



Office of the Superintendent of  
Financial Institutions Canada

Bureau du surintendant des  
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Office of the Chief Actuary

Bureau de l'actuaire en chef

# Viability of Canadian Retirement Income System: Political Consensus and Sound Actuarial Advice

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*Panama, Panama, November 16, 2016*



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# *Office of the Chief Actuary*

- The OCA is an independent unit within OSFI.
  - The Chief Actuary reports to the Superintendent;
  - however, the accountability framework of the OCA makes it clear that the Chief Actuary is solely responsible for content and actuarial opinions in reports prepared by the OCA.
- Mandate: conduct statutory actuarial valuations on the
  - Canada Pension Plan (CPP) – **19M members**
  - Old Age Security Program (OAS) - **5M beneficiaries**
  - Federal public sector pension and insurance plans – **0.8M members**
  - Canada Student Loans Program – **0.5M loans**
  - Employment Insurance Program – **17M workers**



# *Canadian Retirement Income System is based on a diversified approach to savings*

- Canadian retirement system is a three-tiered system with mixed funding approaches
  - Old Age Security Program – a universal basic pension/supplement aimed at poverty reduction (PAYG)
  - Canada / Québec Pension Plan – mandatory earnings - related DB plans aimed at providing basic retirement income (partially funded)
  - Occupational Pension Plans and tax-favoured individual savings – voluntary schemes aimed at providing adequate retirement income (fully funded)
- Today, first two pillars replace about 40% of pre-retirement earnings for an individual with average level of earnings



**Canadian retirement income system is well recognized in the world for its capacity to adapt rapidly to changing conditions.**



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# ***Old Age Security Program's goal is poverty reduction among seniors***

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- OAS is an universal old-age program under federal jurisdiction
  - 98% of Canadian population 65 and over receive basic OAS
  - 33% of OAS beneficiaries also receive income-tested supplement (GIS)
  - Benefits are modest: basic OAS is 13% of average earnings, and average GIS paid is 12% of average earnings
  - All benefits are indexed to inflation
- Financed from Government tax revenues on a pay-as-you-go basis
- OAS is perceived as fair by Canadians – it provides a minimum amount at retirement.

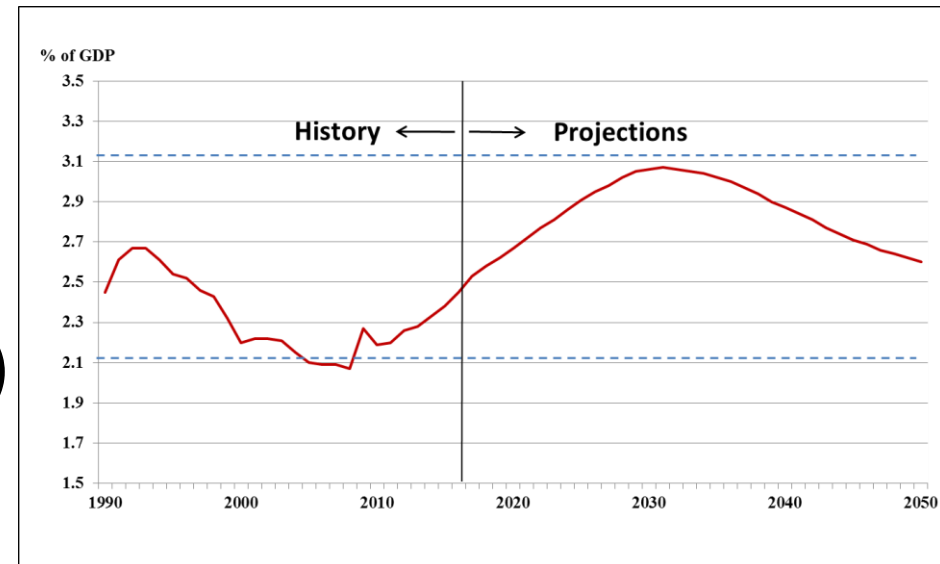


# ***OAS expenditures are related to Canada's economic growth by expressing them as % of the Canadian GDP***

- The changes to the OAS usually target vulnerable groups and have immediate impact on benefits in pay
  - Ad hoc increases to income-tested GIS
  - Top-up benefits for very low-income seniors
  - Top-up benefits for low-income single seniors

## **OAS expenditures as a percentage of the GDP**

The cost of OAS as a % of GDP is very modest compared to other OECD countries (between 2% and 3% of the GDP)



# ***Canada Pension Plan is jointly governed by federal, provincial and territorial ministers of finance***

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- CPP - the second tier of the Canadian retirement income system
- CPP and QPP are earnings-related plans providing indexed retirement, disability and survivor benefits to working Canadians
  - Came into effect in 1966
  - CPP/QPP cover all working population of Canada
  - Cover earnings up to Canadian average wage
  - CPP contributions are paid in equal part by employer and employees at the combined rate of 9.9%
  - Provide retirement replacement rate of 25% of wage-indexed career average earnings.



