the Market Basket Measure data for your community. See the “MBM” tab in the Excel spreadsheet or retrieve from Statistics Canada here: <http://www5.statcan.gc.ca/cansim/a26?lang=eng&retrLang=eng&id=2020809&paSer=&pattern=&stByVal=1&p1=-1&p2=50&tabMode=dataTable&csid> by using the add/remove data tool.

CALCULATING THE FAMILY EXPENSES

1. Food

INFORMATION NEEDED:

(1) the most recent Nova Scotia Participatory Food Costing Data (2012). See http://foodarc.ca/wp-content/uploads/2013/05/NSFoodCosting2012_Report.pdf. (2) CPI data for food category for Nova Scotia 2012 and 2014 (see Excel Spreadsheet Tab CPI).

⁴ Note that where possible the median cost of an item is used. Median costs are almost always lower than average costs because the cost of expenditures can be pulled up by those with higher incomes who can afford higher expenditures. The median costs represent the middle, meaning you may either be paying slightly more or less than this depending on the availability of the item at different price points.

⁵ “What is the MBM?” <http://www.statcan.gc.ca/pub/75f0002m/2013002/mbm-mpc-eng.htm>

The decision was made to use data available through the Nova Scotia Participatory Food Costing Project because it is local, rigorously collected data, and is the closest to the report recommended in the Canadian Living Wage Framework (the BC Dietician's report). Since 2002, partners of the Nova Scotia Participatory Food Costing Project have used an adapted National Nutritious Food Basket (NNFB) containing 51 items to conduct a survey of food costs in the province by district health authority, and calculated costs for specific ages and sexes. The food costing exercise is also focused on affordability, and the lowest cost item, and therefore provides a conservative estimate.

Step 1: Consult Food Costing report Table 1 for the family member profiles: Female Adult aged between 31 and 50; Male Adult aged between 31 and 50; Boy age 7; Girl age 4 (insert in Food costs Table cells M16-M19).

Step 2: Adjust 2012 total monthly food expense to 2014 prices using the Consumer Price Index for "Food" for Nova Scotia (CPI tab of spreadsheet, cell C9).

2. Clothing and Footwear

INFORMATION NEEDED:

(1) MBM for your community (see "MBM" tab in Excel spreadsheet). (2) CPI data for your community for clothing for 2011 and 2014 (see "CPI" tab CPI in Excel spreadsheet).

Step 1: Adjust the MBM annual clothing to get a 2014 amount by using the NS CPI for clothing for 2011 and 2014.

Step 2: Enter the adjusted amount in Living Wage spreadsheet tab in cell C10.

3. Shelter

INFORMATION NEEDED:

(1) Canada Mortgage and Housing Corporation (CMHC), Housing Market Information Portal Halifax Highlights (or for other community), found here: <https://www03.cmhc-schl.gc.ca/hmiportal>. (2) quotes for Contents Insurance from providers.

Step 1: Go to the portal: <https://www03.cmhcschl.gc.ca/hmiportal#TableMapChart/0580/3/Halifax>. Choose the area and the submarket boundary you require (in this case, the choice was Halifax) on left hand drop down menu; choose primary rental market; choose median rent; scroll across for 3+ bedroom apartments for October (depending on when you are calculating the living wage). Enter the amount in cell G9, in the separate box for calculating Shelter expenses.

Step 2: Obtain quotes for content insurance from multiple insurance providers; find the average. Enter the average amount below the rent costs in cell G10.

The total for shelter will be determined automatically by the formula in the spreadsheet. It is linked to the Shelter line in the Family Expenses Table.

4. Utilities

INFORMATION NEEDED:

(1) Nova Scotia Power's rates: The price per kw/h for electricity from the Nova Scotia Power Corporation can be found on their website (<http://www.nspower.ca/en/home/about-us/electricity-rates-and-regulations/rates/>)

domestic-service-tariff.aspx), and should include base customer charges and HST. Our calculation assumes the use of 1100kw/h per month.⁶ Water is assumed to be included in the rental amounts, as that is usually the case.

Note: Internet and landline services are considered a Household Expense. It is left to the family to decide what kind of communication services they need.

