



Brown's Economic Damages Newsletter

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Frank Strain, Ph.D.
Stephen Clark, Ph.D.

*** NEW *** Time Use Data from Statistics Canada's 2015 *General Social Survey* (GSS), cycle 29

By Cara L. Brown, M.A. and Geni Peters, Ph.D.

In this newsletter issue, we introduce the most recent time use data from Statistics Canada which can be used to measure time spent on housekeeping activities for housekeeping claims in civil litigation. This data is from Statistics Canada's 2015 *General Social Survey* ("GSS") cycle 29, which was released in June 2017 and updates the 2010 data (from GSS cycle 24).

We compare the 2015 data to prior survey years in this issue, as well as reproduce housekeeping replacement rates in 2017 for all provinces and territories. These rates are utilized in our ***Housekeeping Damages Calculator***TM ("HDC") available at www.browneconomic.com. Counsel or insurers can use the HDC to assess housekeeping losses for \$190 + GST. We also review the notion of a negative yearly "health contingency" which Brown Economic applies in all housekeeping calculations, similar to a disability contingency in income loss claims. To our knowledge, we are the only forensic experts in Canada who apply a negative "health contingency" in housekeeping loss calculations, though this notion is well accepted in U.S. forensic practice.¹

Prior issues of **Brown's Economic Damages Newsletter** related to this month's topic:²

- ◆ "2017 housekeeping hourly rates: used in court-ready assessments and in the online *Housekeeping Damages Calculator*TM @ www.browneconomic.com", January/February 2017, vol. 14, issue 1
- ◆ "2016 Housekeeping Hourly Rates: used in court-ready assessments; used in the online *Housekeeping Damages Calculator*TM @ www.browneconomic.com; plus 4 recent cases awarding housekeeping damages", May 2016, vol. 13, issue 5

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¹ Michael L. Brookshire and Elizabeth A.W. Gunderson, "Estimating Lost Household Services: Persons Over 50" (2000) *Journal of Forensic Economics* 13(1), pp. 11-21.

² To request back issues of our newsletter, go to: www.browneconomic.com > **RESEARCH & PUBLICATIONS** > *Brown's Economic Damages Newsletter* > click on "Newsletter index" to view issues extending back to 2000, by topic. To request prior issues, click on the "Back issues" on the left-hand side menu and complete the email request.

Prior issues continued:

- ◆ "2015 Housekeeping hourly rates: used in court-ready assessments and for the online *Housekeeping Damages Calculator*[™] @ www.browneconomic.com" February 2015, vol. 12, issue 2
- ◆ "Housekeeping & Cost of Care Awards: 2013 hourly rates & 2012-13 cases", August 2013, vol. 10, issue 7
- ◆ "Time Use: Average Time spent on Activities & Utilization for the *Housekeeping Damages Calculator*[™] ("HDC")", September/October 2012, vol. 9, issue 8
- ◆ "Fatality Cases: Unique aspects related to quantum awards", November 2011, vol. 8, issue 9
- ◆ "Housekeeping Claims: Time Use Data from Statistics Canada's 2010 *General Social Survey* (GSS), cycle 24", July/August 2011, vol. 8, issue 6
- ◆ "Housekeeping claims: 2010 hourly replacement rates", March 2010, vol. 7, issue 3
- ◆ "Housekeeping award by Ontario Court of Appeal: *McIntyre v. Docherty* [2009]", May 2009, vol. 6, issue 4
- ◆ "Cost of care/valuable services assessments: what role does a quantum expert fulfill in quantifying cost of care awards?", November 2008, vol. 5, issue 9
- ◆ "Household Replacement Rates and the 'Health' contingency in housekeeping claims", March 2008, vol. 5, issue 3
- ◆ "Reduction in housework due to disability (2001 PALS & 1991 HALS data)", February 2007, vol. 4, issue 2
- ◆ "Housekeeping claims: Time Use Statistics from Statistics Canada's 2005 *General Social Survey* (GSS) cycle 19", October 2006, vol. 3, issue 9

Time use data for loss of housekeeping capacity awards

Since 1985, Statistics Canada has gathered data on various social trends in Canada³ through the *General Social Survey* ("GSS") program. The *GSS Time Use Survey* was first conducted in 1986, has been repeated every five to six years, and has become a primary source of data on the "time use" of Canadians.⁴ Preliminary results from the most recent time use survey, GSS cycle 29, conducted from April 2015 to April 2016, were released in 2017.⁵