# *The introduction of the Canada Pension Plan in 1966 was a result of extensive political and societal discussions*

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- The CPP was established as a pay-as-you-go plan with small reserve fund
- Focus on both current and future generations
- Meaningful for people close to retirement at inception
  - Full retirement pension was available after 10 years
- Low combined employer-employee contribution rate of 3.6%
  - Despite 1964 projections predicting that the contribution rate necessary to maintain the Plan will be between 4.3% and 5.2% by 2010.
- Low-income rate among seniors fell from 37% in 1971 to 22% by 1981
  - For overall population, the low-income rate went from 16% to 12% over the same period.



# ***Changing economic and demographic conditions jeopardized future of the CPP***

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- From mid-1980 CPP started to show signs of weakness
  - Assets were declining and contribution rate increases were necessary
  - In 1993, it was projected that by 2030 the PayGo rate will be 14.2% and the reserve fund will be exhausted by 2015
- Main reasons for these problems were
  - less births,
  - longer lives,
  - lower productivity, and
  - overutilization of disability provisions.

**Younger generations were loosing confidence in the CPP**





# ***In 1996, the governments held cross-Canada consultation on the future of the CPP***

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- Most Canadians wanted the CPP preserved and protected as a key pillar of the retirement income system
- The federal and provincial governments agreed that they
  - must put to rest the worries that Canadians have that their CPP pensions will not be there for them when they retire in the future
  - must solve the problems facing the CPP quickly
- The governments agreed on nine principles to guide federal-provincial decisions on the CPP.



# *1997 changes were aimed at stabilizing the contribution rate*

- Contribution rate increase from 5.6% in 1996 to 9.9% in 2003
- Slowing of the future growth of benefits
- Major changes in the financing approach
  - Moving from pay-as-you-go basis to partial funding approach called steady-state funding
    - The goal of the steady-state funding is to stabilize asset to expenditures ratio over time, therefore, calculate steady-state rate
    - Introducing full funding for new or improved benefits
  - Creating an investment board (CPPIB) to invest assets on the markets
- New funding objectives improve fairness across generations and result in a stable contribution rate: remains unchanged at 9.9% since 2003.



# ***1997 amendments strengthened CPP governance framework***

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- FTP finance ministers review CPP every three years
  - Actuarial reports prepared by the OCA are one of the main sources of information for these reviews
  - The actuarial reports are tabled in Parliament
  - The actuarial reports are reviewed by an independent external review panel and results of this review are publicly available
- At the end of the triennial review, ministers must make recommendations whether benefits and/or contribution rate should be changed, taking into account results of most recent actuarial report
  - The results of the review are shared with Canadians.



# *Self-adjustment provisions serve as a safety net in case of political impasse*

## **“Insufficient Rates” Provisions**

If the legislated contribution rate is lower than the minimum contribution rate

AND

if the federal and provincial finance ministers cannot reach an agreement to increase or maintain the legislated rate

THEN

insufficient rates provisions apply



- Contribution rate increased by  $\frac{1}{2}$  of excess over three years
  - Benefits frozen until next review (3 years)
- At end of three years, next review performed to determine financial status of Plan.