Step 1: Insert the amount *s* in cells G14–G15 and the table will calculate the HST and subtract the Energy Rebate. The spreadsheet will automatically fill in the amount in B12.

5. Transportation

INFORMATION NEEDED:

(1) MBM transportation amount: in order to capture the cost of owning and operating a second-hand car, we used the MBM amount for a community with a population under 30,000. The MBM transportation amount for Halifax did not include a car, but it was decided that realistically a family of four would need one to cover their transportation needs. Indeed, as is discussed in the full report, the low-wage workers who participated in the focus groups did discuss the need for a car because of where affordable rentals are located, as well as time pressures associated with having children. (2) CPI data for 2014 for NS for the “operation of passenger vehicles.” (3) Bus Pass: updated cost of a monthly bus pass in Halifax (if applicable), available here: <http://www.halifax.ca/transit/fares.php>.

It was decided that, in addition to a car, given work and school commitments, it would be necessary for one parent to have a bus pass. While discounted student fares are available, they are only for full-time students: our parent does not qualify. We have included the cost of an adult monthly pass for the year for one of the parents to use for school or work.

Step 1: Use the MBM data for transportation and adjust it using the CPI data for 2011 and 2014 (fill in the numbers in cell G28).

Step 2: Enter the cost of the monthly bus pass in cell G27 and the formula determines the annual cost of bus passes.

These costs are entered in the separate table for calculating Transportation costs, and the total is linked to the line for Transportation in the Family Expenses Table (C13).

6. Child Care

The ages chosen for the two children are key in determining child care costs. As in the Canadian Living Wage Framework, the children in this calculation are aged four and seven. Since their parents are both working full time, the children need to be in child care programs most weeks. However, it is assumed that the parents get two weeks of vacation each year, so the children would be with their parents those weeks. The four year old is in full-time day care for the full year (regardless of vacation time, most centres require parents to pay), and the seven year old is in after-school care for ten months. Additionally, in the summer, the seven year old will be in summer day camps for six weeks. Along with the parents’ two weeks of vacation, this accounts for the entire year. Information needed: Estimates of local child care expenses.

6 Based on BC Calculation Guide 2014, see page 8.

INFORMATION NEEDED:

(1) Median child care costs for your community: this information is tracked by the Nova Scotia Department of Community Services, Child Care Subsidy division; for Halifax the median child care cost provided by the provincial government were published here: see Table A, City Data in Detail, in this CCPA report <https://www.policyalternatives.ca/publications/reports/parent-trap>. If the median amount for your community is not available, the median amounts for NS can be found here: <http://findingqualitychildcare.ca/index.php/nova-scotia>. The other option is to do a survey and get quotes for a full year of full time preschool/day care for a four year old from preferably at least three regulated⁷ child care organizations, and calculate an average of those costs. (2) Median or Average before/after-school care: contact the Department of Community Services and ask for the median amount for your community, or find three local quotes to calculate the average cost of before/after-school care. (3) Find three local quotes to calculate the average cost of six weeks of summer camps.

For the Halifax calculations, three quotes were found for before/after-school and summer camps. For the before/after-school costs, relying on the median amount provided by the Department of Community Services excludes the subsidized EXCEL program available in schools in the Halifax Regional School Board because these are not available for further subsidy and they are not provided by a regulated organization. The rates from Needham Day Care, Ward 5 and the Excel Program⁸ (Halifax Regional School Board) were used to determine the cost of before/after-school care.⁹ According to the Nova Scotia government, there are 195 school days in a school year.¹⁰ For our calculations of summer camp expenses, we contacted the Boys and Girls Club¹¹ of Spryfield, Sackville, and East Dartmouth, and the Halifax Recreation program (\$114)¹² to determine the cost of the summer camps.

Step 1: Enter preschool amount in N9.

Step 2: Enter the before/after school amount in N10.

Step 3: Enter the summer camps amount in N11.

The table is linked to the line for Child Care (C14) in the Family Expenses Table.

7. Health Care (not publicly insured expenses)

INFORMATION NEEDED:

(1) Quotes for standard family medical insurance from several providers.