The *GSS Time Use Survey* is designed to collect information on activities performed by respondents over a specific period of time. The structure of the 2015 *GSS Time Use Survey* identifies four broad groups of **unpaid work activity**: "household chores", "care of household children under 18 years", "care of household adults" and "shopping for goods and services". These four activity groups are composed of the following activities:⁶

Household chores: meal, lunch or snack preparation, preserving foods, baking, freezing, sealing, packing foods, indoor house cleaning, dish washing, tidying, taking out garbage, recycling, compost, unpacking goods, laundry, ironing, folding, sewing, shoe care, repair, painting or renovation, organizing, planning, paying bills, unpacking

³Including caregiving and care receiving, families, time use, social identity, victimization, and giving, volunteering and participating.

⁴2015 *Time Use Survey Technical Note* (June 2017) Statistics Canada catalogue no. 89-658-X, at p. 4. To date the *GSS Time Use Survey* has been conducted in 1986 (sample size = 16,400), 1992 (sample size = 9,000), 1998 (sample size = 10,700), 2005 (sample size = 19,600), 2010 (sample size = 15,400) and 2015 (sample size = 17,390).

⁵Preliminary results for household activity were reported in CANSIM Table 113-0004 and P. Houle, M. Turcotte and M. Ward, "Changes in parents' participation in domestic tasks and care for children from 1986 to 2015" (June 1, 2017) *Spotlight on Canadians: Results from the General Social Survey*, Statistics Canada catalogue 89-652-X2017001.

⁶Statistics Canada's *Classification of time use activity cycle 29, extension variant, total responses* (www.statcan.gc.ca).

groceries, packing and unpacking luggage for travel and/or boxes for a move, outdoor maintenance such as car repair, ground maintenance, snow removal, cutting grass, planting (picking), maintaining, cleaning garden, caring for house plants, pet care such as feeding, walking, grooming, playing.

Care of household children under 18 years: personal care, getting ready for school, supervising or helping with homework, reading, playing, reprimanding, educational, emotional help, accompanying to or from school, bus stop, sports, activities, parent school meetings or appointments.

Care of household adults: washing, dressing, care giving, financial management, accompanying to or from appointments or shopping.

Shopping for goods and services: such as gasoline, groceries, clothing, car, legal services, financial services, vehicle maintenance, health professional visit, consultation, researching for goods or services.

Table 1 shows the evolution of time spent on paid work, household chores and child care in the past 30 years by core working-age men and women (ages 25-54) across Canada based on publicly available GSS *Time Use Survey* data.

Table 1
Time spent on paid work, household chores & child care, 1986 to 2015, Canada

Average Hours per Day*			
WOMEN (25 to 54 years)	Paid work	Household chores	Child care
GSS 1986 (cycle 2)	6.7	3.1	2.1
GSS 1992 (cycle 7)	6.9	3.1	2.2
GSS 1998 (cycle 12)	7.1	2.8	2.3
GSS 2005 (cycle 19)	7.5	2.8	2.5
GSS 2015 (cycle 29)	7.7	2.7	2.6
MEN (25 to 54 years)	Paid work	Household chores	Child care
GSS 1986 (cycle 2)	7.7	1.9	1.5
GSS 1992 (cycle 7)	8.1	2.0	1.6
GSS 1998 (cycle 12)	8.1	1.8	1.8
GSS 2005 (cycle 19)	8.5	2.1	1.8
GSS 2015 (cycle 29)	8.4	2.2	1.9

* Average hours per day based on a seven-day week. Time use is reported for people who participated in the activity (which will be higher than time use for the total population, which includes people who do not participate in the activity).

Sources: For 1986 to 2005, we report data for men and women aged 25 to 54 years from Katherine Marshall, "Converging gender roles" (Autumn 2006) *Perspectives in Labour and Income*, 18(3), Statistics Canada Catalogue no. 75-001-XPE, Table 1, p. 10; and for 2015, we report data for men and women aged 25 to 54 years from Statistics Canada's CANSIM Table 113-0004 – *Daily average time spent in hours on various activities by age group and sex, 15 years and over, Canada and provinces, occasional (hours)*.

