An Information Paper for Consultations on the Canada Pension Plan

Released by the Federal, Provincial and Territorial Governments of Canada

February 1996

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Quebec has its own plan – the Quebec Pension Plan

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The challenge

The Canada Pension Plan was established 30 years ago to help provide working Canadians and their families with retirement income, and with financial help in the event of death or serious disability. Canadians themselves, and their employers, pay for the CPP through annual contributions. It is a vital part of Canada's retirement income system.

All generations – young and old alike – deserve to have confidence that the CPP can be sustained and will be there for them when they need it. But the fact is that the costs of the CPP have grown much more rapidly than expected when it was created, and will escalate dramatically in the future when the baby-boom generation starts to retire. There are several reasons for these rising costs, as this paper explains.

The architects of the CPP 30 years ago expected that Canadians and their employers would never have to pay more than 5.5 per cent of each individual's earnings towards the CPP. Contribution rates are already legislated to reach 10.1 per cent in twenty years' time, but costs are now expected to mount to 14.2 per cent of earnings in the future if nothing is done. The table shows the reasons why projected costs have increased so much.

Projected CPP costs in year 2030

	Costs as a percentage of contributory earnings
Costs in 2030 as projected when CPP started	5.5
Changed demographics	2.6
Changed economics	2.2
Enrichment of benefits	2.4
Disability	1.5
Costs in 2030 as now projected	14.2

Source: Chief Actuary of the CPP.

The basic challenge facing Canadians today is one of fairness and equity. If no changes are made to the CPP and the way it is financed, our children and grandchildren will be asked to pay two to three times more than we are paying for the same pensions from the CPP. For the past 30 years, we have not paid our way. Even today, we are not paying our way. Today's CPP pensioners have paid much less than their benefits are worth. In contrast, future generations will be asked to pay considerably more than their benefits are worth.

Will they be able to do so? Will they be willing to do so?

To ensure the sustainability of the CPP, steps must be taken to be as fair to future generations as possible.

The Government of Canada and the Governments of the provinces are joint stewards of the Canada Pension Plan. They believe that all reasonable steps should be taken now to ensure that future generations are not faced with unreasonable burdens. They do not believe that Canadians wish to be faced with this problem yet again at the next review of the CPP in five years' time.

If the problems of the CPP are faced squarely now, fairness can be restored, and the CPP can be sustained not only for today's seniors, but for tomorrow's as well.

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Introduction

The Canada Pension Plan (CPP) was established in 1966 to provide working Canadians and their families with income for retirement and with financial help if workers died or became disabled. Today, the CPP, together with the Quebec Pension Plan, play an important role in improving the incomes of Canadian seniors, those who lose their spouses, and the seriously disabled. Canadian governments have been strongly committed to the CPP since its beginning. Governments today maintain that commitment.

This paper is being distributed by federal and provincial governments as part of the current review of the Canada Pension Plan. Under CPP legislation, the plan must be reviewed every five years by both orders of government.

Canada Pension Plan review process

The sustainability of the plan has been the focus for discussion recently among federal and provincial ministers. By law, both orders of government formally review the CPP every five years. This paper provides Canadians with an opportunity to assess the challenges facing the CPP, form their own opinion and make their views known during upcoming consultations.

The paper sets out the facts and strives to answer many of the questions being asked by Canadians – young and old alike – about the future of the plan; tomorrow, and into the next century.

It addresses public concern about the sustainability of the CPP – concerns shared by provincial and federal governments. It also lays out choices for change that will form the basis for upcoming consultations with interested groups and individuals by both levels of government.

Ideas and positions brought before federal and provincial governments will play a large part in determining the direction of the CPP for the next 35 years. In more practical terms, public input will help determine what needs to be done to make the plan sustainable, so that working Canadians – particularly those now in their 20s and 30s – can be sure that the plan will be there for them in their retirement.

What's in the paper?

The paper is divided into four main chapters, plus a number of annexes.

Chapter 2 provides an overview of the CPP: a brief history and basic facts about the plan.

Chapter 3 sets out the problems and challenges facing the plan today. The chapter reviews in detail the impact that changing demographic and economic conditions, and past changes to the CPP, have had on the plan's long-term sustainability.

Chapter 4 examines issues related to the financing of the CPP in detail.

Chapter 5 takes a detailed look at cost issues. It outlines each element of the plan, and provides examples of changes that could reduce expenditures.

Several annexes provide additional material.

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CPP: Overview

The role and evolution of the CPP

The Canada Pension Plan was launched on January 1, 1966 after extensive federal/provincial negotiations. The CPP is a federal-provincial partnership with both levels of government acting as stewards of the plan on behalf of current and future beneficiaries.

The purpose of the CPP was to introduce a system where all working Canadians would provide for their retirement through their own contributions. The plan was the last of the three pillars of Canada's retirement income system to be introduced. At the time the plan was started, the two other pillars were already in place: Old Age Security (OAS) and employer-sponsored pension plans and personal retirement savings plans (RRSPs).

Another element of the retirement income system, the Guaranteed Income Supplement (GIS) for lower income seniors, was added to the OAS at the same time as the CPP was introduced. Together, the OAS and GIS are one pillar. The OAS provides a basic pension to most seniors which is supplemented by GIS for those in need.

Tax assistance for employer-sponsored pension plans and RRSPs – the third pillar – encourages Canadians to save enough to avoid serious disruption in their living standards at retirement.

The retirement income system

Public pensions

Public pension benefits: Old Age Security (OAS) and the Guaranteed Income Supplement (GIS). These programs are all funded out of the federal government's general revenues.

Earnings-related pensions: Provided by the Canada and Quebec Pension Plans (C/QPPs). These plans are financed through employer/employee contributions.

Private pensions

Tax assistance for private retirement savings (employer-sponsored pension plans and RRSPs).

Canadians nearing retirement in the mid-1960s had endured the Great Depression of the 1930s and the war years of the 1940s and many had saved little for their retirement. To help address the shortfall, full CPP retirement benefits were phased in rapidly over the 1966-1975 period. At the same time as the CPP was created, the age of eligibility for OAS was gradually lowered to 65 from 70 years over the 1966-1970 period. The initial CPP retirement pensions, paid in 1967, were to persons over age 68. The first age-65 pension was paid in 1970.

CPP benefits (detailed in the accompanying box) are an important source of income for Canadians upon retirement, disability or the death of a contributor.

Canada Pension Plan (CPP) benefits

CPP retirement pensions are paid monthly to all Canadians who have contributed to the plan. The normal age of eligibility is 65, late retirement (up to age 70) is also permitted. Reduced benefits are available as early as 60. The pension replaces up to 25% of average earnings. The 1996 maximum monthly pension is $727.08.

Disability benefits are payable to contributors under age 65 whose capacity to work is affected by a severe and prolonged mental or physical condition and who have made sufficient contributions to the program. The maximum monthly CPP disability benefit is $870.92 (1996).

Survivor benefits are paid to the deceased contributor's estate, surviving spouse and dependent children. There are three categories:

Death benefit, a one-time payment to, or on behalf of, the estate of a deceased CPP contributor to a maximum of $3,540 in 1996.

Surviving spouse's pension, a monthly pension paid to the surviving spouse of a deceased contributor. Maximum benefit for individuals under age 65 is $399.70; for those over 65 it is $436.35.