The estimate for the non-insured health care costs is assumed be equivalent to the cost of purchasing private insurance. Most health insurance providers have online quote tools on their website, which are generic enough that they can be used for a reference family of four in any community easily. Our assumptions: the plan is standard (versus basic) and includes prescription drug coverage with a deductible, and dental coverage; the

7 Note that in order to qualify for a child care subsidy, the child must receive care in an organization which has received a license operate a child care centre or Family Home agency from the Department of Education and Early Childhood Development, see Appendix A for definitions: http://www.ednet.ns.ca/earlyyears/documents/families/Subsidy_Terms_and_Conditions.pdf

8 <http://www.hrsb.ca/about-our-schools/parents/excel-child-care/fees>

9 The only reported median fee is \$26/day from the provincial government, however after personal communication with an official within the Department of Early Learning and Education, we were advised that the data collected by the government is only for licensed centre-based care and would not include the Excel program. <http://findingqualitychildcare.ca/index.php/nova-scotia>

10 Department of Education and Early Learning, School Calendar, <http://www.ednet.ns.ca/educators.shtml>

11 <https://www.bgccan.com/en/ClubsPrograms/Programs-Children/Pages/default.aspx>

12 Halifax Recreation <http://www.halifax.ca/rec/ProgramsandActivities.php>

adults are both aged 37, and the children aged 4 and 7, living in Nova Scotia. Multiple quotes¹³ obtained were: \$134 (SunLife), \$155 (Manulife) and \$177 (Blue Cross).¹⁴

Step 1: Enter the resulting quotes amount in the formula for averaging the amount in cell B15.

8. Contingency/Emergency Amount

This expense represents two weeks' pay per parent for the year and is designated as an emergency fund. This is a very conservative estimate of what might be needed in any given year for emergency non-budgeted items. It is designed to cover (for example) two weeks of unpaid leave (perhaps because of family illness or travel to a funeral) and can cover the two-week waiting period for Employment Insurance.

The formula (the living wage amount x hours worked x 2 weeks) in C16 automatically calculates the amount once the final calculations are finished.

9. Parent Education

INFORMATION NEEDED:

(1) up to date average tuition and student association fees from the closest campus of the Nova Scotia Community College (NSCC).

In order to provide the family with funds for one parent to work toward upgrading their skills and education with the intent of eventually moving up to a job that pays a higher wage, we include a line for education in our Family Expenses. This amount will be enough for one parent to take two courses a year from a nearby community college. This is not enough for them to be considered full-time, nor is it enough to qualify for a student loan, but it does get them on the track towards a better paying job.

Step 1: Contact the NSCC and obtain an average tuition cost for their various programs. This information is entered in the Parent Education table cell J9.

Step 2: The student association fees were also calculated using the average for all three campuses in Halifax, which can be found on the website (http://www.nsc.ca/admissions/cost_and_financial_aid/index.asp), and are added in cell J10.

The table calculates a total education cost for the year, and is linked to the Parent Education line in the Family Expenses Table (C17). It was not possible to include expenses related to textbook or other course material costs as these costs vary significantly depending on the type of course. These costs are included as a possible expense in the social inclusion budget category.

10. Household Expenses and Social Inclusion

INFORMATION NEEDED:

(1) the Market Basket Measure table for your community (Statistics Canada, CANSIM Table 202-0809).

13 <http://www.healthquotes.ca/Individual/Insurance-Quote-Results.aspx>

14 Note that the Blue Cross plan chosen was with a family in which the male is the oldest adult (the question that has to be answered) <http://web-beta.medavie.bluecross.ca/en/individuals/health-benefits/estimate-your-rate>

The amount assigned to these two categories is based on the 'Other' category of the MBM, which is drawn from the spending patterns from Statistics Canada's Survey of Household Spending (2012). The 'Other' category of the MBM is designed "to cover other goods and services that would be considered necessities according to the current societal norms."¹⁵ This category is to cover expenses items considered necessities, but not essential basics. The complete list of the items included in the 'other' category is in Table A.8 in the report explaining the MBM.¹⁶

No specific breakdown of costs is provided in the living wage's family expense budget except to allocate half of the 'Other' expenditures for household expenses and half for social inclusion (an indication that the two categories are equally important). We chose not to allocate any specific amounts because these categories are meant to allow for a bit of choice in regards to household expenses, but also regarding social inclusion: families' ability to respond and recognize societal norms differ depending on cultural, neighbourhood, school, family, etc.

