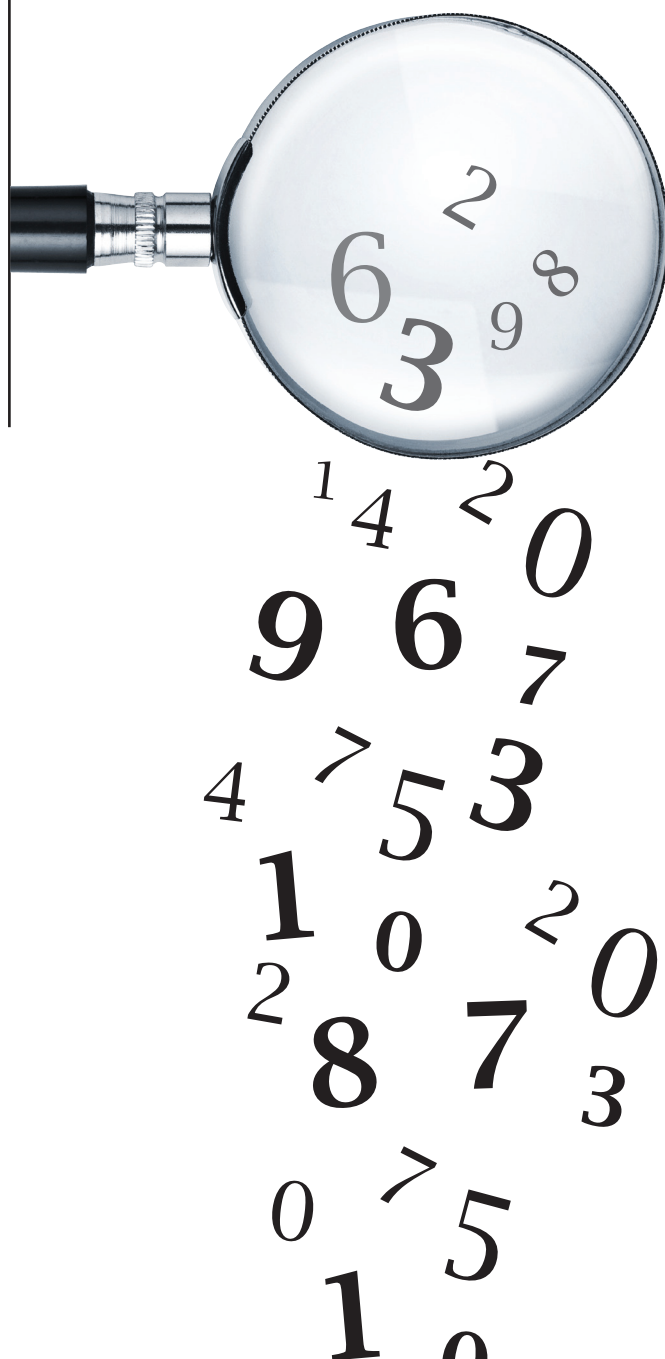


CFIB

Pension Research Series

REPORT 5: Canada's Two-Tier Retirement



Canada's Two-Tier Retirement

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CFIB Pension Research Series

Canada's pension system is a disaster waiting to happen. Public sector pension plans at all levels of government are massively underfunded which will demand higher taxes and strain Canada's economy. There is also a widening pension gap between Canadians in the public sector and those in the private sector. This will create resentment as more and more public servants retire earlier—and more comfortably—than anyone else in society. Continuing on this track is unsustainable and unfair. Major reforms are clearly needed.

This publication represents part of a series of research reports by the Canadian Federation of Independent Business (CFIB) on pension, retirement income and compensation issues. The series builds on CFIB's extensive work on these topics, including our Wage Watch reports and Pension Tension campaign. The purpose of the series is to provide greater insight on what has always been a complex and poorly-understood issue. It will also provide policy recommendations on how to bring fairness and sustainability into the system.

Canada's Two-Tier Retirement

Decades ago there used to be a clear delineation in total compensation between the private and public sectors. Private sector jobs usually paid more but offered leaner benefits and pensions (if any) and less job security. In contrast, working in the public sector meant lower pay, but better benefits, including a more secure job and a generous pension. Over the years, governments of all levels have been acquiescing to the relentless demands of public sector unions, resulting in significant increases in salaries and wages for civil servants, without conceding generous benefits and pensions. With pay increases in the public sector, the cost of other benefits also goes up, such as health and dental insurance, life insurance, holiday and sick pay, and most importantly pension benefits, which are primarily based on salary at retirement.