Table 1 shows that the *paid* workweek for both men and women in Canada increased over the past three decades, although men continue to work more hours per day than women. Time spent by women on household chores has declined slightly, while time spent on childcare increased slightly. Men have slightly increased the time they spend on childcare, but have fluctuated in terms of time spent on housework.

In order to tailor estimates of time spent on household activity⁷ to a plaintiff's characteristics, Brown Economic purchases custom GSS *Time Use Survey* datasets which partition time use data for Canadian men and women by "role group".⁸ The "role groups" distinguish people by their employment status, their marital status, their partner's employment status, and whether children over or under 5 years old are living in the household. Tables 2 and 3 below report the average hours spent on household chores (Table 2) and child care (Table 3) by Canadian men and women in 2010 and 2015, for select "role groups".

Table 2
Time Spent on Household Chores, 2010 & 2015, Canada

Average Hours per Week Spent on <i>Household Chores</i>	<i>General Social Survey</i>	
	2010 cycle 24	2015 cycle 29
Women (15 years and over)		
Female keeping house, partner employed, no children	28.4	29.4
Female retired, partner employed, no children	23.5	23.6
Female employed, partner employed, no children	14.8	14.9
Female employed, living alone	11.7	12.5
Female keeping house, partner employed, children < 5 years	19.7	22.7
Female keeping house, lone parent, children < 5 years	19.8	14.1 ^E
Female employed, partner employed, children < 5 years	14.2	14.4
Female keeping house, partner employed, children 5+ years	27.3	29.2
Female keeping house, lone parent, children 5+ years	26.0	23.8
Female employed, partner employed, children 5+ years	17.7	17.9
Men (15 years and over)		
Male retired, partner employed, no children	19.7	22.7
Male employed, partner employed, no children	10.7	12.2
Male employed, living alone	9.7	9.7
Male employed, partner keeping house, no children	7.4	8.9
Male employed, partner employed, children < 5 years	10.7	11.0
Male employed, partner keeping house, children < 5 years	8.1	10.1 ^E
Male employed, partner employed, children 5+ years	11.5	13.5
Male employed, partner keeping house, children 5+ years	9.6	11.1

E: use with caution

Source: Custom tabulations of GSS cycle 24 and GSS cycle 29 data prepared for Brown Economic Consulting by Statistics Canada.

⁷ Including household chores, care of household children and shopping for goods and services. We do not include care of household adults in our estimate of time spent on household activity.

⁸ The custom datasets purchased by Brown Economic also tabulate time use data by age group, so that we can estimate housekeeping losses over the life cycle of the plaintiff. The data in Table 2 and Table 3 are based on the entire population (ages 15 and over).

The time use statistics in Table 2 above show remarkable consistency in time spent on household chores within each “role group” between 2010 and 2015. Most entries are within 1 to 2 hours of each other.⁹ Overall, the similarity in the hours recorded for household chores in both survey years lends a great deal of credibility to the estimates, even though they are based on household recall.

One notable finding in Table 2 is that retired persons report spending more time on household chores than adults without children, a result which likely reflects three influences: (1) retired people generally *have more time* for household chores given the reduced time spent on paid work; (2) retired people change their composition of activities, i.e., they do far less maintenance and repair and a *component of the time they do spend could be leisure* if concentrated on tasks such as gardening or baking; (3) retired people may *do the activity more slowly* and hence it takes longer.¹⁰ To account for these influences in our estimates of household activity, Brown Economic incorporates a negative “health contingency”, which *lowers* the compensation for valuable services every year, by as much as –35% per year by age 80.¹¹

In Table 2 above we see that both men and women spend more time on **household chores** when children in the household are older (*5 years and over*) than when they are younger (*under 5 years*). In contrast, the most consistent finding in Table 3 below is that the time parents spend on **child care** dramatically declines when the children are *5 years and over* (compared to when they are *under 5 years*), likely due, for the most part, to the enrolment of children in school.