Children's benefit, a monthly benefit for dependent children of a deceased contributor. The CPP monthly benefit is $164.17 (1996), and is payable to age 18, or during periods of full-time school attendance to age 25. This benefit is also provided in respect of children of disabled contributors.

In 1996, the CPP will pay $17.5 billion in retirement, disability and survivor benefits.

It is estimated that some 10 million working Canadians will contribute – with their employers – to the CPP this year, paying in a total of $12.5 billion. These contributions plus interest earnings on the CPP, plus a small amount of capital will pay for the plan's annual expenditures.

CPP: Facts

A federal-provincial partnership

Under CPP legislation, major changes to the plan require the approval of the Parliament of Canada and the governments of at least two-thirds of the provinces with two-thirds of Canada's population. As a result, any changes to benefits, contribution rates, the contributory base, or the investment of the CPP fund require federal and provincial agreement.

To ensure that the plan remains financially sustainable, federal and provincial governments are collectively charged under the Canada Pension Plan Act with reviewing the plan's 25-year contribution rate schedule every five years. At this time, governments must also extend the schedule for another five years.

Setting contribution rates

The CPP Act requires federal and provincial governments to set a 25-year schedule of rates.

These rates are reviewed every five years to make sure the plan continues to be financially secure. At each review, the schedule must also be extended by five years to ensure a 25-year rolling schedule. This year's review is now in progress.

The Canada and Quebec Pension Plans

The Canada Pension Plan and the Quebec Pension Plan (QPP) operate in parallel to provide benefits which are portable wherever an individual has worked in Canada. The contribution rates of both plans are identical.

CPP benefits

Retirement benefits

In 1996, over 2.3 million Canadians will receive CPP retirement benefits of about $10.9 billion (a further 1 million will receive benefits under the Quebec Pension Plan). This will represent about 62 per cent of total CPP expenditures.

Full benefits are provided to participants at age 65. These are calculated according to the number of years a person has worked and contributed to the plan, and on the salary or wages they earned. The maximum pension at age 65 in 1996 is $727.08 a month ($8,725 a year). Pensions are fully indexed to reflect inflation.

The annual pension is equal to 25 per cent of the average of the contributor's pensionable earnings adjusted for wage growth. The calculation of average pensionable earnings excludes periods of disability or child-rearing. The formula also provides a "drop-out" provision that disregards a worker's lowest 15 per cent of years of

earnings (up to a total of seven years) in calculating average earnings, to account for school attendance, periods of unemployment, etc.

Early retirement: Canadians between 60 and 64 can apply for a CPP retirement pension at a lower level of benefits. In this situation, benefits are reduced by 6 per cent for every year before the normal retirement age of 65 to reflect that the benefit is paid over a longer period. As a result, a CPP pension taken at age 60 is 70 per cent of its amount if taken at age 65, and will remain at that level permanently (subject to price indexation).

Late retirement: Canadians can also elect to continue paying into the CPP up to age 70. In this case, the individual's pension benefit will be boosted by 6 per cent for each year worked after age 65. This means a pension taken at age 70 is 30 per cent larger than the one available at 65.

Disability benefits

A disability pension is provided to CPP participants who are unable to work due to a severe and prolonged physical or mental condition. Disability pensions are payable until age 65 (when they are converted to retirement pensions) or until recovery from the disability.

To be eligible, the person must have made CPP contributions for at least five of the last ten calendar years, or two of the last three calendar years. The Chief Actuary projects payments under the disability benefits in 1996 will be some $3.3 billion, or 19 per cent of total CPP expenditures.

The amount of disability benefit paid is based on two portions: a flat-rate portion, and an earnings-related portion, equal to 75 per cent of the retirement pension that the contributor would have received at age 65. The maximum monthly CPP disability benefit in 1996 is $870.92.

Disabled contributor's child's benefit: Each child of a CPP contributor who receives a disability pension is also entitled to a benefit, as long as the child is under 18, or between 18 and 25 and is attending school full-time. The monthly benefit payment in 1996 is $164.17 (the same as the orphan's benefit). Payments in 1996 will total some $329 million, or almost 2 per cent of CPP expenditures.

Survivor benefits

Survivor benefits are paid to a deceased contributor's estate, surviving spouse and dependent children. There are three categories of survivor benefits.

Death benefit: This is a one-time payment to, or on behalf of, the estate of a CPP contributor. Essentially, it amounts either to one-half of the pension payable in the year of death or 10 per cent of the maximum pensionable earnings, whichever is less. The maximum death benefit in 1996 is $3,540. Payments of death benefits in 1996 will equal about 1.4 per cent of total CPP expenditures, or $250 million.

Surviving spouse's pension: This is a monthly pension paid to the surviving spouse of a deceased contributor. Payments to surviving spouses in 1996 are estimated at 13 per cent of total CPP expenditures, or $2.3 billion. The benefit paid depends on the age of the surviving spouse, and if there are dependent children.

- Between the ages of 45 and 65, a surviving spouse receives a pension consisting of two portions: a flat-rate portion, and an earnings-related portion (essentially 37.5 per cent of the retirement benefit that the deceased could have been entitled to if he or she had been retired). The maximum total monthly benefit in 1996 is $399.70. The pension is also paid to a surviving spouse under 45 who has dependent children – children under 18, or under 25 who attend school full-time, or who are disabled. (Survivor spouses under age 35 do not receive benefits unless they are disabled or have a dependent child.)
- A surviving spouse between 35 and 45 years old who is not disabled and who has no dependent children receives a pension calculated in the same manner, but reduced by 1/120 for each month that the survivor was under age 45 when the pension begins.
- After age 65, the surviving spouse is entitled to a pension equal to 60 per cent of the pension entitlement of the deceased. The maximum monthly payment in 1996 is $436.25.
- Contributions in one-third of the contributory period by the contributor are required for the surviving spouse and children to be eligible for CPP benefits.

Orphan's benefit: Each child of a deceased CPP contributor is entitled to an orphan's benefit as long as the child is under age 18, or is between 18 and 25 and is attending school full-time. The amount of monthly benefit payable in 1996 is $164.17. A child can receive two benefit payments if both parents are deceased and had been CPP contributors. Payments of orphans' benefits in 1996 are estimated to represent 1 per cent of total CPP expenditures, or $209 million.

CPP contributions

All Canadian workers aged between 18 and retirement age (60 to 70) belong to the CPP. Contributions are paid equally by employers and employees. Self-employed Canadians pay the full amount.

When the plan was launched in 1966, the CPP contribution rate was set at 3.6 per cent of contributory earnings, to be paid equally by employers and their employees. In the 1960s and 1970s, the number of CPP pensioners was relatively small and contributions exceeded expenditures.

In 1996, the contribution rate is 5.6 per cent on earnings between the basic exemption of $3,500 and the maximum pensionable earnings of $35,400. Maximum contributions are $893.20 each for workers and their employers, and $1,786.40 for self-employed persons.

Schedule of contribution rates

The 1986 and 1991 CPP reviews adjusted contribution rates upward to take into account growing expenditures. The current schedule of contribution rates, shared equally between employees and employers, is as follows:

Year	Rate	Year	Rate
	(per cent)		(per cent)
1992	4.80	2007	8.30
1993	5.00	2008	8.50
1994	5.20	2009	8.70
1995	5.40	2010	8.90
1996	5.60	2011	9.10
1997	5.85	2012	9.30
1998	6.10	2013	9.50
1999	6.35	2014	9.70
2000	6.60	2015	9.90
2001	6.85	2016	10.10
2002	7.10		
2003	7.35		
2004	7.60		
2005	7.85		
2006	8.10		

Today, the CPP is financed essentially on a *pay-as-you-go* basis. In a pay-as-you-go system, contributions by today's workers finance the benefits of today's recipients. Other than a small fund intended to equal about two years of benefits, total contributions equal total pay-outs. The security of plan benefits, therefore, relies on the continuing ability of each working generation to pay for the pensions of preceding generations.