Previous CFIB research, based on Statistics Canada Census data, estimates that federal government employees are paid up to 17 per cent more in wages than similarly employed individuals in the private sector. When pensions and other benefits are factored in, the total compensation advantage balloons to 41 per cent.¹ The stark compensation differences between the public and private sectors have gradually created two classes of retirees: those who work for government, get paid more, retire early and have generous guaranteed pensions, and everyone else (mostly private sector workers and the self-employed) who cannot even dream of getting anything remotely comparable in retirement.

The Pension Predicament

Almost 80 per cent of Canadians are employed in the private sector and two-thirds of them do not participate in an employer-sponsored registered pension plan.² Organizations in the private sector are increasingly moving away from guaranteed pension plans and are instead offering other retirement savings vehicles such as a defined-contribution pension plan or a Registered Retirement Savings Plan (RRSP). Both of these retirement savings vehicles do not guarantee the level of benefit at retirement—retirees only get what they have accumulated in the plan.

The other 20 per cent of Canadians work in the public sector and 87 per cent of them are offered an employer-sponsored pension plan.³ Most of these plans are defined-benefit pension plans, meaning they guarantee the pension benefit (indexed to inflation) that a person receives during retirement, regardless of contribution levels or the financial health of the plan. In addition to having secure pensions, public sector workers are able to retire earlier than private sector employees, while Canada's entrepreneurs tend to work on average several more years to ensure they have enough saved for retirement. According to

¹ Mallett and Wong. *Wage Watch: A Comparison of Public-sector and Private-sector Wages*, CFIB, 2008

² Office of the Superintendent of Financial Institutions Canada and Office of the Chief Actuary: *Registered Pension Plan (RPP) and Retirement Savings Coverage (Canada)*, 2010

³ Ibid

Statistics Canada data, in 2011 the average retirement age for a public sector worker was 61, while those working in the private sector retired at 63 and the self-employed at 66.⁴

The pension gap:

- 80% of Canadians are employed in the private sector—two-thirds of them do not have an employer-sponsored registered pension plan.
- 20% work in the public sector and 87% of them have a workplace pension plan—most of these plans guarantee the benefits no matter what.
- Federal government employees are paid up to 17% more in wages than similarly employed individuals in the private sector—the gap grows to 41% with pensions and other benefits.
- The average public sector employee retires at 61 years of age, while a private sector worker retires at 63 and a business owner at 66.
- To replace 70% of their working income in retirement, a federal government worker currently contributes about 7% of their salary, while a private sector worker would have to contribute up to 21% of their salary.

Pension Inequity between Public and Private Sectors

To better understand the pension inequity between the public sector and private sector, the following scenarios examine the estimated retirement benefits of two workers. The individuals depicted below are fictional but their work settings, retirement savings plan arrangements and years of service are indicative of the developing retirement trends in comparable public and private sector occupations.

- 1) **Public Sector Worker (Mary):** Mary works as a human resources specialist with the federal government in Ottawa. She started in 1995 when she was 30 years old with a salary of \$34,900. Mary makes regular contributions to the federal public service pension plan and the federal government also contributes on her behalf. She plans to work until age 65, meaning that she will retire at the end of 2029 after 35 years of service. Her salary at retirement is expected to be \$179,000. Her annual pension will be fully indexed to inflation and provided she lives until age 85, she will receive a total benefit of over **\$1.38 million**⁵ over 20 years in retirement, in addition to her CPP benefits.
- 2) **Private Sector Worker (Jane):** Jane works as a human resources specialist for a mid-size financial services firm. Similarly to Mary, she started in 1995 at age 30 with a salary of \$34,900. Jane also plans to retire at the end of 2029 at age 65. Throughout her career, Jane is assumed to earn the same income as Mary. Jane's

⁴ Mallett and Wong. *Wage Watch: A Comparison of Public-sector and Private-sector Wages*, CFIB, 2008

⁵ Present value calculation

*employer offers a Group RRSP to which she contributes every year and her pension contributions are identical to Mary's. Her company also contributes an amount equal to 3.8 per cent of Jane's annual income to the Group RRSP on her behalf. At the end of 2029 when she retires, Jane will be making \$179,000. In addition to her CPP benefits, her pension will be based on the amount accumulated in her Group RRSP portfolio - **\$605,000**, without any inflation indexation.*