- Household Expenses: These expenses include those items considered necessities, but not essential basics, and covers items such as personal care, furniture, household supplies, and communication expenses (whether landline, cell phone or/and internet, cable).
- Social Inclusion Expenses: The social inclusion category is about lessening stigma, and allowing family members to participate fully in the life of their community. It could include expenses such as school supplies, reading materials, minimal recreation and sports fees, children's birthday gifts and a small budget for entertainment (e.g. tickets to a movie, fees for a museum).

Step 1: Determine the 'Other' amount for the MBM measure for your community, divide it in two and allocate half to Household Expenses (C18) and half to Social Inclusion (C19).

OR Step 1: If you are using local food costs, you will first need to determine the percentage to allocate as 'Other' (the percentage the MBM 'Other' represents for your community). First divide the MBM 'other' amount by the total MBM amount to determine the percentage allocated.

Step 2: Enter this percentage amount in cell G22 and G23. For the Halifax calculation, the 'Other' category is calculated at 75.4% of the food and clothing/footwear expense.

Once all amounts for Family Expenses are entered into Table 1, the monthly and annual totals will be calculated automatically. These figures, along with taxes and transfers, form the basis of the calculations for total income needed to cover expenses.

15 Michael Hatfield, Wendy Pyper, Burton Gustajtis, First Comprehensive Review of the Market Basket Measure of Low Income: Final Report (Ottawa: Human Resources and Skills Development Canada) June 2010, p. 44.

16 Hatfield et al., Ibid, http://publications.gc.ca/collections/collection_2011/rhdcc-hrsdc/HS28-178-2010-eng.pdf#

Step 2: Calculating Government Transfers

THIS INFORMATION IS calculated in Table II.

Government transfers represent a source of income for the reference family. Transfers are added to total disposable family income, decreasing the amount our family needs to earn through private wages. The living wage is not meant to replace government transfers and programs, but to work with them to achieve a decent standard of living.

TIMING OF GOVERNMENT TRANSFERS: The Canada Child Tax Benefit and the GST/HST credits amounts remain the same from July of one year to June of the next. However, the formulas may change each July and should be verified if you are doing your calculations after the month of July.

The transfers that the family may receive are:

Federal Transfers:

- Canada Child Tax Benefit (CCTB)
- Universal Child Card Benefit (UCCB)
- GST/HST Credit

Provincial Transfers:

- NS Child Benefit
- NS Child Care Subsidy
- Nova Scotia Affordable Living Tax Credit

Transfers are based on the previous year's net income. However, for the first time calculating the living wage, the amount of the transfers is based on the net income amounts in Table IV, cells B45, C45 and total for the household in D45.

FEDERAL TRANSFERS

A) The Canada Child Tax Benefit (CCTB)¹⁷

The 2015 living wage amounts are based on the CCTB formulas for the July 2014 to June 2015 time period.

This is an income-tested benefit received for children under 18. The amount is affected by two factors:

- Number of children; and
- Family's net income.

The CCTB formula has the following three components:

- Basic Benefit, which is a monthly amount (\$120.50) multiplied by the number of children;
- Benefit Reduction, by means of which the CCTB is reduced when a family's net income reaches a specified amount; and
- National Child Benefit Supplement (NCBS), which provides an additional amount for families with low income, based on the number of children and the family's net income; for a two-child family it is \$186.75 per month for the first child and \$165.16 for the second.