Table 3
Time Spent on Child Care, 2010 & 2015, Canada

Average Hours per Week Spent on <i>Child Care</i>	<i>General Social Survey</i>	
Women (15 years and over)	2010 cycle 24	2015 cycle 29
Female, keeping house, lone parent, children < 5 years	35.5	26.9
Female, keeping house, partner employed, children < 5 years	32.9	25.1
Female, employed, partner employed, children < 5 years	14.9	14.6
Female, employed, partner keeping house, children < 5 years	14.6	F
Female, keeping house, lone parent, children 5+ years	14.9 ^E	14.6 ^E
Female, keeping house, partner employed, children 5+ years	13.8	10.4 ^E
Female, employed, partner employed, children 5+ years	5.6	5.2
Female, employed, partner keeping house, children 5+ years	3.5 ^E	F
Men (15 years and over)		
Male employed, partner employed, children < 5 years	11.5	12.5
Male employed, partner keeping house, children < 5 years	11.3	8.0
Male employed, partner employed, children 5+ years	2.9	2.9
Male employed, partner keeping house, children 5+ years	3.4 ^E	3.6 ^E

E: use with caution

F: too unreliable to be published

Source: Custom tabulations of GSS cycle 24 and GSS cycle 29 data prepared for Brown Economic Consulting by Statistics Canada.

⁹ Exceptions to this pattern are: females keeping house, with a partner who is employed and children under 5 years of age (time use increased by 3 hours from 2010 to 2015); lone parent females with children under 5 years of age (time use decreased by 5.7 hours from 2010 to 2015); lone parent females with children 5 years and over (time use decreased by 2.2 hours from 2010 to 2015); and retired males with an employed partner and no children (time use increased by 3 hours from 2010 to 2015).

¹⁰ This is echoed in W. Augustus Richardson, *Claims for Loss of Housekeeping Capacity/Services in Personal Injury and Fatal Accident Cases* ((Nova Scotia: The Continuing Legal Education Society of Nova Scotia, January 2001), p. 16.

¹¹ Our source for the yearly “health contingency” is Expectancy Data, *Healthy Life Expectancy: 2012 Tables*. Shawnee Mission, Kansas, 2016, Tables 2 & 3. No comparable Canadian data exists.

Another clear pattern that emerges in Table 3 is that females “keeping house” – whether they have partners or are lone parents – spend considerably more time on **child care** than do females who are employed. With young children (*under 5 years*) females “keeping house” spent 25 to 27 hours per week on child care in 2015, as compared to employed females who spent approximately 15 hours per week. Likewise, with older children (*5 years and over*) females “keeping house” spend approximately 10 to 15 hours per week on child care in 2015 in contrast to 5 hours per week spent by employed females.

Table 3 also indicates that the time spent on **child care** by employed men with young children (*under 5 years*) **increased** by 1 hour per week from 2010 to 2015 when their partners were employed, but **decreased** by more than 3 hours per week when their spouse was keeping house. In contrast, time spent on child care by employed men with older children (*5 years and over*) did not change from 2010 to 2015.

Hourly replacement rates for loss of housekeeping capacity awards

Table 4 shows the hourly replacement rates to use for quantifying loss of housekeeping capacity awards. This table is identical to the one shown in the January/February 2017 edition of **Brown’s Economic Damages Newsletter**.

Table 4
Hourly replacement rates for housekeeping / valuable services (in 2017 dollars)

Province/Territory	Source(s) of data	Average rate in 2017 Dollars ¹
Northwest Territories*	2001/2006 Census (NOC-S G811)	\$28.26
Yukon*	2006 Census (NOC-S G811), Canada's Job Bank ² (NOC 4412)	\$24.73
Average NWT & Yukon		\$26.50
British Columbia	2006 Census/2011 National Household Survey (NOC-S G811), Canada's Job Bank ² (NOC 4412), 2009 British Columbia Wage and Salary Survey (NOC 6471)	\$18.80
Ontario	2006 Census/2011 National Household Survey (NOC-S G811), Canada's Job Bank ² (NOC 4412)	\$17.93
Alberta	2006 Census/2011 National Household Survey (NOC-S G811), Canada's Job Bank ² (NOC 4412), 2015 Alberta Wage and Salary Survey (NOC 4412)	\$19.11
Saskatchewan	2006 Census/2011 National Household Survey (NOC-S G811), Canada's Job Bank ² (NOC 4412), Saskatchewan Job Futures (NOC 4412), 2011 Saskatchewan Wage Survey (NOC 6471)	\$18.32
Manitoba	2006 Census/2011 National Household Survey (NOC-S G811), Canada's Job Bank ² (NOC 4412)	\$15.63
Average Prairies		\$17.69
New Brunswick	2006 Census/2011 National Household Survey (NOC-S G811), Canada's Job Bank ² (NOC 4412), New Brunswick Wage Report 2003 (NOC 6471)	\$13.26
Prince Edward Island	2006 Census/2011 National Household Survey (NOC-S G811), Canada's Job Bank ² (NOC 4412), Service Canada's PEI Wage Survey 2006 (NOC 6471)	\$17.31
Nova Scotia	2006 Census/2011 National Household Survey (NOC-S G811), Canada's Job Bank ² (NOC 4412)	\$18.67
Newfoundland	2006 Census/2011 National Household Survey (NOC-S G811), Canada's Job Bank ² (NOC 4412)	\$14.04
Average Atlantic Canada		\$15.82