CPP reserve fund

Today, the CPP reserve fund stands at about $40 billion. This equates to about two years worth of benefits. Its purpose is to provide a cushion to prevent sharp changes in the contribution rates from economic and demographic fluctuations. If the CPP had been fully funded from the outset, it would, according to the Chief Actuary's estimates, have an accumulated fund of almost $600 billion in 1995. (See Annex D.)

CPP fund investments

The CPP reserve fund is invested primarily in long-term non-marketable securities of provincial governments. Provinces pay interest at the federal long-term bond rate at the time the bonds are purchased. The average rate of earned interest is currently 11 per cent, in large part due to investments made in the early and mid-1980s, when interest rates were substantially higher than they are today.

Some contend that this policy is the main reason that the plan risks becoming unsustainable. This is incorrect. The reserve fund has earned a very good rate of return because investments made in the high interest years of the 1980s have been locked in.

Earning an even higher rate of return on a structurally "small" fund – just two years worth of benefits – would have a minimal impact on escalating contribution rates. For example, on a fund of two years of benefits (the target established in 1986), a full percentage point increase in the rate of return would lower the long-term contribution rate by less than 0.25 of a percentage point.

Chief Actuary's report

The CPP legislation requires the Chief Actuary of the CPP to prepare an actuarial report every five years to support the review of the plan by federal and provincial ministers.

The 15th Actuarial Report on the CPP was tabled in the House of Commons in February, 1995. The report indicated that contribution rates will have to rise to *14.2 per cent in the future in order to pay for benefits in 2030.*

To illustrate what this means in dollar terms, last year a worker earning the average wage paid contributions worth about $850, and his or her employer paid a matching amount. A self-employed Canadian paid the entire $1,700. If the rate had been 14.2 per cent, workers would have had to contribute $2,240, matched by their employers, for a total of $4,480.

The report also showed that the CPP reserve fund will be exhausted in 2015 if nothing is done now. For more details on this report see Annex A.

Administration

The day-to-day administration of the Canada Pension Plan involves a partnership of the following federal government departments:

- Human Resources Development determines eligibility for benefits through its national and regional offices, provides social insurance numbers, and has overall responsibility for management of CPP.
- Revenue Canada collects contributions.
- Finance Canada manages the CPP Investment Fund.
- The Receiver General is responsible for printing and mailing monthly checks, and making direct deposits on time.
- The Office of the Superintendent of Financial Institutions provides actuarial services.

The overall cost of administering the CPP is about 1.3 per cent of program expenditures, or about $225 million in 1996. This is lower than the administrative cost of private sector plans, reflecting the economies of scale large public plans enjoy.

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CPP: The issues facing us today

The CPP is today and will continue to be a key pillar of Canada's retirement income system.

The incomes of seniors have been growing rapidly over the last three or four decades – growing faster than the incomes of the working age population – in part because the CPP has grown in importance. Today, however, the plan faces several challenges which must be addressed in order to ensure that it can be sustained, and that it treats successive generations of Canadians fairly.

The fundamental problem the CPP now faces is that its costs have grown much more rapidly than expected and will escalate much more dramatically in the future, as the baby boomers start to retire.

There are four factors which are driving up the costs of the CPP – changing demographics, changing economic conditions, benefit enrichments and, most recently, unexpected growth in disability benefits. These are the factors cited in the chief actuary's projections that set out significantly higher expenditures over the next 35 years.

- *Changed demographics*

  Lower birth and death rates than expected in the mid-1960s have increased long-term costs by 2.6 percentage points since rates were first set in 1966.

- *Changed economics*

  Slower growth in output per worker has added a further 2.2 percentage points.

- *Benefit enrichments*

  Enrichments have boosted costs by 2.4 percentage points.

- *Disability*

  The increased numbers of Canadians claiming disability benefits for longer periods of time has added another 1.5 percentage points.

The following table sets out the financial consequences of these factors on CPP cost projections:

Projected CPP costs in year 2030

	Costs as a percentage of contributory earnings
Costs in 2030 as projected when CPP started	5.5
Changed demographics	2.6
Changed economics	2.2
Enrichment of benefits	2.4
Disability	1.5
Costs in 2030 as now projected	14.2

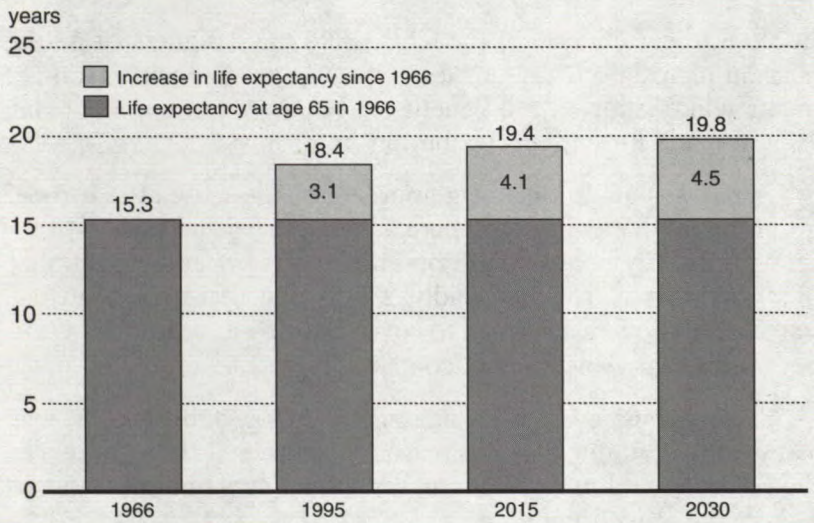
Source: Chief Actuary of the CPP.

These are the issues which will drive the discussions of federal and provincial ministers and all Canadians. But before outlining the possible choices for change to the CPP, it is important to describe these four factors in more detail to understand how the CPP arrived at where it is today.

Changed demographics

Improved health as a result of lifestyle changes and medical advances means that Canadians are living considerably longer than when the CPP was introduced in 1966.

Life expectancy at age 65 in Canada



Sources: Statistics Canada for 1966 and mortality tables projected in CPP 15th Actuarial Report for 1995 onward.

On average, Canadians are now living 3.1 years longer in retirement and can expect to live another 1.4 years longer in retirement by 2030. As a result, benefits are paid out over a much longer time – three years longer than in 1966, and by 2030, 4.5 years longer.

An even bigger impact on CPP revenues and costs will come from the baby boom – the upsurge in birth rates in the 20 years following the Second World War – and the baby bust – the low birth rates experienced since the 1960s. The baby boom generation will start to retire in large numbers around 2011. And as a result of the 'baby bust', there will be relatively fewer younger Canadians in the workforce to support the escalating pension bill.