The pension gap between public and private sector

The differences in the retirement savings options and the vast discrepancies in retirement income are a good reflection of the growing gap between public and private sector (Figure 1). Both Mary and Jane had the same starting salary of \$34,900 in 1995, which was identical to that year's maximum pensionable earnings (YMPE) amount. Both will work for 35 years and will earn the same income over their entire career. Their own personal pension contributions are assumed to be identical. However, they contribute to different retirement savings vehicles, with Mary contributing to a defined-benefit plan and Jane contributing to a Group RRSP. As a result, their retirement savings are vastly different. *If Mary lives until age 85, she would collect over **\$776,000** (in 2030 present-value dollar terms) more in retirement savings benefits than Jane over the same period of time.* To accumulate the extra \$776,000, Jane would need to contribute an additional *13 per cent* of her pay every year throughout her career by age 65—that is 13 per cent more per year than the amounts Mary contributes to her pension plan.

Figure 1: Retirement benefits gap^{1,2,3}

	Sector	Retirement Savings Vehicle	Starting salary in 1995	Salary at Retirement In 2029	Years of service	Annual Retirement Benefit in 2030	Total Retirement Benefit (present value)
Mary	Public Sector	Defined-benefit	\$34,900	\$178,970	35	\$94,633	\$1,382,221
Jane	Private Sector	Group RRSP	\$34,900	\$178,970	35	\$48,998	\$605,366
Total Gap							\$776,855

Notes:

- 1) see Appendix 1 for complete calculations and explanatory notes
- 2) average life expectancy is 85 years
- 3) does not include CPP benefits

To present a realistic scenario of the discrepancies between public and private sector retirement savings, this model relies on both historical data (1995-2012) and future

projections (2013-2029)⁶. As striking as the pension gap appears to be, it is in fact a rather conservative estimate. As mentioned earlier, the federal civil servant, Mary, would likely enjoy a wage premium of up to 17 per cent over the salary income of the private sector worker Jane—the calculation presented above assumes they earn the exact same salaries throughout their careers (see Appendix 1). In addition, the average retirement age in the public service is 61, while here we assume that Mary will work until age 65. If higher wages and early retirement for Mary are factored into the calculation, the gap between her total retirement benefits and those of Jane grows to over *\$1 million*.

Often labour groups and some politicians point the finger at the private sector employer, claiming that lower or no contributions from businesses to their employees' pensions have led to establishing such a wide gap. It is true that in this model Jane's employer does not have the same financial ability as Mary's employer to contribute towards her retirement savings. It is assumed that Jane's employer contributes an amount equal to 3.8 per cent of her earnings every year, while the federal government (meaning Canadian taxpayers) over the years has made contributions to Mary's pension plan equal to between 7 and 10 per cent of her annual income. The differences in employer contributions, however, do not account for the whole pension gap. If we assume that Jane's employer contributes amounts identical to those the federal government contributes to Mary's pension, the gap in total retirement benefits between the two will be reduced to *\$480,000*. All things being equal, it is clear that the main reason for having such a large pension gap is not so much the inability of Jane's employer to make higher contributions, but the generosity of Mary's retirement savings plan, backed by Canadian taxpayers, which in this case offers her an additional half a million dollars in retirement.

The federal public service pension plan that Mary belongs to is the largest pension plan in Canada with about 316,000 active members and 243,000 retired members (including those receiving survivor benefits).⁷ This means there are currently only 1.3 workers in the plan for every one retiree. It is a defined-benefit plan and it guarantees the pension benefit (including inflation protection) to the plan member. Currently, the plan's estimated unfunded liability is 200+ billion.⁸ Despite the plan's dismal financial state, federal government workers will still be able to collect their full pension, as their benefit is not calculated on what's available in the plan's pot, but on an outdated formula that takes into consideration the worker's highest paid five years prior to retirement and the length of their service. Public sector pension plan shortfalls are expected to be covered by government (taxpayers).

⁶ Projected increases in CPI and the 10Y Canada Bond yields for the period of 2013-2029 are from: Dungan and Murphy. *Long Term Outlook for the Canadian Economy: National Projection through 2040*. University of Toronto, July 2012

⁷ Report on the Public Service Pension Plan for the Fiscal Year Ended March 31, 2011, Available at: <http://www.tbs-sct.gc.ca/reports-rapports/pspp-rrfp/2011/rpspp-rrfp01-eng.asp>

⁸ There are various estimates of exactly how big the unfunded liability is. It ranges from \$146 billion (Public Accounts) to \$253 billion (C.D. Howe Institute estimate) depending on the accounting method used.