## ***CPP27: the Plan is expected to be able to meet its obligations over long term***

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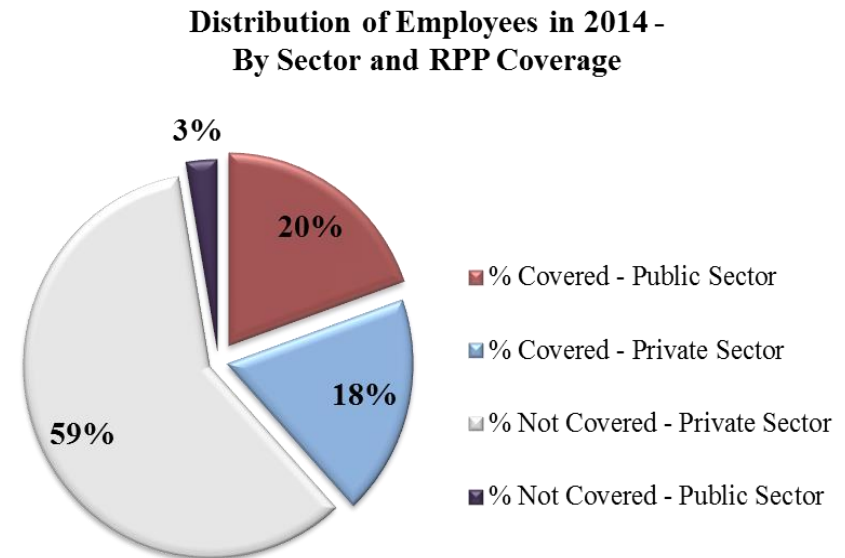
- The minimum contribution rate to sustain the Plan is **9.79%** of contributory earnings for the year 2019 and thereafter
- Under the **9.9%** legislated contribution rate:
  - contributions are projected to be more than sufficient to cover the expenditures over the period 2016 to 2020
  - Total assets are expected to grow from \$285 billion at the end of 2015 to \$476 billion by the end of 2025
  - In 2050, it is projected that 26% of investment income will be required to pay for expenditures.

*Source: the 27<sup>th</sup> Actuarial Report on the Canada Pension Plan as at 31 December 2015 tabled in Parliament on 27 September 2016*



# Triggers of 2016 changes to the CPP

- Decline in the coverage by the employer-sponsored pension plans (especially in private sector)
- Changing labour market – increased employment mobility
- 2008-2009 financial crisis
- **One in four families approaching retirement—1.1 million families—are at risk of not saving enough**



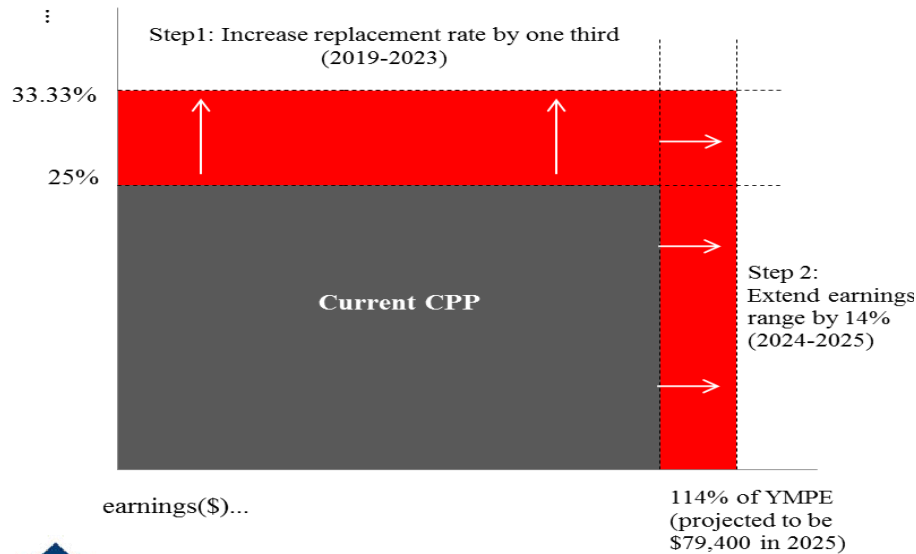
**Stewards of the CPP agreed on expansion parameters:  
modest, gradual and fully-funded**