Over the next decade, there will be about five working age Canadians to help support each person aged 65 and over. By 2030, there will be only three working age Canadians for every person aged 65 and over. Because the CPP is financed by each working generation paying for the pensions of the previous generation, today's youth will need to pay much more into the CPP than their parents paid, yet receive no more in the way of benefits. More than anything else, this is why Canadians are concerned about the future sustainability of the CPP.

Changed economics

In 1966, the architects of the CPP – like the designers of public pension plans in other countries – put in place financing arrangements which allowed full benefits to be phased in quickly (over 10 years) and for initial contributions to be low.

A pay-as-you-go financing approach made sense at that time, given the fundamentals of the era – total wages and salaries were growing rapidly because both output per worker and the number of workers were growing rapidly. This meant that total contributions could grow fast enough to cover growing expenditures without needing large increases in contribution rates.

Such strong growth in aggregate wages and salaries was assumed to continue. For this reason, few thought that workers in the future would need to pay much higher contribution rates to finance the same benefits.

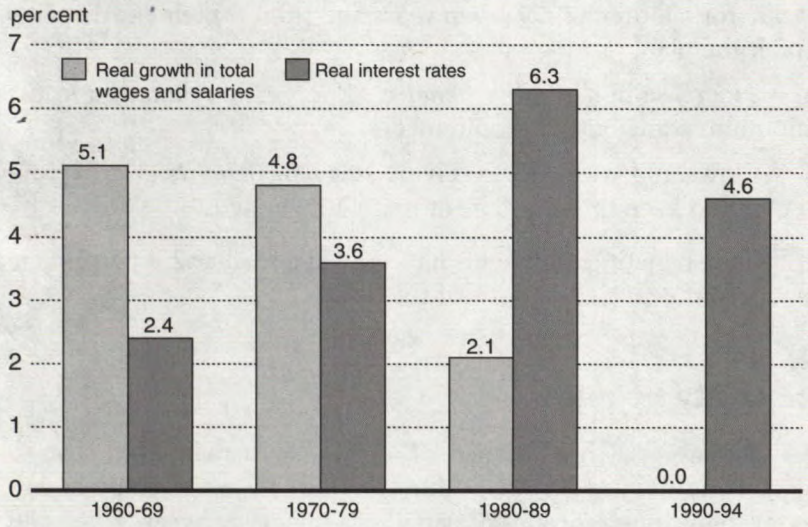
At the same time, real interest rates were low in 1966. This meant there were few advantages in building up a substantial reserve fund. Because of low interest rates, a large fund would not have been much help in paying for benefits.

Economic and demographic conditions have changed significantly in Canada since 1966. First, slower growth in labour productivity and the labour force now mean that total wages and salaries in Canada are growing much more slowly than expected. In a pay-as-you-go system, this demands rapid contribution rate increases to compensate for the slower-than-expected growth of the contribution base.

Second, real interest rates have increased substantially – from a little over 2 per cent in the 1960s to over 6 per cent in the 1980s. This means that building up a larger fund can substitute for the slower economic growth that Canada is experiencing. A larger fund earning a higher rate of return could help to pay for the rapidly growing costs that will occur once baby boomers start to retire.

The following chart shows how the relationship between the rate of increase in wages and salaries, and the rate of earnings on investment has reversed in the last 30 years.

Real growth in total wages and salaries and real interest rate



In the 1960s and 1970s, the growth in real wages and salaries was very high – 5.1 and 4.8 per cent. It exceeded the real rate of interest. But by the 1980s and continuing into the 1990s, this situation had reversed. Interest rates were higher than the growth of wages. Today, it would be imprudent to assume any change in that relationship for the foreseeable future.

Enrichments to the CPP since 1966

In the past, several enrichments to the plan have been made by federal and provincial governments. The most important ones are detailed below:

- ***Full indexation*** of benefits to changes in the cost of living (1975). Previously there was a 2 per cent ceiling.
- Payment of ***survivor benefits*** (1975) to widowers as well as widows. Initially benefits were paid only to widowers if they were disabled and dependent.
- Dropping the ***retirement and earnings tests*** (1975). Originally, contributors aged 65 to 69 could only receive their retirement benefits if they passed a retirement test, and their subsequent benefit up to age 70 was reduced if they earned more than a set amount.

- Introduction of a *child-rearing drop-out provision* (1978). This allows working Canadians to leave a job or reduce their hours while caring for children under seven years and protect their entitlements under the plan.
- An increase in *disability benefits* (1987), and relaxation in the minimum contributory requirements.
- Widows and widowers receiving *survivor benefits* (1987) were allowed to keep this entitlement upon remarriage.

These benefit enrichments have added a further 2.4 percentage points to the long term costs of the plan.

Disability benefits

An increase in the number of disability benefits granted to Canadians and in the average duration of the benefits combined to more than double disability benefit payments between 1987 and 1994. In 1996, payments will amount to $3.3 billion. This has added a further 1.5 percentage points to long-term costs.

This rapid growth in the cost of the benefit was due to a number of factors. Higher rates of unemployment; administrative guidelines giving greater weight to non-medical factors such as the rate of unemployment; more referrals from other programs, e.g., provincial social assistance and private insurance companies; and legislative changes which increased benefits, reduced the number of years of contribution required for coverage, and allowed late applicants to qualify for benefits.

Since 1993, measures have been put in place which have improved the plan's administration and guidelines: these have helped curtail the growth of disability claims. (See Annex B for more information.)

Summary: Key challenges facing the CPP

(1) Canadians are living longer in retirement, and therefore receiving benefits over a longer period of time.

(2) When the baby boom generation retires, there will be fewer working Canadians to support the CPP's pay-as-you-go structure. Over the next decade there will be about five workers supporting each pensioner; by 2030 there will be only three supporting each pensioner.

(3) Economic growth has slowed considerably since the architects of the Canada Pension Plan designed its structure in the mid-1960s. As a result, expectations of continuing strong wage growth have not materialized, calling into question the sustainability of pay-as-you-go financing.

(4) If pay-as-you-go financing is left in place, future generations of Canadians will be paying 14.2 per cent of contributory earnings for their CPP benefits – much more than the 5.6 per cent that today's workers are paying. The advantage of pay-as-you-go financing would be that the increase to 14.2 per cent could be gradual – taking place over many years. However, it fails to deal with the fundamental challenge of whether it is either reasonable or fair to expect younger generations to pay such high contribution rates.

Taking all these factors into consideration, there is increasing pressure on provincial and federal governments to find ways of assuring Canadians that the CPP will be there for them when they retire. First, governments agree that they should examine how they can keep closer scrutiny on the growth of CPP expenditures in periods between the regular five-yearly reviews. Secondly, Canadians and their governments therefore need to examine the choices and take steps to ensure a plan which is sustainable in the long term and fair to current and future generations.

The next two chapters of this paper examine an approach that would strengthen the financing of the CPP, as well as options that would reduce costs. Together, such steps would mean that CPP contribution rates would never have to reach 14.2 per cent.

4

CPP: An approach to strengthening the financing

The financing of the CPP can be strengthened by ensuring that today's working Canadians pay a fairer share of CPP costs. Raising contributions more quickly now would ease some of the contribution burden that will otherwise be passed on to future generations of workers. This would not only be fairer across generations – it would also make the CPP more sustainable for future participants.

To strengthen CPP financing would require both fuller funding and a new investment policy. Together with benefit reductions, these actions could help to keep future contribution rates from rising to levels which may be beyond the capacity and willingness of future generations to pay.