¹ Figures are adjusted to 2016 dollars using Statistics Canada's *Estimates of Average Weekly Earnings and Survey of Employment, Payrolls and Hours*, NAICS 5617 (services to buildings and dwellings), Canada (when provincial or territorial data not available for index 5617), Ontario, Alberta, and Saskatchewan. We assume 2.0% wage inflation from 2016 to 2017 based on the Bank of Canada's inflation target of 2.0%.

² "www.jobbank.gc.ca" data for each respective province and territory (formerly "workingincanada.gc.ca" and "labourmarketinformation.ca").

³ We rely on data from the 2006 Census for the Northwest Territories and Yukon as data from the 2011 National Household Survey is insufficient for the territories. Note that the only relevant case we are aware of in the territories is *Fallowka et al* (2004). The hourly housekeeping rate in the judge's decision in this case was \$14.91 (equivalent to \$22.41 in 2017 dollars).

Key components of loss of housekeeping capacity awards

To quantify a loss of housekeeping award, the key components are as follows:

- 1) Evidence regarding the plaintiff's pre-incident weekly hours spent on housework and childcare versus post-incident hours (or the decedent's pre-incident hours);
- 2) Replacement rate to attach to the deficit of hours (if any) as determined in (1);
- 3) A negative "health" contingency;
- 4) A negative "mortality" contingency; and
- 5) A real discount rate assumption to calculate the future loss of housekeeping capacity award.

Once these components are identified, the quantum expert can assess the past and future housekeeping losses, adding pre-judgment interest to the past losses and discounting to present value the future losses. Unlike income loss estimates that usually cease at retirement age, housekeeping assessments extend to age 80.

(1) Plaintiff's/Decedent's housekeeping hours

With respect to evidence about housekeeping hours, a quantum expert's assessment begins with the plaintiff's evidence and usually compares this to statistical averages, matching the plaintiff's demographic characteristics in terms of gender, age, employment status, marital status, and presence or absence of children. Special tabulations are available from Statistics Canada's *GSS Time Use Surveys*. As described above, the most recent *GSS Time Use Survey* was conducted in 2015.¹²

The plaintiff's evidence is gathered in terms of a survey, but this survey should be especially designed keeping in mind the biases that can be introduced by persons who have no experience in creating surveys. Statistics Canada has published various articles about such biases, especially with regard to asking respondents about time use recall.

Brown Economic has created a *Diary of Household Activities*TM that has been used for many years and which went through several iterations with the help of feedback from counsel and the courts. This form was also designed while keeping in mind the biases that can result from, say, asking an open-ended question such as "How many hours do you spend on housekeeping per week?" Such an open-ended question invariably leads to an overstatement of such hours because the respondent is not constrained to a 168-hour week.

The usefulness of a form like the *Diary of Household Activities*TM is that it achieves what the courts dictate: a link between the plaintiff's or family's evidence as to the plaintiff's or decedent's household activities and the statistics published as to the 'average' hours performed by Canadians. It also asks the plaintiff or family to allocate his/her time to other activities (paid work, sleeping, personal care, leisure), not just housework, and constrains all activities to a 168-hour week.

¹² The Census also asks questions about housekeeping hours but typically only asks the respondent to identify the *range of hours* done each week, i.e., 5 to 10 hours, 10 to 20 hours, etc.

To access our *Diary of Household Activities*TM online, please visit www.browneconomic.com > Products & Services > Diaries & Checklists.