RRSP, on the other hand is a very different retirement savings vehicle from a defined-benefit plan—it does not guarantee the pension benefits of the contributors. Plan members will only receive what has accumulated in the RRSP portfolio, which fluctuates based on the stock market's performance. Jane earned the same amount of money as Mary did, yet she will have a different lifestyle in retirement based on the pension benefits that she will be receiving. There are no pension guarantees for Jane as there is no taxpayer to match her contributions or to bail out her RRSPs.

Furthermore, not only can't Jane hope to generate a retirement income comparable to Mary's, but she also indirectly contributes to Mary's pension through her taxes. And so does Jane's employer—the mid-size financial services firm—through the various payroll and income taxes that they have to pay. Recent Statistics Canada data further illustrates the magnitude of this problem—in 2011, more than \$31.3 billion was contributed to public sector pensions, \$12.8 billion from employees' contributions and \$18.6 billion from taxpayers.⁹ By funding the larger part of public servants' generous pension benefits, the taxpayers (incl. business owners and private sector employees) are unfairly restricted in their ability to contribute more towards their own retirement savings. As the pension gap between the two groups gets wider, a much clearer trend emerges of “haves”—public sector retirees and “have nots”—those who were self-employed or worked in the private sector.

The golden rule used in the public sector is that a worker's pension has to be equal to about 70 per cent of the average of their best paid five years of pre-retirement income. In the private sector, to achieve a 70 per cent income replacement after 35 years of service, a worker would have to contribute *21 per cent* of their annual salary.¹⁰ How many private sector taxpayers can afford to set aside 21 per cent of their income every year? In contrast, a federal public servant, like Mary, in 2012 contributed 6.2 per cent of her salary to the pension plan in order to receive a pension worth about 70 per cent of her pre-retirement income. If we take into consideration the federal government's intention (announced in the 2012 budget) to move to equal contribution sharing (50:50 split) between federal public servants and the government, Mary's contributions are projected to increase to 8.2 per cent—that is still two and a half times less than what Jane needs to contribute in order to have comparable retirement benefits.

What if we lowered expectations and worked towards a pension worth only 50 per cent of pre-retirement income? To get a 50 per cent income replacement in retirement, a private sector worker (who is not in a defined-benefit plan) would still need to make double digit contributions. For instance, after 35 years of service, he or she would need to contribute *13 per cent* per year.¹¹

⁹ Statistics Canada, CANSIM Matrix 280-0026

¹⁰ Dodge, Laurin, and Busby: *The Piggy Bank Index: Matching Canadians' Saving Rates to Their Retirement Dreams*. C. D. Howe Institute, 2010.

¹¹ Ibid

With the current economic challenges, aging population and longer life expectancy the gap between public sector and private sector retirees will become even starker. Governments are doing a serious disservice to the majority of taxpayers by permitting these disparities to continue to grow. Instead, they need to take action to address and eliminate the gap between public and private sector retirement benefits.

CONCLUSIONS AND RECOMMENDATIONS

Reforms based on fairness and sustainability

Information on public sector pension plans and benefits is scarce, not easily accessible, and, at times, unnecessarily complicated, which does not allow the general public (including independent business owners) to actively engage in the pension debate. Lack of research data also hinders attempts to estimate the extent of the real deficiencies of the pension system and to offer practical solutions.

Going forward, it is critical that any discussion on pension reform address the views of one of the most important contributors to the Canadian economy—the entrepreneurs. As major creators of jobs and economic growth, the views of small business owners are too significant to be ignored. The first step in achieving this objective is addressing the gross imbalance of public sector versus private sector pension benefits and retirement trends.

Guiding Principles and Practical Solutions:

If decision-makers are serious about fixing the pension gap between the private and public sectors, they need to approach pension reforms in the context of two guiding principles—those of **fairness and sustainability**.