Fuller funding and 'steady-state' contribution rates

The fairest way to equalize the costs of paying for the CPP across generations would be to quickly raise CPP contributions from today's 5.6 per cent to a higher level which can then be maintained without further increases.

This contribution rate would cover the costs of each contributor's own benefits, plus a share of the burden that has built up because both current and past contributors have paid far less than their benefits are worth. This rate can be called the "steady-state" contribution rate.

Moving to a steady-state contribution rate would result in fuller funding of the CPP. Instead of a reserve fund equal to about two years of benefits, the CPP fund would contain about six years of benefits.

The earnings on a fund of this size could help pay for an increased share of CPP benefits. This would make a major contribution to lowering contribution rates in the future. For this reason, options for enhancing the returns on the fund need to be explored.

The precise level of the steady-state contribution rate depends on several factors: the rate of return that a more fully funded plan can earn; the speed at which the steady-state is phased in; and the level of CPP benefit expenditures.

For example, with the current benefit structure, the steady-state contribution rate could be about 12.2 per cent indefinitely, if: a) the CPP could achieve a real rate of return of 3.5 to 4 per cent over the very long term; b) contribution rate increases were fast enough to get to the steady-state over six to eight years. Rates would then never have to climb to 14.2 per cent. This would be an important step towards making the CPP sustainable in the future.

Under a steady-state approach to CPP financing, faster increases in contribution rates could begin in 1997 and optimally, reach the steady-state rate over six to eight years.

The window of opportunity for fuller funding of the CPP is rapidly closing. If the current contribution rate schedule were maintained for another five years, the opportunity for fuller funding would be significantly curtailed. The longer that higher contribution rates are postponed, the less the degree of funding that can be achieved. This would put the steady-state contribution rate that much closer to the pay-as-you-go rate, with the sustainability and intergenerational fairness problems that this would entail. (See Annex C.)

Effect of benefit reductions on steady-state rate

As noted, a steady-state contribution rate of just over 12 per cent could be achieved, assuming no changes were made to the existing benefit structure. Contribution rates could be further reduced if the cost of benefits were reduced. For example, the table below shows that an overall reduction in the cost of benefits of 7 per cent would bring the steady-state rate down to 11.3 per cent from 12.2 per cent.

Similarly, a 10 or 15 per cent reduction in the overall cost of benefits would bring the steady-state rate down to 10.9 per cent and 10.3 per cent respectively.

Steady-state contribution rates with illustrative benefit reduction scenarios

Benefit scenario	Steady-state contribution rate
	(per cent of contributory earnings)
Existing plan	12.2
With reduced benefits:	
7 per cent reduction	11.3
10 per cent reduction	10.9
15 per cent reduction	10.3

The next chapter outlines some options for reducing CPP costs.

A new investment policy

Under the steady-state approach, the CPP reserve fund would grow significantly in size. How quickly it would grow would depend on how rapidly the steady-state rate is reached.

Currently CPP funds are invested primarily in 20-year non-marketable securities of provincial governments at the federal government's cost of funds. Returns on the CPP fund have been comparable to returns on other pension funds over recent decades due in large part to the high returns on CPP investments made in the early to mid 1980s. There have nonetheless been criticisms that the current CPP investment policy does not maximize returns. This issue should therefore be addressed, particularly in light of the possibility of building a larger CPP fund.

One option would be to continue with the current policy of giving provinces the option of borrowing a share of contributions. Modifications could be considered such as allowing the provinces to borrow a range of maturities instead of just 20-year maturities and charging the provinces a rate of interest equivalent to the rate of interest on their market borrowing. These changes would help

the provinces better meet their borrowing need, and could enhance the return on CPP investments. If the CPP fund were to grow to the point where it exceeded provincial borrowing needs the excess could be invested in the market instead of being taken up by the federal government, as is currently the case.

Another option is to invest most or all future available funds in the market. Increasingly, pension plans in Canada sponsored by governments as employers have their assets professionally managed and invested in the interest of pension plan contributors and beneficiaries. Federal and provincial legislation regulating private sector pension plans in Canada and recent reforms of pension plans in other countries have followed a similar principle. Pension funds managed on the basis of this principle are generally invested in a diversified portfolio of assets which enhances returns and prudently limits risks. This option raises a number of important issues that would have to be addressed, including how such a fund should be governed and the implications that a larger CPP fund would have for Canada's capital markets.

Earnings exempted from contributions

As mentioned earlier, employers and employees are exempted from paying contributions on the first 10 per cent of covered earnings ($3,500 in 1996), although benefits are paid on these earnings. This is called the year's basic exemption (YBE).

The basic exemption introduces an element of progressivity into the CPP – since lower income earners are exempted from contributions on a larger proportion of their earnings than are higher income earners. However, this exemption means that the contribution rate must be about 15 per cent higher than it would otherwise be to generate an equivalent amount of revenue. The earnings exemption also benefits employers of workers with only a marginal attachment to the workforce.

Reducing or freezing the basic exemption would result in a substantial decrease in the plan's contribution rate because contributions would be levied on a broader earnings base. Cutting the YBE to 5 per cent of the YMPE rather than 10 per cent would reduce the long-term pay-as-you-go rate by 1.1 percentage point. This would allow the steady-state contribution rate, under the current benefit structure, to fall from 12.2 to about 11.2 per cent.

Alternatively, the exemption could be eliminated and replaced by a credit paid at tax filing time. Contributions would be collected from the first dollar of earnings up to the maximum pensionable earnings. This would improve employer compliance and would decrease the contribution rate.

It is important to note that while reducing or eliminating the exemption would in the long term lower the contribution rate, it would reduce neither the cost of benefits, nor the overall amount of contributions paid by workers and their employers.

Economic and fiscal impacts

A decision to move towards fuller funding would have positive economic impacts in the longer term – increased national savings, more investment, higher capital stock, reduced foreign indebtedness – all leading to higher national income. This would provide a sounder economic base to sustain the CPP down the road when there will be many more seniors than today. The federal Department of Finance recently released a working paper on this subject.

In the shorter term, higher contribution rates would reduce overall spending in the economy. The impact would likely be small enough that it could be ameliorated by an easing in monetary conditions without compromising inflation-control targets. It could also be ameliorated by reductions in unemployment insurance premium rates. The impact of higher contribution rates on employers and employees in the short term is illustrated in Annex C.

With fuller funding, there would be a negative impact in the short run on the tax revenues of the federal and provincial governments, since CPP contributions are creditable for personal income taxes and deductible for corporate income taxes.

While the short-term impacts of higher contribution rates are an important consideration, as stewards of the CPP, the federal and provincial governments must weigh them against the longer-term benefits of fuller funding and lower contribution rates. Canadians deserve to have confidence that the CPP can be sustained and will be there for them in the future.

5

Options for reducing CPP costs

Future increases in contribution rates could be moderated by reducing CPP expenditures. Expenditure reductions could be achieved, first, by lowering the CPP administrative costs, and second, by reviewing each block of benefits – retirement, disability, and survivors – to make sure that they are still appropriately designed and relevant to today's and tomorrow's needs.

The following is a list of ideas for Canadians' consideration. This document should not be interpreted as implying that any particular government has decided in favour of any particular options. Other ideas for reducing costs will be welcomed during the course of the consultations with Canadians.