To access our *Housekeeping Damages Calculator*TM ("HDC"), visit www.browneconomic.com > **Housekeeping (pay per use)**. The HDC calculates past and future housekeeping losses for \$190 + GST. An online video is available to show the user how to input data into the HDC.

(2) Replacement rate

Table 4 above shows the hourly rates we assign to the plaintiff's or decedent's unpaid housework/childcare time. In conjunction with the hours per week and the rate per hour, an annual estimate is derived.¹³

Table 4 shows rates expressed in 2017 currency. We use Statistics Canada's *Estimates of Average Weekly Earnings and Survey of Employment, Payrolls and Hours*, for NAICS¹⁴ 5617 ("services to buildings and dwellings")¹⁵ to inflate or deflate the hourly replacement rates to years prior to 2017. Not only it is inappropriate to use the consumer price index ("CPI")¹⁶ it would also be inappropriate to use the industrial aggregate wage index (which aggregates wages across all industries) from NAICS.

(3) "Health" contingency

As in loss of income cases, we apply negative contingencies for the possibility that the person would have done less housework as she or he aged, due to four possible factors:

- a) People change the distribution of activities such that some tasks become hobbies, thus blurring the definition of "housework". This can be the case for tasks such as gardening, pet care, baking and renovating. It is our understanding that time spent on hobbies (i.e., leisure) is compensated by non-pecuniary claims, so should not be included in pecuniary claims for loss of housekeeping capacity
- b) Many seniors decrease their involvement in "heavy" household chores, and particularly in childcare, other than babysitting grandchildren. There are participation rates available for males and females in Canada, under and over age 65, which show a decline in some housekeeping activities.
- c) Data on hours spent on housekeeping chores shows consistently that seniors spend more time on household work. However, this could be because they either *have more time* to do the chores; or they *take more time* to do them. The data obscures these impacts.
- d) Ailing health, just as in the case of working at a paid job, can interfere with performing unpaid work.

¹³ An exception to this might occur in a report by a cost of care or rehabilitation expert. If these expert reports are available, typically the quantum expert will defer to these assessments, because the cost of care or rehabilitation expert will have interviewed and evaluated the plaintiff's functional abilities and/or interviewed the family about the decedent. In some cases, calculations using both rates can be supplied.

¹⁴ NAICS = North American Industry Classification System.

¹⁵ NAICS 5617 refers to the industry sector "services to buildings and dwellings", which reflects establishments primarily engaged in "cleaning buildings interiors and windows" and "landscaping installation, care and maintenance". It includes NAICS 561722 "janitorial services (except window cleaning)", NAICS 561730 "landscaping services" and NAICS 561799, "all other services to buildings and dwellings" which include the cleaning of swimming pools, drains and gutters, light maintenance, and snow ploughing. These services are consistent with many of the activity codes collected in Statistics Canada's *GSS Time Use Survey*.

¹⁶ For discussion on the difference between wage inflation and price inflation see **Brown's Economic Damages Newsletter** "Wage inflation data: CPI versus SEPH" April 2009, vol. 6, issue 3.

None of these effects can be captured by the time use data, which on its face merely collects the time people say they spend on an activity.

In *Mahe v. Boulianne* (2008),¹⁷ Marshall J. commented on the inclusion of negative contingencies after retirement age for failing health (the “health” contingency) and mortality:

...with respect to future impairment of the Plaintiff's capacity to carry out such work, I find Ms. Brown's use of statistics from Statistics Canada to be helpful. I accept her views respecting the likely hours an individual spends on housekeeping after retirement and the onset of advancing years. She has also considered contingencies for failing health and mortality. In this case I find it is probable that some tasks that the Plaintiff presently carries out with pain, such as gardening, will probably be affected in the future. Due to the compromised situation of his spine and the normal aging processes, he will probably be unable to carry out some of these tasks at all in the future, when he would otherwise have been able to do so. (para. 115)

Our source for the negative “health” contingency is from Expectancy Data, *Healthy Life Expectancy: 2012 Tables*. Shawnee Mission, Kansas, 2016.