Table 2: Canada Child Tax Benefit Formula						
CCTB	=	Basic Benefit (BB)	-	Benefit Reduction (BR)	+	National Child Benefit Supplement (NCBS)
CCTB	=	# of dependents x \$1,446	-	(net income – UCCB – \$43,953) x <u>0.04</u>	+	\$4,223 – (net income – UCCB – \$25,584) x <u>0.23</u>
2 Children	=	2 x \$1,446	-	(net income – UCCB – \$43,953) x <u>0.04</u>	+	\$4,223 – (net income – UCCB – \$25,584) x <u>0.23</u>
		In spreadsheet C25		In spreadsheet C25		Not in spreadsheet

The Canada Child Tax Benefit reduction begins at family net income of \$43,953. The National Child Benefit Supplement ceases at two-child family net income of \$45,000.¹⁸ The spreadsheet does not include the NCBS formula because the Halifax family income is too high to receive the supplement. If the wage falls below the threshold, it would need to be added.

¹⁷ The Canada Revenue Agency guide "Canada Child Benefits," for the period from July 2014 to June 2015, www.cra-arc.gc.ca/E/pub/tg/t4114/t4114-e.html

¹⁸ <http://www.cra-arc.gc.ca/bnfts/cctb/ncbs13-eng.html>

B) The Universal Child Care Benefit (UCCB)

This benefit is \$100/month for each child under six years of age and is not income tested.¹⁹ This calculation does not take into consideration proposed changes for 2015 that have not been passed into law.²⁰

Step 1: Enter \$100 into cell B27.

C) GST/HST Credit

This credit is designed to offset all or part of the goods and services tax/harmonized sales tax. The 2015 living wage amounts are based on the GST/HST credit formulas for the July 2014 to June 2014 time period.²¹

This is an income-tested benefit and is affected by three factors:

- Whether the parent has a spouse;
- Number of children; and
- Family's net income.

Table 3: GST/HST Credit Formula						
GST/HST Credit	=	Basic Credit	+	Additional Credits	-	Credit Reduction
GST Credit	=	\$268	+	spouse credit = \$268; children credits = \$141 for each child	-	(net income – UCCB – \$34,872) x 0.05
2 parents and 2 children	=	\$268	+	\$268 + \$141 + \$141	-	(net income – UCCB – \$34,872) x 0.05

For a two-parent, two-child family, the GST/HST credit ceases at a family net income of \$51,232.²²

PROVINCIAL GOVERNMENT TRANSFERS

A) Nova Scotia Child Benefit²³

This is a provincial supplement to the CCTB. To qualify for this full transfer, a family must have a net income below \$18,000, and *families whose net income is between \$18,000 and \$25,000 will receive partial benefits*. The reference family does not qualify because its net income is too high.

Step 1: Enter 0 in B26.

19 Source: Universal Child Care Benefit for the period from July 2014 to June 2015, http://www.cra-arc.gc.ca/bnfts/uccb-puge/fq_pymnts-eng.html

20 Under proposed changes to the Universal Child Care Benefit (UCCB), parents will be eligible for a benefit of \$160 per month for each eligible child under the age of six – up from \$100 per month effective January 1, 2015. Under these proposed changes to the UCCB, parents may also receive a benefit of \$60 per month for eligible children ages six through 17. Payments of the additional amount and the expanded amount will start in July of 2015.

21 Source: Canada Revenue Agency GST/HST Credit – Calculation sheet, <http://www.cra-arc.gc.ca/bnfts/gsthst/gstccl13-eng.html>

22 Income Level http://www.cra-arc.gc.ca/bnfts/gsthst/gstc_ncms-eng.html

23 <http://www.novascotia.ca/coms/families/ChildBenefit.html>

B) Nova Scotia Child Care Subsidy²⁴

Subsidies are available if the family fulfills the following criteria:

- Your family's net income is below \$61,668 (for two children)²⁵ and
- You cannot have more than \$50,000 in liquid assets savings or investments; and
- You must demonstrate social need: applicants and spouses/partners must be working, looking for work, be a student or have a special need within the family.

If all three criteria are met, the family *may* qualify. There is a limited pot of money for subsidies available in the province and you have to find a child care spot where you can use the subsidy. There are waitlists for child care spots as well as a limited budget for subsidies in Nova Scotia²⁶ (and further reporting requirements when a child care organization agrees to allow a subsidized space which is a further disincentive). For all these reasons, even if our family qualified the subsidy would not be included in the calculation.

Step 1: Enter 0 in B30.