Administration

The federal government is in the midst of a fundamental redesign of the administration of its income security programs, including the CPP. When the new administrative structures are in place in 1997, a growing number of seniors will be better served, at an estimated saving of some $1.3 billion over the first fifteen years. This will both save money and respond to seniors' requests for better and more timely service.

The key elements of the redesign include improved file management and computer systems, and electronic networking of regional and central offices. These and the other efficiencies will shorten the benefit application period, improve verification procedures, and minimize overpayments.

Retirement pensions

As noted earlier, by 2030, life expectancy at age 65 is expected to be 4.5 years longer than when CPP began in 1966. Retirement benefits could be modified in a number of different ways, or in a combination of ways, to deal with the impact of increasing life expectancy and the longer duration of benefits. These include looking at reducing the amount of retirement pensions for new pensioners; increasing the years required for full pensions; raising the age of entitlement to retirement pensions; or providing only partial indexation.

Reducing retirement pensions

One way to deal with the costs imposed on the CPP by increasing longevity would be to reduce the amount of retirement benefits for new retirees only.

If benefits were to be reduced enough to fully reflect rising life expectancy, the benefit rate would have to be reduced to about 22.5 per cent, from 25 per cent of earnings. To illustrate what this means, if this were in place today, the maximum monthly retirement pension would be $654, rather than $727.

This measure would reduce long term CPP costs by 8.8 per cent. By itself, it would lower the long-term 14.2 per cent contribution rate to 12.95 per cent – that is, by 1.25 of a percentage point.

This measure would affect all future seniors throughout their retirement years – their CPP pensions would be 10 per cent lower.

Years required for full pension

Another way to deal with the costs imposed by increasing longevity would be to require workers to contribute longer before receiving the full pension. This would have no effect on those already retired.

When calculating lifetime earnings, contributors are currently allowed to drop from their earnings record 15 per cent of their non-working or low-income years between age 18 and 65, to a maximum of seven years. By changing the 15 per cent drop-out to 10 per cent, for example, some contributors would have to work about 2.3 years longer, or count this number of low-earning years, towards their retirement pension.

This would reduce long-term CPP costs by 2.2 per cent (or 0.31 percentage point reduction in future contribution rates). This measure would have an impact on the pensions of Canadians whose careers start late because of schooling, or are interrupted by spells of unemployment.

In addition to the general 15 per cent "drop-out", contributors can drop out time spent out of the workforce caring for children under age seven. There currently is no limit on the number of years that can be dropped out for this purpose.

Consideration could be given to placing one overall limit on the total number of years that can be dropped out of a person's earnings record – for example, the general drop-out and child-rearing drop-out combined could not exceed 15 years.

The "drop-out" provisions

Working Canadians can make CPP contributions any time between the ages of 18 and 70: this is called the "contributory period". This period is used in calculating the amount of any CPP benefit to which they become entitled, whether related to disability or retirement.

Many contributors have periods of low earnings during these years – for school attendance, unemployment, child rearing, disability, etc. To protect these contributors, some parts of this contributory period can be "dropped out" – erased from a contributor's record. By counting only their better earning years, working Canadians increase the amount of the benefits they will be entitled to.

All the years in which a contributor is receiving a disability pension can be dropped from the contributory period, as can any years in which a contributor is caring for children under the age of seven. In addition, contributors can drop out 15 per cent of the years remaining after any disability or child-care years are removed from their contributory period – this is sometimes called the "general" drop-out.

Raising the age of entitlement

If retirement benefits in 2030 were paid on average for the same period of time as in 1966, the age of entitlement to full CPP pensions would have to rise from age 65 to almost 70. This would be another way of dealing with the costs of rising life expectancy, but many would consider this excessive.

A less drastic approach could see the normal age of entitlement gradually raised to 66 or 67, from the current 65 years of age. (The United States has already announced a gradual increase to age 67 for its public pensions.) Early retirement pensions – now available from 60 – would likewise be available one or two years later – from 61 or 62.

A number of years notice – say, five to ten years – should be given before starting any significant increase in the eligibility age for CPP pensions. This would give Canadians time to adjust while they are still working. Once started, the increase would be phased in gradually – for example, three or four months every year. With such phase-ins, the measures would be fully in place by the time baby boom generation starts to retire in 2011. No one currently retired, or nearing retirement, would be affected.

Today, there are concerns that delaying the age of eligibility for pensions would keep people in the workforce longer, making it harder for younger people to find jobs. It is important to note that when the baby boomers start to retire, it is expected that there will be no shortage of jobs, so delayed retirement would not hurt young people.

Raising the age of entitlement to 67 would reduce long-term costs by 4.2 per cent (equal to 0.63 per cent of contributory earnings). The savings would be higher if some of the measures discussed below to control the costs of disability benefits were adopted.

A two-year increase in the age of entitlement would reduce the average duration of retirement benefits by about 10 per cent. The overall reduction in plan expenditures (4.2 per cent) would be much lower for two reasons. First, retirement benefits do not constitute the whole of CPP expenditures. Second, some of the reduced expenditures on retirement benefits would be offset by increased expenditures on other benefits, predominately disability benefits for persons age 65 and 66.

Partial indexing of pensions

Once CPP benefits start being paid, they are fully indexed to inflation (as measured by the consumer price index) so that they maintain their full purchasing power. A fourth way of dealing with the issue of increased longevity and the costs this imposes on the CPP would be to provide only partial indexation of CPP benefits.

For example, indexing the pensions of all current and future retirees at the rate of inflation minus one percentage point would reduce expenditures in 2030 by 9.0 per cent; future contribution rates would come down by 1.28 percentage points. Such a measure would affect persons more the longer they lived. A variation of this approach would be to limit the partial indexation to a specific period of time, for example, for the next 10 years. This would allow current seniors, and those about to retire, to make a contribution to lessening the burden which CPP will impose on younger generations.

Disability benefits

A number of administrative steps regarding disability benefits have already been taken. And progress has been made in controlling rapidly increasing disability costs through strengthening the adjudication, appeals and reassessment processes.

Additional administrative efficiencies will be achieved with the full implementation of the new Income Security Program Redesign in 1997, which will bring the advantages of modern systems and technology to the administration of public pensions. A rules-based adjudication system currently in development will apply information technology to ensure consistency of adjudication decisions and tracking of clients.

The administrative actions taken to date are projected to reduce CPP expenditures in the long term by about 1.5 per cent (a 0.22 percentage point reduction in future contribution rates). Efforts to improve the administration of CPP disability benefits will continue so as to ensure that benefits are provided only to those who are truly incapacitated and must rely on the CPP for income support. Experience will be carefully monitored to determine whether there is a need to amend the legislation to more clearly define eligibility for disability benefits.

Aside from tightening administration, a number of changes to disability benefits could be considered to further reduce costs and to ensure the sustainability of this part of the CPP. These changes would not affect current beneficiaries.

Stacking of CPP and Workers' Compensation

In some provinces, disabled persons can receive both CPP benefits and Workers' Compensation. Reducing CPP disability benefits to take account of Workers' Compensation benefits would reduce the current overlap. It would also remain consistent with Workers' Compensation principles that the employer – not the CPP – should bear the cost of a work injury. Such a move would align the CPP closer to Quebec Pension Plan policy in this regard, and it would reduce disincentives to return to work.

Either the full amount of WCB benefits, or part of WCB benefits, would be subtracted from CPP benefits. For example, subtracting 25 per cent of Workers' Compensation from CPP disability benefits of new beneficiaries would reduce plan expenditures in 2030 by 0.6 per cent. Expressed as a percentage of contributory earnings, this would amount to 0.08 of a percentage point.