(4) “Mortality” contingency

In all cases, quantum experts routinely incorporate a mortality contingency for the possibility that the person might pass away and thus not do housework. For most of the years of the calculation, this is a small negative contingency but does become important in the calculation after retirement age and until age 80 (when the housekeeping calculations cease). Our main source for the negative “mortality” contingency is Statistics Canada’s *Life Tables, Canada, Provinces and Territories, 2011 to 2013*.¹⁸

(5) Real Discount Rate

Quantum experts typically quantify both a past loss and future loss of housekeeping capacity. To accurately quantify the future loss award, the replacement cost in the future must be discounted to present value, just as with a loss of income award.

Most provinces and territories in Canada stipulate a mandated discount rate¹⁹ for calculating present value in civil litigation. For those provinces and territories that do not mandate a real discount rate, see our discussion in **Brown’s Economic Damages Newsletter**, “Choosing a Real Interest Rate for Civil Litigation”, February 2016, vol. 13, issue 2.

¹⁷ (2008) ABQB 680, filed Dec. 17, 2008. The author testified on behalf of the plaintiff in this matter.

¹⁸ Statistics Canada Catalogue no. 84-537-X No. 001.

¹⁹ For a summary of mandated real discount rates in Canada, see Table 5 in **Brown’s Economic Damages Newsletter**, “Trends in Real Interest Rates: New Research” August 2016, vol. 13, issue 8. We note that Saskatchewan’s mandated discount rate has recently changed as follows: For the first 15 years that follow trial: the greater of, the average real return bond rate for the period commencing on March 1st and ending on August 31st in the year before the year in which the trial begins, less ½%, rounded to the nearest 1/10%, and zero. For any period later covered by the award: 2.5% per year. According to Rule 9-21 of the Saskatchewan *Queen’s Bench Rules*, the real return bond rate is “the average of the value for the last Wednesday in each month of the real rate of interest on long-term Government of Canada real return bonds, monthly series, as published in the Bank of Canada’s *Weekly Financial Statistics*” and the Government of Canada’s long-term return bond, monthly series is V122553. In 2017, the rates will be 0% for the next 15 years, 2.5% thereafter.

UPDATING NON-PECUNIARY AWARDS FOR INFLATION (AUGUST 2017, CANADA)