C) Nova Scotia Affordable Living Tax Credit²⁷

Is an income tested credit designed to offset a portion of the provincial tax portion of the HST. It provides a base amount of \$255.00 for individuals or couples and \$60.00 per child each year. The credit is reduced by \$0.05 for every dollar of adjusted family income over \$30,000. The reference family is not eligible because their income is too high. The credit ceases at a family net adjusted income of \$36,300.²⁸

VERIFY: You can verify your calculations as follows:

- For the Canada Child Tax Benefit and NS Benefit, use this calculator http://www.cra-arc.gc.ca/bnfts/clcltr/cctb_clcltr-eng.html
- For the GST/HST credit and Nova Scotia affordable living tax credit, see: http://www.cra-arc.gc.ca/bnfts/clcltr/gstc_clcltr-eng.html

²⁴ <http://www.ednet.ns.ca/earlyyears/families/childcaresubsidy.shtml>

²⁵ <http://www.ednet.ns.ca/earlyyears/families/incomeeligibility.shtml>

²⁶ In 2011/12 only 5,630 children received subsidies (there are 43,625 children 0-4 in NS). Subsidies depend on several criteria and are calculated on a sliding scale. The formula for the calculation is not made public.

²⁷ <http://www.novascotia.ca/finance/en/home/taxation/tax101/personalincometax/altc-prc.aspx>

²⁸ <http://www.novascotia.ca/just/regulations/regs/incaffordable.htm>

Step 3: Calculating Government Deductions and Taxes

THIS INFORMATION IS calculated in Table IV of the Excel spreadsheet.

Government Taxes: Many tax rules and formulas change for each tax (calendar) year and need to be verified if the living wage guide is not for the current year.

For current information consult the following:

- General Income Tax and Benefit Guides (all years): <http://www.cra-arc.gc.ca/formspubs/t1gnrl/llyrs-eng.html>
- Income Tax Forms (2014): <http://www.cra-arc.gc.ca/formspubs/t1gnrl/ns-eng.html>
- T1 General 2014 - Income Tax and Benefit Return - Nova Scotia:
- Federal Worksheet
- Schedule 6 - Working Income Tax Benefit
- Schedule 11 - Tuition, Education, and Textbook Amounts
- Provincial Worksheet - Nova Scotia
- Form NS428 - Nova Scotia Tax and Credits
- Schedule NS(S11) - Provincial Tuition and Education Amounts
- T778 (Child Care Expenses Deduction): <http://www.cra-arc.gc.ca/E/pbg/tf/t778/README.html>

Please note that this calculation does not take into consideration proposed changes i.e. income tax changes that have been announced, but have not become law at this time.²⁹ The calculation therefore does not consider the impact that changes to the child tax credit³⁰ might have on this family.

To complete Table IV you will need the following information:

- EI Premiums: the EI premium rate and formula
- CPP Premiums: the CPP premium rate and formula
- Federal taxes: Basic personal amount
 - Tax rates
 - Tax brackets and corresponding tax rates

²⁹ <http://www.cra-arc.gc.ca/gncy/t1gtrdy/menu-eng.html>

³⁰ Under proposed changes the enhanced UCCB will replace this tax credit.

- Tax credits
 - EI Premiums
 - CPP Premiums
 - Child Tax Credit
 - Employment Tax Credit
 - Public Transit Credit (if applicable)
 - Tuition, education and textbook amount
 - Medical expenses
 - Children's Fitness Tax Credit
- Provincial taxes:
 - Basic personal amount
 - Tax rates
 - Tax brackets and corresponding tax rates
 - Tax credits
 - EI Premiums
 - CPP Premiums
 - Tuition, education and textbook amount
 - Medical expenses
 - Healthy Living Tax Credit
 - NS Child Tax Credit

In addition, you will need to allocate federal and provincial tax credits between the parents in the way that is most advantageous to the family. The formulas in the Excel spreadsheet indicate how these credits have been assigned for the living wage calculations for Halifax.

Note on Refundable Tax Credits: The formulas for the tax calculations include a "rule" that will not allow a negative amount. If the tax calculation (tax payable minus tax credits) returns a negative number, this might mean that the family is eligible to receive a cheque for the *Refundable* tax credits. If this is the case, the amount in the Federal/Provincial Tax lines will read \$0, and the refundable credits are calculated in the next line. This is to prevent Non-Refundable Tax Credits from resulting in a negative tax payable amount, which would be inaccurate.