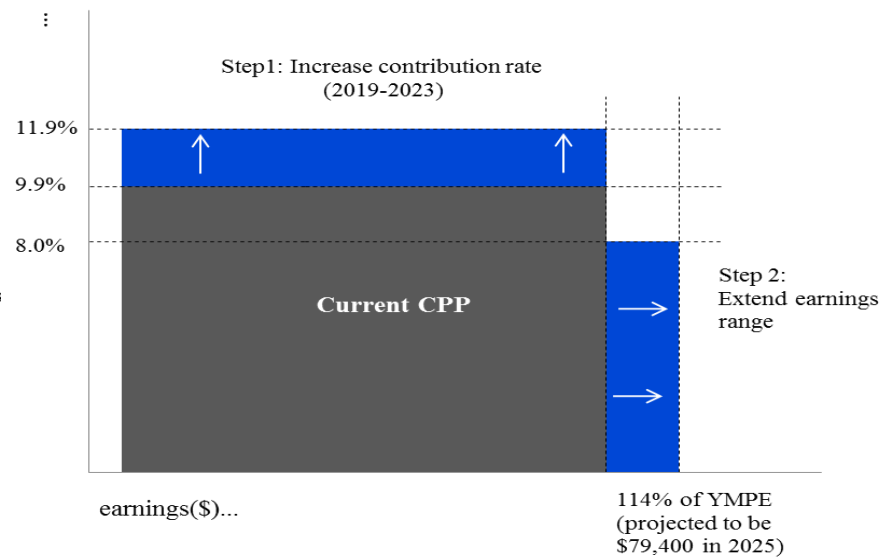
# ***Historical agreement on the CPP expansion was reached by federal and provincial Ministers of finance in June 2016***

- Increase in covered earnings to 114% of average wage
- Increase in replacement rate to 33.33%
- Contribution rates to finance expansion are 2%/8%
- Phase-in over 7 years to mitigate impact on businesses and workers

Income replacement rate



Contribution rate



# ***Additional CPP strengthens link between contributions and benefits***

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- Each year of contributing to the enhanced CPP will allow workers to accrue partial additional benefits
  - Full enhanced CPP benefits will be available after 40 years of making contributions.
  - Partial benefits will be available sooner and will be based on years of contributions.
- The financing objective of additional CPP:
  - To have constant contribution rates that result in projected contributions and investment income that are sufficient to fully pay the projected expenditures of the additional CPP over the long-term

***No past service liability is created.***

***Current young workers benefit the most from the expansion.***

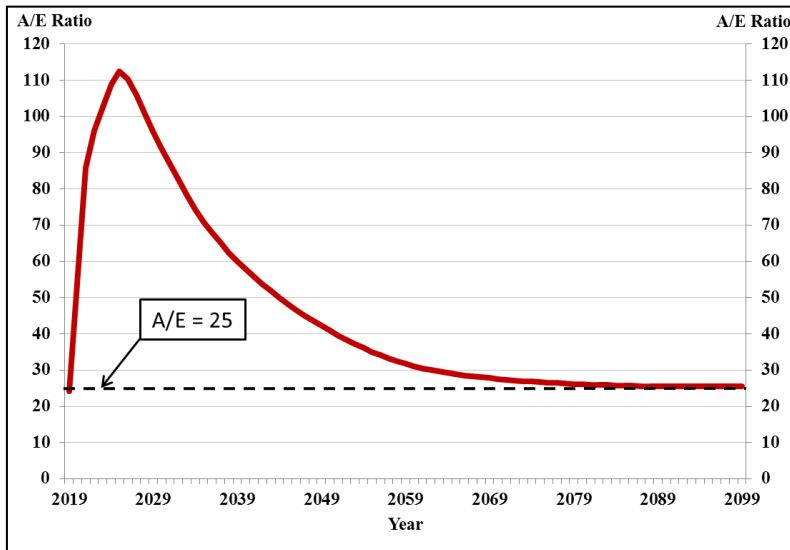




# The 28<sup>th</sup> CPP Report was tabled in Parliament on 28 October 2016

	Legislated rate	Minimum rate
First additional	2.0%	1.93%
Second additional	8.0%	7.72%