Year of Accident/ Year of Settlement or Trial	"Inflationary" Factors*	Non-Pecuniary Damages - Sample Awards				
		\$10,000	\$25,000	\$50,000	\$75,000	\$100,000
Avg. 2016-August 2017	1.015	\$10,148	\$25,370	\$50,739	\$76,109	\$101,479
Avg. 2015-August 2017	1.025	\$10,246	\$25,614	\$51,229	\$76,843	\$102,457
Avg. 2014-August 2017	1.036	\$10,361	\$25,903	\$51,806	\$77,709	\$103,611
Avg. 2013-August 2017	1.056	\$10,559	\$26,396	\$52,793	\$79,189	\$105,585
Avg. 2012-August 2017	1.066	\$10,657	\$26,644	\$53,287	\$79,931	\$106,575
Avg. 2011-August 2017	1.082	\$10,819	\$27,048	\$54,096	\$81,145	\$108,193
Avg. 2010-August 2017	1.113	\$11,134	\$27,835	\$55,671	\$83,506	\$111,342
Avg. 2009-August 2017	1.133	\$11,333	\$28,332	\$56,663	\$84,995	\$113,327
Avg. 2008-August 2017	1.139	\$11,386	\$28,466	\$56,932	\$85,398	\$113,864
Avg. 2007-August 2017	1.164	\$11,636	\$29,089	\$58,179	\$87,268	\$116,357
Avg. 2006-August 2017	1.188	\$11,884	\$29,710	\$59,421	\$89,131	\$118,842
Avg. 2005-August 2017	1.212	\$12,122	\$30,305	\$60,609	\$90,914	\$121,219
Avg. 2004-August 2017	1.239	\$12,391	\$30,976	\$61,953	\$92,929	\$123,906
Avg. 2003-August 2017	1.262	\$12,621	\$31,552	\$63,105	\$94,657	\$126,209
Avg. 2002-August 2017	1.297	\$12,969	\$32,423	\$64,846	\$97,270	\$129,693
Avg. 2001-August 2017	1.326	\$13,262	\$33,156	\$66,312	\$99,468	\$132,624
Avg. 2000-August 2017	1.360	\$13,596	\$33,990	\$67,981	\$101,971	\$135,961
Avg. 1999-August 2017	1.397	\$13,967	\$34,917	\$69,833	\$104,750	\$139,666
Avg. 1998-August 2017	1.421	\$14,208	\$35,521	\$71,042	\$106,563	\$142,084
Avg. 1997-August 2017	1.435	\$14,350	\$35,875	\$71,749	\$107,624	\$143,499
Avg. 1996-August 2017	1.458	\$14,582	\$36,456	\$72,911	\$109,367	\$145,823
Avg. 1995-August 2017	1.481	\$14,812	\$37,030	\$74,061	\$111,091	\$148,121
Avg. 1994-August 2017	1.513	\$15,130	\$37,825	\$75,650	\$113,476	\$151,301
Avg. 1993-August 2017	1.515	\$15,155	\$37,887	\$75,774	\$113,661	\$151,548
Avg. 1992-August 2017	1.544	\$15,438	\$38,595	\$77,190	\$115,786	\$154,381
Avg. 1991-August 2017	1.567	\$15,668	\$39,169	\$78,338	\$117,506	\$156,675
Avg. 1990-August 2017	1.655	\$16,549	\$41,373	\$82,746	\$124,119	\$165,493
Avg. 1989-August 2017	1.734	\$17,342	\$43,354	\$86,708	\$130,062	\$173,415
Avg. 1988-August 2017	1.821	\$18,206	\$45,515	\$91,029	\$136,544	\$182,058
Avg. 1987-August 2017	1.894	\$18,937	\$47,342	\$94,685	\$142,027	\$189,369
Avg. 1986-August 2017	1.976	\$19,762	\$49,406	\$98,811	\$148,217	\$197,623
Avg. 1985-August 2017	2.059	\$20,591	\$51,477	\$102,953	\$154,430	\$205,907
Avg. 1984-August 2017	2.141	\$21,406	\$53,516	\$107,032	\$160,548	\$214,064
Avg. 1983-August 2017	2.233	\$22,328	\$55,820	\$111,639	\$167,459	\$223,278
Avg. 1982-August 2017	2.364	\$23,638	\$59,096	\$118,192	\$177,288	\$236,384
Avg. 1981-August 2017	2.618	\$26,182	\$65,455	\$130,911	\$196,366	\$261,821
Avg. 1980-August 2017	2.945	\$29,453	\$73,632	\$147,263	\$220,895	\$294,526
Avg. 1979-August 2017	3.244	\$32,436	\$81,091	\$162,181	\$243,272	\$324,362
Jan. 1978-August 2017	3.695	\$36,946	\$92,365	\$184,729	\$277,094	\$369,459

\$94,685 = \$50,000 × 1.894 represents the dollar equivalent in August 2017 of \$50,000 based on inflation increases since 1987. Similarly, \$369,459 (= \$100,000 × 3.695) represents the dollar equivalent in August 2017 of \$100,000 in 1978 based on inflationary increases since the month of January 1978.

* Source: Statistics Canada, Consumer Price Index, monthly CPI release, rolling average (except for Jan. 1978).

Consumer Price Index



Unemployment Rate

From August 2016 to August 2017*		For the month of August 2017	
(rates of inflation)			
Canada**	1.4%	Canada:	6.2%
Vancouver:	2.4%	Vancouver:	4.7%
Toronto:	2.1%	Toronto:	6.4%
Edmonton:	1.1%	Edmonton:	8.7%
Calgary:	1.2%	Calgary:	8.5%
Halifax:	1.0%	Halifax:	7.1%
St. John's, NF:	1.2%	St. John's, NF:	8.4%
Saint John, NB:	1.8%	Saint John, NB:	5.8%
Charlottetown:	2.2%	Charlottetown (PEI):	8.8%

* Using month-over-month indices. Source: Statistics Canada

** 12 month rolling average up to August 2017 is 1.5% (see table above).

Brown Economic Consulting Inc.



HEAD OFFICE

#216, 5718-1A Street South West
Calgary, AB T2H 0E8
T 403.571.0115 F 403.571.0932

#907, 1128 Sunset Drive
Kelowna, B.C. V1Y 9W7
Toll 1.800.301.8801

1701 Hollis Street Suite 800
Halifax, NS B3J 3M8
Toll 1.800.301.8801

Email help@browneconomic.com
Web www.browneconomic.com