- ▶ *Governments of all levels should adopt an overarching principle of fairness for all Canadians to be able to afford a decent retirement by leveling the playing field between the treatment of retirement savings for public and private sector individuals.*
- ▶ *Governments need to look into realistic solutions to the unsustainable funding deficiencies of public sector defined-benefit pension plans. The taxpayer should not be the default go-to-mechanism to fund public sector pension plan shortfalls.*

The federal government, some provinces (New Brunswick, Ontario) and municipalities (Regina, Saint John) have started to look at ways to address the rising costs of public sector pensions and their impact on public finances. Governments across the country now have the opportunity to set the tone for an open and constructive dialogue on finding solutions to the pension predicament. To that end, CFIB offers the following recommendations to restore fairness and sustainability to the retirement savings system:

- ▶ **Do not increase mandatory CPP/QPP premiums.** Payroll taxes like CPP/QPP take a disproportionate toll on small businesses, and are ultimately counter-productive to their intended effect. They are a barrier to job creation and economic growth. There are better ways to help people save for retirement and higher CPP/QPP premiums would limit the flexibility to contribute to other saving vehicles (i.e. RRSPs, TFSAs, etc.). As a result, governments should avoid any increases in

CPP/QPP premiums until, at the very least, the unfairness and unsustainability of public sector pensions have been addressed.

- ▶ **Politicians should lead by example:** Scale back generous political pensions (MPs, MPPs/MLAs) or convert them to defined-contribution plans. The federal government has announced changes to MP pensions by increasing politicians' contributions (eventually to 50 per cent). After the next federal election, expected in 2015, the age of eligibility for MPs to collect a full pension will change from 55 to 65 years. In addition, the provinces of Ontario and Saskatchewan have already converted their MPP/MLA pension plans to defined-contribution.
- ▶ **Enroll new public sector employees in defined-contribution plans.** Phasing out defined-benefit plans and setting up defined-contribution plans for new hires is increasingly the direction being chosen by private sector employers. Some public sector institutions have also started to adopt this approach to avoid the heavy burden of future pension liabilities. For instance, Export Development Canada (EDC) introduced in January 2012 a defined-contribution plan for new hires.¹² Other options could include capping of taxpayer funded contributions, benefit de-indexing and benefit restructuring. Ultimately, the total compensation package of civil servants needs to be taken into consideration—if the public sector offers more generous wages (than comparable private sector occupations), then benefit levels (incl. pensions) should logically be lower to ensure fairness in total compensation. In the current context, however, public sector workers enjoy both the wage advantage and the pension premium.
- ▶ **Eliminate early retirement provisions in the public sector.** With life expectancy increasing and demographic trends pointing to future labour shortages in both the public and private sectors, there is no justification for incentives to promote early retirement in the public sector. In addition, federal public employees who retire early are eligible to collect a “bridge benefit” (a temporary income top-up that ends when a retired public servant reaches the age of 65) which can be as much as \$105,000 per retiree, as estimated in a recent CFIB study.¹³ The federal government will now require new employees in the federal public service to work until age 65 to be eligible for unreduced pension benefits (with the exception of employees with at least 30 years of service)¹⁴. Also, New Brunswick is looking at phasing out early retirement even for employees currently in the workforce. This could be replicated in other jurisdictions by announcing the increase of retirement age to 65 years well in advance, and phasing in the change over several years—an approach similar to the process used by the federal government to increase the qualifying age for Old Age Security (OAS) from 65 to 67 years.
- ▶ **Require better disclosure of the state of public sector pensions.** Private sector pension plans are required to submit a funding valuation to the regulator once a

¹² Export Development Canada. 2013-2017 Corporate Plan Summary.

¹³ Cruz, Marvin. *The Case for Ending Early Retirement in the Public Sector*. CFIB, 2013

¹⁴ Treasury Board of Canada Secretariat: <http://www.tbs-sct.gc.ca/pensions/notices-avis/2012-11-07-eng.asp>

year, while public sector pension plans can report once every three years. Public sector plans must be required to adopt a common reporting standard to ensure comparability and consistency over time with the private sector. Beyond that, government plan managers must also be required to disclose net pension balances under a range of reasonably possible rate-of-return assumptions. The public should at least be given the opportunity to see the scenarios where risks could become unmanageable.

- ▶ **Improve access to other retirement savings options for Canadians:** Implement voluntary Pooled Registered Pension Plans (PRPPs) across the country and exempt RRSP contributions from payroll taxes. Close to 80 per cent of small business owners do not have retirement plans in place for themselves or their employees as they simply cannot afford them or find it difficult to access and manage them. PRPPs will be an excellent addition to the retirement savings options for small business employers, their employees and for the self-employed so long as they remain voluntary, administratively simple and at a lower cost.