The table below explains Table IV of the Excel spreadsheet (base year is 2014).

Table 4: Tax Calculations

Line	Explanation
Hours / Week	This is determined by your assumptions (the calculation for Vancouver and Victoria is 35 hours per week)
Wage	This amount is determined after all the tables have been completed
Employment Income	This is total earnings = hourly wage x hours per week x weeks per year
Adjustments	= the UCCB amount – child care expenses claimed These amounts must be claimed by the spouse with the lower income
Net Income	= “Employment Income” plus “Adjustments”
EI Premiums ³¹	= “Employment Income” x premium rate (2014: premium rate = 0.0188)
CPP Premiums ³²	= (“Employment Income” – \$3,500) x premium rate (2014: premium rate = 0.0495)
Federal Income Tax	See below
Federal Refundable Tax Credit	See below
Provincial Income Tax	See below
After Tax Income	= “Employment Income” – EI Premiums – CPP Premiums – Federal Income Tax – Provincial Income Tax
Monthly After Tax Income	= “After Tax Income” / 12

To calculate the living wage, you need to determine both employment income and net (or taxable) income.

CALCULATING TAXABLE INCOME

The following two adjustments are made in calculating Taxable Income from Total or Employment Income.

- The UCCB amount is added to Employment Income; and
- Child care expenses are deducted from Employment Income.

Therefore:

$$\text{Net (taxable) Income} = \text{Employment Income} + \text{UCCB} - \text{Child care Expenses}$$

Regarding the calculation of Taxable Income, there are two relevant tax rules (2014):

- The spouse with the lower income must claim the UCCB and Child care Expenses.
- The amount of child care expenses that can be claimed is limited as follows:
 - For children born 2008 or later, \$7,000.
 - For children born between 1997 and 2007, \$4,000.

31 EI Premiums: In 2014, the employee EI premium rate will remain at \$1.88 per \$100. This premium rate and the MIE increase means that insured workers will pay a maximum annual EI premium in 2014 of \$913.68. <http://www.servicecanada.gc.ca/eng/ei/information/maximum2014.shtml>

32 UCPP Premiums: <http://www.cra-arc.gc.ca/tx/bsnss/tpcs/pyrll/clcltng/cpp-rpc/cnt-chrt-pf-eng.html>

The reference family has one child born in 2008 (turning 7 in 2015) and one born in 2011 (turning 4 in 2015), therefore the maximum amount to be deducted would be \$7,000 per child.

FEDERAL INCOME TAX

Federal Income Tax deducted = (Taxable Income x tax rate) – (Non-refundable Tax Credits x tax credit rate) – (Refundable Tax Credits x Tax credit rate)

The formula for these tax calculations is in the excel spreadsheet cell B48 for parent 1 and C48 for parent 2.

Federal Tax Brackets:

For 2014, on taxable income less than \$43,953 the rate is 15 per cent. For taxable income between \$43,953 and \$87,907 it is 22 per cent. Therefore, if the taxable income of either parent increases above \$43,561, the formula for “Taxable Income x tax rate” becomes: Taxable Income x tax rate = ($\$43,953 \times 0.15$) + ((Taxable income – $\$43,561$) x 0.22)

Table 5: Federal Non-refundable Tax Credits (2014)		
Basic Personal Amount	= \$11,138 in 2014	Both Parents
EI Premiums	= B53 or C53 in the Excel spreadsheet	Both Parents
CPP Premiums	= B54 or C54 in the Excel spreadsheet	Both Parents
Canada Employment Amount	= \$1,127 in 2014	Both Parents
Child Tax Credit	= \$2,255 per child	Parent 2
Public Transit Credit	= Amount of monthly bus passes	Parent 2
Tuition, education and textbook amount	= $103.30 \times 3 \times 2$ (= \$103.30 average/credit x 3 credits/course x 2 courses) + 120×8 (= \$120/month x 8 months in school) + 20×8 (= \$20/month x 8 months in school (textbooks))	Parent 2
Medical expenses	= Family medical expenses (C15) – Net income (B45) x 3% Note: To be eligible to claim medical expenses, the family’s annual medical expenses must be greater than 3% of the net income of the person claiming the expenses.	Parent 1
Children’s Fitness Amount ³³ or Children’s Arts Amount	Family can claim up to \$500 spent on fitness and another \$500 each child on arts programs. Only one \$500 per child is claimed given the constraints on this family’s expenses.	