Tighter eligibility requirements

Individuals must have a certain minimum attachment to the workforce before they can claim disability benefits.

Prior to 1987, contributors were required to have worked (and therefore made CPP contributions) in at least five years, and more in many cases, before they could claim disability benefits. Benefits are now provided if a person contributed to the plan in two of the last three calendar years or five of the last ten calendar years before applying for disability benefits.

For new applicants, the eligibility period to qualify for disability benefits could be changed to require contributions be made in four of the last six years. Such an extension would reduce CPP expenditures in year 2030 by about 1.2 per cent, or 0.17 percentage point of contributory earnings.

Changing the requirement for contributions to four of the last six years would mean that some persons just entering or re-entering the labour force would not have CPP disability coverage until they had accumulated a more lengthy period of recent labour force attachment than is required at present.

In addition, the practice of allowing benefits to be claimed for a disability occurring up to 6 months after a person has started an early retirement benefit could be ended. As well, in some circumstances, contributors can become eligible for disability benefits after

they have died, and benefits are paid to their estate. This practice will be examined to see if changes are necessary. Savings from these two measures would be small.

Base retirement pensions on maximum pensionable earnings at time of disablement

Under current provisions, as long as a CPP disability beneficiary continues to meet the CPP disability definition, he or she continues to receive benefits until age 65. These benefits are indexed to the consumer price index.

At age 65, disability benefits are automatically converted to a retirement pension. This retirement benefit calculation is based on average wages at the time the beneficiary turns 65 and is thus, in effect, wage indexed for the period of disability.

By contrast, other CPP benefits are based on average wages at the time of the event giving rise to the benefit (i.e. death, retirement).

The disability benefit could be amended by basing the retirement pension of disability pensioners on the average wage *at the time of disablement*, with subsequent price indexing. This means that at age 65, the benefit would have the same purchasing power as it had at the time the person became disabled. This would link the retirement pension more closely to the work history of the disability recipient. This would not apply to those former disability beneficiaries already receiving a retirement pension.

This measure would reduce plan expenditures in 2030 by 1.1 per cent (or 0.15 of a percentage point if expressed as a percentage of contributory earnings).

Convert disability benefit to an actuarially reduced retirement pension at age 65

Since 1987, CPP retirement pensions can be taken as early as age 60. Few disability recipients opt for it, however, as the disability benefit is considerably larger than the comparable early retirement benefit for other workers and is not actuarially reduced at age 65 when it is converted to a full retirement pension. Disabled Canadians, therefore, receive, when they reach 65, more generous retirement benefits than workers who retire early and receive reduced benefits.

Converting the disability pension at age 65 to a retirement pension equivalent to an *actuarially reduced* early retirement pension would treat disabled persons at retirement commensurate with those who take early retirement. This would reduce CPP expenditures in 2030 by 2.7 per cent (or 0.39 of a percentage point expressed as a percentage of contributory earnings). This would not apply to people already age 65.

An alternative would be to permit only a partial drop-out of the years of disability when calculating the retirement benefit, rather than allowing all the years of disability to be dropped out in addition to the 15 per cent general drop-out.

Survivor benefits

CPP survivor benefits were designed in an era when most women did not work outside of the home. As such, when a contributor died, the plan provided the spouse at home, typically the wife, with a basic amount of income. Today, when 68 per cent of working-age women are in the work force, consideration could be given to redesigning CPP survivor benefits so that they reflect the changing realities and needs of today's families.

Fundamental reform would be complex and time consuming. It is beyond the timeframe of the current review.[1]

In the meantime, changes could be considered to the rules governing how much a person can receive when they are entitled to two kinds of benefits simultaneously from the CPP. Current beneficiaries would not be affected. Further, the elimination of the death benefit could be considered.

Combined benefit rules: survivor/disability and survivor/retirement

Under the CPP a surviving spouse can qualify for a disability or retirement benefit in addition to a survivor benefit. A ceiling has been placed on the amount of combined benefits that an individual can receive. Someone receiving combined survivor/retirement benefits is limited to a total amount equal to the maximum retirement

[1] The federal and provincial governments have agreed to continue the review of survivor benefits over the next one or two years.

benefit ($727 monthly in 1996). Similarly, someone under age 65 receiving both disability and survivor benefits is limited to the maximum disability pension (currently $871 a month) *plus* 25 per cent of the maximum retirement pension (currently $182 a month).

To reduce costs, combined benefit rules could be tightened. The ceiling on the combined disability/survivor benefit could be set at the level of the maximum disability pension alone. Also, current rates allow earnings-related benefits to "stack" together up to the maximum amount. As an alternative, a formula could provide only a portion of the two earnings-related amounts. Such a change in benefit rules would reduce plan expenditures in 2030 by 1.2 per cent (or 0.17 per cent of contributory earnings).

These changes would not apply to persons already receiving these combined benefits.

Death benefit

The CPP provides a one-time death benefit (to a maximum $3,540 in 1996) to the estate of a deceased contributor or pensioner. The purpose of this benefit is to defray funeral costs.

In 1966, when many elderly Canadians had few assets, this benefit filled a real need. Today, after three decades of rising incomes among the elderly and a need to limit escalating CPP costs, this benefit might be eliminated.

Eliminating this benefit would reduce plan expenditures in 2030 by 1.5 per cent; or 0.21 of a percentage point of contributory earnings.

Partial pensions

Although it would not result in reduced costs, another change to the CPP could be considered – whether Canadians who wish to make a gradual transition to retirement should be allowed to take a partial pension while continuing to work and earn further CPP pension credits.

Several European countries have introduced an element of flexibility into their public pension plans by allowing people who wish to make a gradual transition to retirement to take a partial pension. A similar scheme under the CPP could provide older workers with

a partial pension to help offset lower income from reduced employment. Recipients would continue their CPP contributions on the basis of their reduced employment earnings to help build up their CPP pension. This measure would recognize new realities in the labour force and could complement an increase in the age of entitlement, if this measure were adapted. Any measure to allow for partial pensions would have to be desinged in a way that would not add to the costs of the CPP.

Addressing the administrative and design complexities associated with this idea would be complex and time consuming. It is beyond the timeframe of the current review.

Summary of financial impacts of possible CPP measures

The following table summarizes the savings of the various measures discussed in this chapter. These savings cannot simply be added up because there is interaction among some of them. Also, some measures are alternatives to others.

Financial impacts of possible CPP measures

	Savings in 2030	
	As per cent of CPP expenditures	As reduction in pay-as-you-go rate
	(per cent)	
Retirement benefits		
Reduce income replacement rate to 22.5 per cent	8.8	1.25
Reduce drop out to 10 per cent over 5 years	2.2	0.31
Raise age of entitlement to 67	4.2	0.63
Index benefits in pay by CPI minus 1 per cent	9.0	1.28
Disability benefits		
Tighten administration	1.5	0.22
Lower benefit by 25 per cent of Workers Compensation	0.6	0.08
Stronger labour force link	1.2	0.17
Convert pension at age 65 to actuarially reduced pension	2.7	0.39
Base retirement pensions on YMPE at time of disablement	1.1	0.15
Survivor benefits		
New rule for combined benefits	1.2	0.17
Eliminate death benefit	1.5	0.21
CPP earnings base[1]		
Cut YBE to 5 per cent and index	-0.1	1.10
Freeze YBE at 1997 level	-0.2	1.63

[1] Savings as a per cent of CPP costs are negative because more people would be brought into the system, thus increasing expenditures. However, the pay-go rate would decline because the earnings base on which contributions are paid would expand.