Appendix 1: Calculations and Explanatory Notes

Year	CPI	Salary increase*	Salary***	PSSA contributions (self)****	Total self (\$)	PSSA contributions (employer)	Total employer (\$)	Total contributions (%)	Total contributed (\$)	10Y Canada Bond (yields & projections)	Total balance (\$)
1995			\$34,900	4.8%	\$1,675	7.8%	\$2,731	12.6%	\$4,406		\$4,406
1996	1.5%	3.00%	\$36,471	4.7%	\$1,714	7.7%	\$2,794	12.4%	\$4,508	6.4%	\$9,195
1997	1.7%	3.00%	\$38,185	4.5%	\$1,718	7.3%	\$2,801	11.8%	\$4,519	5.6%	\$14,230
1998	1.0%	3.00%	\$39,712	4.3%	\$1,708	7.0%	\$2,783	11.3%	\$4,491	4.9%	\$19,416
1999	1.8%	3.00%	\$41,618	4.0%	\$1,665	6.5%	\$2,714	10.5%	\$4,378	6.2%	\$24,995
2000	2.7%	3.00%	\$43,990	4.0%	\$1,760	10.3%	\$4,522	14.3%	\$6,282	5.4%	\$32,614
2001	2.5%	3.00%	\$46,410	4.0%	\$1,856	10.3%	\$4,771	14.3%	\$6,627	5.4%	\$41,015
2002	2.2%	3.00%	\$48,823	4.0%	\$1,953	10.3%	\$5,019	14.3%	\$6,972	4.9%	\$49,989
2003	2.8%	3.00%	\$51,655	4.0%	\$2,066	10.3%	\$5,310	14.3%	\$7,376	4.7%	\$59,694
2004	1.8%	3.00%	\$54,134	4.0%	\$2,165	10.3%	\$5,565	14.3%	\$7,730	4.4%	\$70,045
2005	2.2%	3.00%	\$56,949	4.0%	\$2,278	10.3%	\$5,854	14.3%	\$8,132	3.9%	\$80,930
2006	2.0%	3.00%	\$59,797	4.3%	\$2,571	9.5%	\$5,657	13.8%	\$8,228	4.1%	\$92,436
2007	2.2%	3.00%	\$62,906	4.6%	\$2,894	10.0%	\$6,279	14.6%	\$9,173	4.1%	\$105,390
2008	2.3%	3.00%	\$66,240	4.9%	\$3,246	10.8%	\$7,141	15.7%	\$10,386	2.7%	\$118,611
2009	0.3%	3.00%	\$68,426	5.2%	\$3,558	9.9%	\$6,761	15.1%	\$10,319	3.6%	\$133,200
2010	1.8%	3.00%	\$71,711	5.5%	\$3,944	10.7%	\$7,652	16.2%	\$11,596	3.2%	\$149,005
2011	2.9%	3.00%	\$75,942	5.8%	\$4,405	9.5%	\$7,180	15.3%	\$11,584	2.0%	\$163,509
2012	1.7%	3.00%	\$79,511	6.2%	\$4,930	10.1%	\$8,035	16.3%	\$12,965	1.8%	\$179,450
2013	1.7%	3.00%	\$83,248	6.9%	\$5,702	9.5%	\$7,867	16.3%	\$13,569	2.5%	\$197,506
2014	1.9%	3.00%	\$87,327	7.5%	\$6,550	8.8%	\$7,685	16.3%	\$14,234	3.5%	\$218,653
2015	1.9%	3.00%	\$91,606	8.2%	\$7,466	8.2%	\$7,466	16.3%	\$14,932	4.5%	\$243,424
2016	1.9%	3.00%	\$96,095	8.2%	\$7,832	8.2%	\$7,832	16.3%	\$15,663	5.1%	\$271,502
2017	1.9%	3.00%	\$100,803	8.2%	\$8,215	8.2%	\$8,215	16.3%	\$16,431	5.1%	\$301,780
2018	1.9%	3.00%	\$105,743	8.2%	\$8,618	8.2%	\$8,618	16.3%	\$17,236	5.1%	\$334,407
2019	1.9%	3.00%	\$110,924	8.2%	\$9,040	8.2%	\$9,040	16.3%	\$18,081	5.1%	\$369,542
2020	1.9%	3.00%	\$116,359	8.2%	\$9,483	8.2%	\$9,483	16.3%	\$18,967	5.1%	\$407,355
2021	1.9%	3.00%	\$122,061	8.2%	\$9,948	8.2%	\$9,948	16.3%	\$19,896	5.1%	\$448,026
2022	1.9%	3.00%	\$128,042	8.2%	\$10,435	8.2%	\$10,435	16.3%	\$20,871	5.1%	\$491,746
2023	1.9%	3.00%	\$134,316	8.2%	\$10,947	8.2%	\$10,947	16.3%	\$21,894	5.1%	\$538,719
2024	1.9%	3.00%	\$140,898	8.2%	\$11,483	8.2%	\$11,483	16.3%	\$22,966	5.1%	\$589,160
2025	1.9%	3.00%	\$147,802	8.2%	\$12,046	8.2%	\$12,046	16.3%	\$24,092	5.1%	\$643,299
2026	1.9%	3.00%	\$155,044	8.2%	\$12,636	8.2%	\$12,636	16.3%	\$25,272	5.1%	\$701,379
2027	1.9%	3.00%	\$162,641	8.2%	\$13,255	8.2%	\$13,255	16.3%	\$26,510	5.1%	\$763,660
2028	1.9%	3.00%	\$170,610	8.2%	\$13,905	8.2%	\$13,905	16.3%	\$27,809	5.1%	\$830,416
2029	1.9%	3.00%	\$178,970	8.2%	\$14,586	8.2%	\$14,586	16.3%	\$29,172	5.1%	\$901,940
				Total	\$218,254		\$269,016		\$487,269		