**Stable Assets to Expenditures Ratio:  
no projected increase in contributions**



**At inception, the open group assets  
exceeds open group liabilities:**

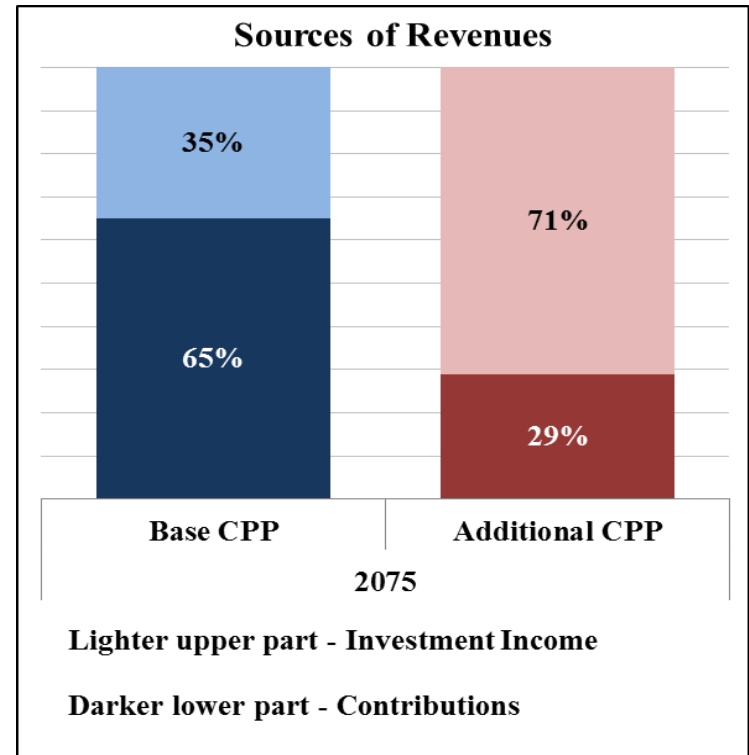
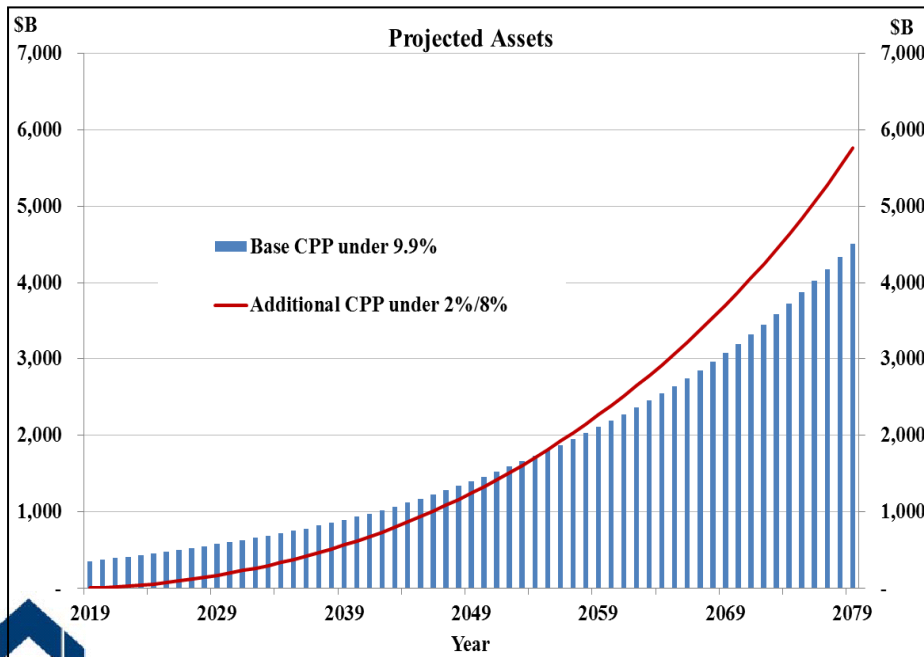
Assets – Liabilities = CAD \$40 billion

Assets/Liabilities = 106%



# *For the additional CPP, investment income is the major source of revenues*

- Under 2%/8% contribution rates contributions will exceed benefits up to the year 2058.
  - This will result in the accumulation of sizable assets
- The major source of financing: Contributions for the base CPP, and investment income for the expansion.