33 Note that there is a proposed change to turn this amount into a refundable tax credit for 2015. This has not become law and is thus not incorporated into this calculation. The amount for the credit is also increasing to \$1000. The reference family will be claiming \$500 for each child as part of the social inclusion category, but it is unrealistic to assume that this family would have more than \$500 each (\$1000 per year) to contribute.

Working Income Tax Benefit	= 1,813 – (Family Net income – UCCB – 15,649) x 0.15 Note: To be eligible for the Working Income Tax Benefit, the family's net income minus UCCB must be less than \$27,736.	Parent 2
Refundable Medical Expense Supplement	= 0.25 x [Family medical expenses (C15) – Net income (B45) x 0.03] – 0.05 x [Family Net Income – UCCB – 25,506] Note: To be eligible to claim the refundable medical expense supplement, the person must be eligible for the non-refundable medical expenses tax credit, and their family net income (excluding the UCCB) must be lower than \$48,546.	Parent 1

- Verify: you can verify your tax deductions with this calculator: <http://www.cra-arc.gc.ca/esrvc-sr-vce/tx/ndvdl/td1/menu-eng.html>

Provincial Tax

Tax = (Net income x Provincial Tax Rate)-(Non-Refundable Tax Credits x Tax Rate)

The formulas are in cells B49 for parent 1 and C49 for parent 2.

Basic Personal Amount	= \$8481 in 2014	Both Parents
EI Premiums	= B46 and C46	Both Parents
CPP Premiums	= B47 and C47	Both Parents
Tuition, Education, and Text Book Amount	= J23	Parent 2
Healthy Living Credit ³⁴	= (Max \$500) Note: The family can claim up to \$500 per child if they are registered in approved recreation programs including summer camps	Parent 1
Medical expenses	= Family medical expense (C18) – Net income x 3% Note: To be eligible to claim medical expenses, the family's annual medical expenses must be greater than 3% of the net income of the parent claiming the expenses.	Parent 1

The Nova Scotia Low Income Tax Reduction: The NSLITR provides assistance for families with low income, but all our families' incomes too high to qualify for this, and so it is not calculated in the spreadsheet.³⁵

Provincial Tax Brackets: For 2014, the provincial rate on taxable income below \$29,590 is 8.79%, and the rate on taxable income between \$29,590 and \$59,180 is 14.95%. One of our parent's net income (parent 2) is above the \$29,590 bracket, and therefore the formula used to calculate their provincial tax is altered to take this into account.

34 <http://novascotia.ca/dhw/pasr/healthy-living-incentive.asp>

35 <http://www.novascotia.ca/finance/en/home/taxation/tax101/personalincometax/default.aspx>

Step 4: Final Calculation of Living Wage

ADJUST THE "WAGE" in cell B42 and keep an eye on what happens to the "Gap" (C37), which is the difference between Available Income and Family Expenses. Using trial and error, adjust the Wage up or down until you find the level at which the Gap is as small as possible while still being positive. A Gap of \$0-\$20 is common, and this simply means that the family will have an extra few dollars above their calculated expenses. As this calculation is a very conservative estimate, and \$20 will not buy much, this extra amount is quite fair.

Step 5: Verifying the Calculations

YOU CAN VERIFY SOME of the calculations that are part of the living wage calculation through on-line calculators.

CCTB: The Canada Revenue Agency provides a CCTB benefits calculator online at: http://cra-arc.gc.ca/bnfts/clcltr/cctb_clcltr-eng.html

GST/HST: The Canada Revenue Agency provides a GST/HST credit and related provincial programs calculator online at: http://cra-arc.gc.ca/bnfts/clcltr/gstc_clcltr-eng.html

You are finished!

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