Retires at age 65											
Average best 5 years			\$163,013								
Annual pension in 2030			\$114,109								
Annual CPP (max)***** in 2030			\$19,476								
Net PSSA pension in 2030			\$94,633								
Total retirement benefit:											
(over 20 years until age 85)				PV	\$1,382,221.51			(5.1% ROR; CPI indexed at 1.9%/yr**; 20 yrs in retirement=age 85*****)			

Notes:

* assumes an average salary increase of 3.0%/year (merit + service increases, promotions)

** assumes 1.9% CPI indexation in line with projections

*** assumes the 1995 YMPE as a starting salary

**** assumes contributions are on income under the YMPE for any given year

***** based on maximum monthly CPP benefit: \$1,012 in 2013, increasing with the YMPE rate (3.0%/yr) over 16 years = \$1,623/month in 2030

***** assumes average life expectancy = age 85

Column E includes actual employee contribution rates between 1995 and 2011; 2013-2029 rates are projected based on changes announced in 2012 Federal Budget.

Column G reflects the approximate share of employer contribution rates for the same period.

Jane (private sector)

Year	CPI	Salary increase*	Salary***	PSSA contributions (self)****	Total self (\$)	contributions employer**	GRRSP contributions employer (\$)	Total contributed (\$)	10Y Canada Bond (yields & projections)	Total balance (\$)
1995			\$34,900	4.8%	\$1,675	3.8%	\$1,326	\$3,001		\$3,001
1996	1.5%	3.00%	\$36,471	4.7%	\$1,714	3.8%	\$1,386	\$3,100	6.4%	\$6,293
1997	1.7%	3.00%	\$38,185	4.5%	\$1,718	3.8%	\$1,451	\$3,169	5.6%	\$9,815
1998	1.0%	3.00%	\$39,712	4.3%	\$1,708	3.8%	\$1,509	\$3,217	4.9%	\$13,512
1999	1.8%	3.00%	\$41,618	4.0%	\$1,665	3.8%	\$1,581	\$3,246	6.2%	\$17,593
2000	2.7%	3.00%	\$43,990	4.0%	\$1,760	3.8%	\$1,672	\$3,431	5.4%	\$21,965
2001	2.5%	3.00%	\$46,410	4.0%	\$1,856	3.8%	\$1,764	\$3,620	5.4%	\$26,780
2002	2.2%	3.00%	\$48,823	4.0%	\$1,953	3.8%	\$1,855	\$3,808	4.9%	\$31,895
2003	2.8%	3.00%	\$51,655	4.0%	\$2,066	3.8%	\$1,963	\$4,029	4.7%	\$37,411
2004	1.8%	3.00%	\$54,134	4.0%	\$2,165	3.8%	\$2,057	\$4,222	4.4%	\$43,275
2005	2.2%	3.00%	\$56,949	4.0%	\$2,278	3.8%	\$2,164	\$4,442	3.9%	\$49,418
2006	2.0%	3.00%	\$59,797	4.3%	\$2,571	3.8%	\$2,272	\$4,844	4.1%	\$56,263
2007	2.2%	3.00%	\$62,906	4.6%	\$2,894	3.8%	\$2,390	\$5,284	4.1%	\$63,848