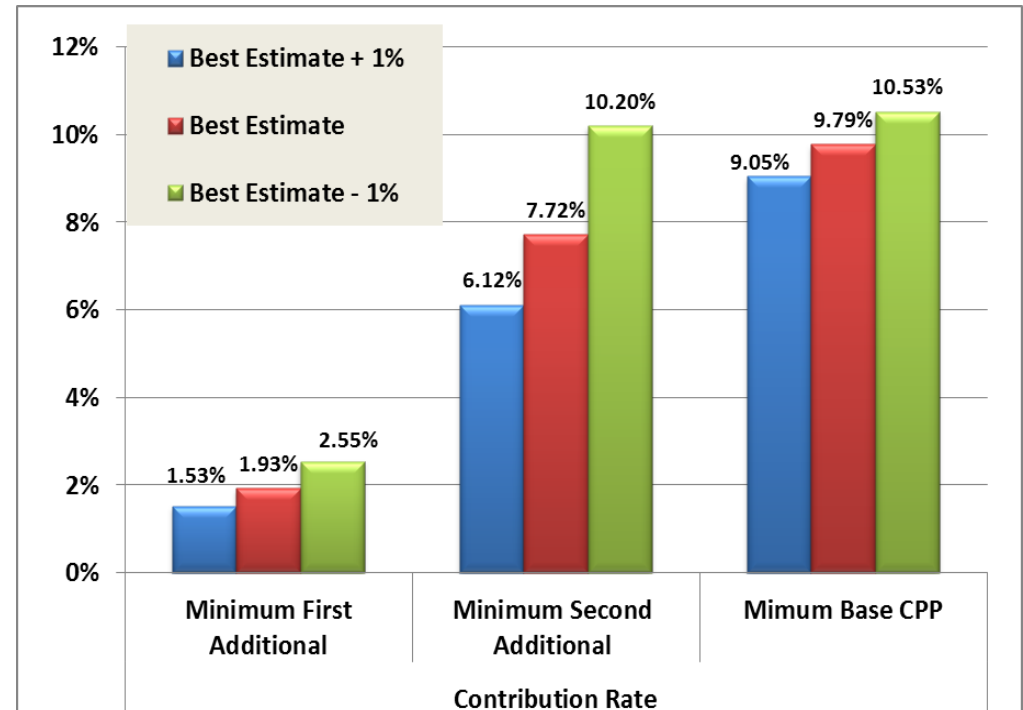


# Additional CPP will be sensitive to investment environments

	Additional CPP	Base CPP
<b>Assumed Assets Allocation</b>	Fixed Income: 50% Equities: 50% Volatility: 9.2%	Fixed Income: 32.5% Equities: 67.5% Volatility: 11.4%
<b>Average real rate of return 2019-2093 (net of expenses)</b>	3.55%	3.98%

The decrease in the best-estimate rate of return of 1%:

- **30%** increase in the minimum additional contribution rates
- **8%** increase in the minimum contribution rate for the base CPP.



# *Conclusions*

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- The viability of the Canadian retirement income system is a joint responsibility of both federal and provincial governments
- Strong governance, political dialogue and sound actuarial analysis are three pillars needed to maintain financial sustainability and to ensure the adequacy of benefits.





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*Thank you*

*November 16, 2016*



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# Appendix



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# ***Principles to Guide Federal-Provincial Decisions on the Canada Pension Plan, 1996***

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1. The CPP is a key pillar of Canada's retirement income system that is worth saving.
2. The CPP is an earnings-related program. Its fundamental role is to help replace earnings upon retirement or disability, or the death of a spouse - not to redistribute income. The income redistribution role is the responsibility of the income tax system, the Old Age Security/Guaranteed Income Supplement/Seniors Benefit, and other income-tested programs paid from general tax revenues.
3. The solutions to the CPP's problems must be fair across generations and between men and women.
4. The CPP must be affordable and sustainable for future generations. This requires fuller funding and a contribution rate no higher than the already legislated future rate of 10.1 per cent. In deciding how quickly to move to this rate, governments must take economic and fiscal impacts into account.
5. Governments must tighten administration as the first step towards controlling costs.



# ***Principles to Guide Federal-Provincial Decisions on the Canada Pension Plan, 1996***

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6. Disability and survivor benefits are important features of the CPP. However, they must be designed and administered in a way that does not jeopardize the security of retirement pensions.
7. Any further benefit improvements must be fully funded.
8. CPP funds must be invested in the best interests of plan members, and maintain a proper balance between returns and investment risk. Governance structures must be created to ensure sound fund management.
9. Governments must monitor changing economic, demographic, and other circumstances which can affect the CPP, and act to respond to these changing conditions. Annually, Ministers of Finance should provide Canadians with the appropriate information so they can judge for themselves that the integrity and security of the CPP is being protected.