2008	2.3%	3.00%	\$66,240	4.9%	\$3,246	3.8%	\$2,517	\$5,763	2.7%	\$71,329
2009	0.3%	3.00%	\$68,426	5.2%	\$3,558	3.8%	\$2,600	\$6,158	3.6%	\$80,055
2010	1.8%	3.00%	\$71,711	5.5%	\$3,944	3.8%	\$2,725	\$6,669	3.2%	\$89,254
2011	2.9%	3.00%	\$75,942	5.8%	\$4,405	3.8%	\$2,886	\$7,290	2.0%	\$98,294
2012	1.7%	3.00%	\$79,511	6.2%	\$4,930	3.8%	\$3,021	\$7,951	1.8%	\$108,034
2013	1.7%	3.00%	\$83,248	6.9%	\$5,702	3.8%	\$3,163	\$8,866	2.5%	\$119,600
2014	1.9%	3.00%	\$87,327	7.5%	\$6,550	3.8%	\$3,318	\$9,868	3.5%	\$133,654
2015	1.9%	3.00%	\$91,606	8.2%	\$7,466	3.8%	\$3,481	\$10,947	4.5%	\$150,616
2016	1.9%	3.00%	\$96,095	8.2%	\$7,832	3.8%	\$3,652	\$11,483	5.1%	\$169,781
2017	1.9%	3.00%	\$100,803	8.2%	\$8,215	3.8%	\$3,831	\$12,046	5.1%	\$190,485
2018	1.9%	3.00%	\$105,743	8.2%	\$8,618	3.8%	\$4,018	\$12,636	5.1%	\$212,836
2019	1.9%	3.00%	\$110,924	8.2%	\$9,040	3.8%	\$4,215	\$13,255	5.1%	\$236,946
2020	1.9%	3.00%	\$116,359	8.2%	\$9,483	3.8%	\$4,422	\$13,905	5.1%	\$262,936
2021	1.9%	3.00%	\$122,061	8.2%	\$9,948	3.8%	\$4,638	\$14,586	5.1%	\$290,932
2022	1.9%	3.00%	\$128,042	8.2%	\$10,435	3.8%	\$4,866	\$15,301	5.1%	\$321,070
2023	1.9%	3.00%	\$134,316	8.2%	\$10,947	3.8%	\$5,104	\$16,051	5.1%	\$353,496
2024	1.9%	3.00%	\$140,898	8.2%	\$11,483	3.8%	\$5,354	\$16,837	5.1%	\$388,361
2025	1.9%	3.00%	\$147,802	8.2%	\$12,046	3.8%	\$5,616	\$17,662	5.1%	\$425,830
2026	1.9%	3.00%	\$155,044	8.2%	\$12,636	3.8%	\$5,892	\$18,528	5.1%	\$466,075
2027	1.9%	3.00%	\$162,641	8.2%	\$13,255	3.8%	\$6,180	\$19,436	5.1%	\$509,280
2028	1.9%	3.00%	\$170,610	8.2%	\$13,905	3.8%	\$6,483	\$20,388	5.1%	\$555,642
2029	1.9%	3.00%	\$178,970	8.2%	\$14,586	3.8%	\$6,801	\$21,387	5.1%	\$605,366
					Total		\$118,175	\$336,429		

Retires at age 65

Total retirement benefit:
(over 20 years until age 85, no CPI indexing)
\$605,366

Annual benefit in 2030
(5.1% ROR, 20 years in retirement, no CPI indexing)
\$48,988.88

Notes:

*Assumes an average salary increase of 3%/year (merit + service increases, promotions)

** Average employer GRRSP contributions = 3.8%/year, source: Great-West Life, 2011 Capital Accumulation Plan Benchmark Report

*** Assumes 5.1% ROR

**** Assumes average life expectancy = age 85

Jane's scenario assumes exactly the same salary stream (incl. annual increases) and contribution rates (to a GRRSP) as those of the civil servant (Mary)