# ***Bill C-26 tabled before Canadian Parliament on 6 October 2016 amends the Canada Pension Plan***

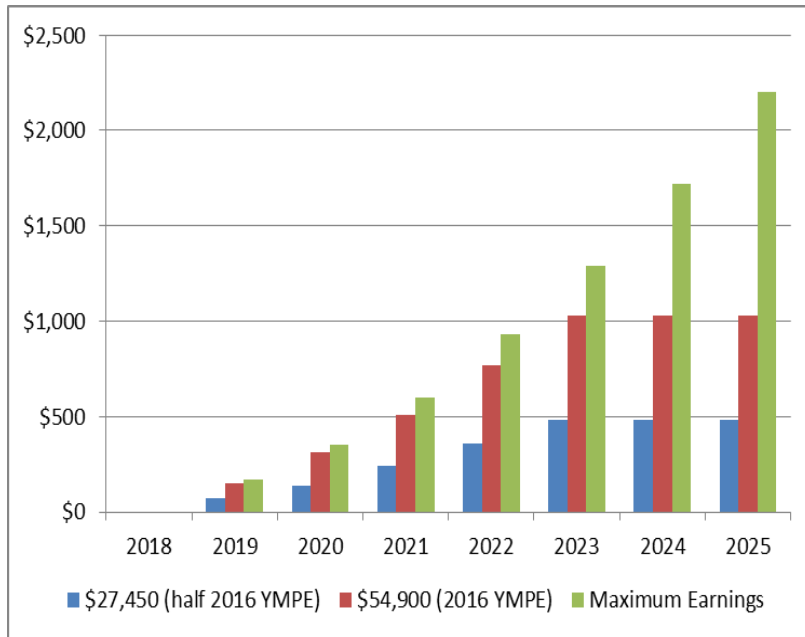
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- Increase the amount of the retirement pension, as well as the auxiliary benefits subject to the amount of additional contributions made and the number of years over which those contributions are made;
- increase the maximum level of pensionable earnings by 14% as of 2025;
- provide for the making of additional contributions, beginning in 2019;
- provide for the creation of the Additional Canada Pension Plan Account and the accounting of funds in relation to it; and
- include the additional contributions and increased benefits in the financial review provisions of the Act and authorize the Governor in Council to make regulations in relation to those provisions.



# Additional Contributions and Benefits

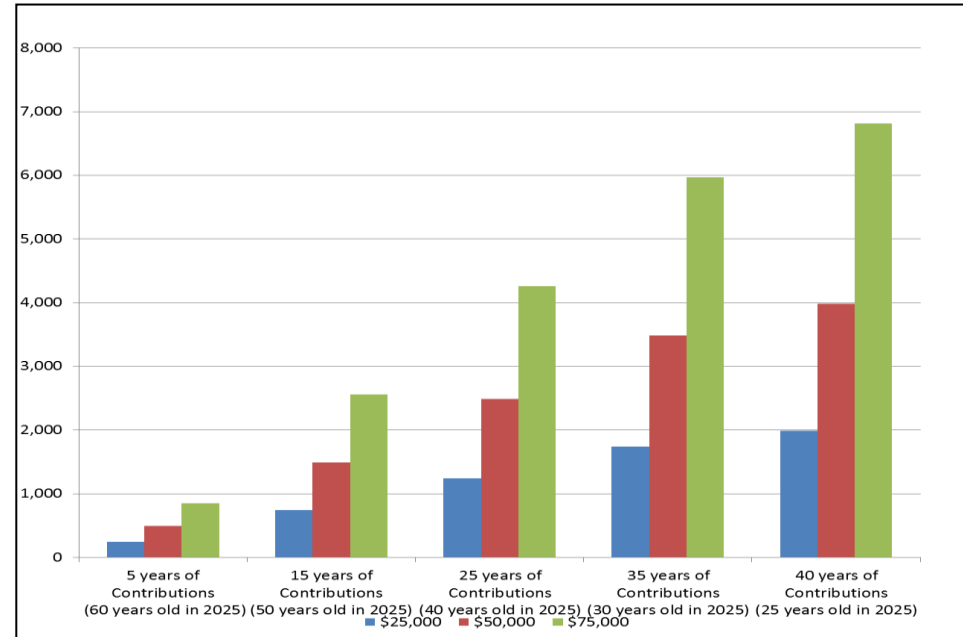
**Estimated additional annual combined employee/employer contributions (nominal; rounded to nearest \$10; pre-tax)**



**Note:** Assumes constant nominal earnings.

Source: Finance Canada

**Illustration of Additional Annual CPP Benefits for Different Age Cohorts and Income Levels (\$2016)**



**Note:** This illustration assumes that individuals have constant earnings and that individuals would take-up CPP benefits at age 65. The increase in benefits is based on contributions starting in 2025 (when enhancement is fully implemented); rounded to nearest \$10.

Source: Finance Canada