6

Conclusion, next steps and key questions

The Canada Pension Plan was established 30 years ago to help provide working Canadians and their families with income for retirement, and with financial help in the event of death or serious disability. CPP, together with the Quebec Pension Plan has played an important role in improving the incomes of Canadian seniors. Canada's governments have been strongly committed to the CPP since its beginning, and remain so.

The way the CPP is financed, however, suited a Canada with much different social and economic conditions than those existing today. As a result of these changes and of a series of enrichments to CPP benefits over time, CPP costs are now projected to be much higher in the future than originally expected when the plan was launched 30 years ago.

The last actuarial report projects the cost of the CPP to be 14.2 per cent of contributory earnings in 2030. The architects of the CPP expected costs to rise to only 5.5 per cent by that time.

The table shows the reasons why expected costs have increased so much.

Projected CPP costs in year 2030

	Costs as a percentage of contributory earnings
Costs in 2030 as projected when CPP started	5.5
Changed demographics	2.6
Changed economics	2.2
Enrichment of benefits	2.4
Disability	1.5
Costs in 2030 as now projected	14.2

Source: Chief Actuary of the CPP.

There are serious concerns that future generations will be unable or unwilling to pay contribution rates in the 14 per cent range.

The federal and provincial governments, as stewards of the CPP, have issued this information paper to set the stage for Canadians to provide their views on how to restore fairness to the Canada Pension Plan, and to preserve it for future generations.

The paper outlines an approach to financing that would spread the cost of the CPP more fairly across generations. This would mean increasing contributions now to avoid even higher contributions later. As well, the paper describes a number of possible ways that costs could be lowered. This would mean reducing benefits, or access to benefits, in various ways so that the burden on future contributors would be lightened.

Consultations with Canadians are expected to begin in mid-March. In preparing for them, Canadians should consider the following important questions.

(1) CPP contribution rates are already legislated to increase in the years ahead, and will have to be increased even more. If nothing is done, rates will reach 14.2 per cent by 2030.

- How high can the rates go before they become unaffordable? beyond the limits of fairness?

(2) The cost of the CPP can be reduced and future increases in contribution rates moderated, by some combination of early increases in contribution rates and reduced benefits, or reduced access to benefits.

- What is the appropriate balance between contribution rate increases and changes to benefits?

(3) This paper has identified some ideas for reducing the cost of benefits.

- Are these the appropriate range of options to consider, or are there others?
- Of the ideas outlined, which ones are most appropriate? Least appropriate?

(4) If a fuller funding approach to the financing of the CPP were adopted, a much larger CPP fund would build up. The more the fund earns, the lower future contribution rates could be.

- Should CPP funds be invested so as to earn maximum returns? How could this be done?
- Are there other important considerations that should be taken into account in coming to a decision?

Annex A

Canada Pension Plan Fifteenth Actuarial Report Summary

(This summary was prepared by Finance Canada.)

The Canada Pension Plan (CPP) provides workers and their families with income for retirement, and with financial help if workers die or become disabled. The plan is financed entirely by contributions from workers and their employers and from interest on the accumulated plan reserves.

The Canada Pension Plan legislation contains a number of financing provisions:

- A 25-year schedule of contribution rates is set out in the legislation. In the existing schedule, the combined employer-employee contribution rate rises in steps from 5.4 per cent in 1995 to 10.1 per cent in year 2016 to pay for projected expenditures in the future. Expenditures are rising over time as Canada's population ages. This has been known for some time.
- Every five years, contribution rates must be reviewed by federal and provincial finance ministers to determine whether any adjustments to the schedule are necessary and to extend the schedule by five more years.
- In setting contribution rates, federal and provincial finance ministers are required to take into account the financing objectives of the plan: the fund should be targeted at approximately two years of

benefit payout over time, but it may vary from this target in order to moderate the effects on contribution rates of economic and demographic conditions.

- In order to ensure that federal and provincial ministers have up-to-date information on which to base their review, the legislation requires the federal government's Chief Actuary to prepare an actuarial report on the CPP prior to the review.

The Canada Pension Plan Fifteenth Actuarial Report (as at December 31, 1993) shows that expenditures will rise from 7.8 per cent of contributory earnings in 1995 to 14.2 per cent in year 2030, one percentage point higher than projected in the 14th actuarial report (as at December 31, 1991).

CPP expenditures as per cent of contributory earnings

Year	Previous 14th	New 15th	Difference
	(per cent of contributory earnings)		
1995	7.40	7.80	0.40
1996	7.37	7.85	0.48
2001	7.75	8.36	0.61
2006	8.28	9.11	0.83
2011	9.13	10.08	0.95
2016	10.22	11.26	1.04
2030	13.16	14.22	1.06

Notes:

1. Workers contribute to the CPP on their contributory earnings, i.e. their earnings between a basic exemption ($3,400 in 1995) and the maximum pensionable earnings ($34,900 in 1995), which corresponds to the average wage. Employers pay an equal amount.

2. Expenditures expressed as percentage of aggregate contributory earnings are "pay-as-you-go" rates, i.e. the contribution rates that would be required in any given year to exactly cover expenditures in that year.

The key development since the last report is that disability benefits are higher than expected.

- In 1989, the incidence of new disability cases was 4.28 per thousand persons for males and 2.99 per thousand for females. By 1994, this had increased to 6.34 for males and 5.79 for females.

- For purposes of the report, it is assumed that the recent higher incidence of disability cases will be a permanent feature of the CPP in the years to come. In the last report, the incidence of new disability cases was assumed to be 4.19 per thousand persons for males

and 2.14 for females for year 2000 and beyond. The 15th report assumes that the long-term incidence of new disability cases will be 5.5 per thousand for both sexes.

■ The average duration of disability benefits has also increased by about 6 per cent over that last six years. As a result, the 15th report assumes that the average duration of disability benefits in the long term will be 7.70 years instead of the 7.25 years assumed in the 14th report.

As well, the recession of the early 1990s led to lower earnings than had previously been projected. This, in turn, led to lower contributions than expected. As a result of the differences between projected and actual expenditures and contributions, the size of the CPP fund at the end of 1993 was some $800 million smaller than projected in the 14th report.

The new actuarial report also projects the fund to decline in 1994 and subsequent years. In 1995, expenditures are projected to be $16.5 billion and contributions are projected to be $11.4 billion. The $5.1 billion difference between expenditures and contributions will be made up by using all of the projected $4.4 billion in interest earnings and by drawing down the fund by $670 million.

If no changes are made to the remaining 20 years of the existing schedule of contribution rates, the CPP fund is projected to continue to decline gradually from $40.5 billion in 1995 until it is exhausted in 2015. Previously, the fund was projected to build gradually to $112 billion in 2016, an amount representing 1.65 years of projected expenditures.

Size of CPP fund under existing schedule of contribution rates

	Existing schedule of contribution rates		Size of CPP fund at end of period	
	Annual increment in contribution rate	Contribution rate at end of period	Previous 14th report	New 15th report
	(percentage point)	(per cent)	(as ratio to CPP expenditures)	
1992-96	0.20	5.60	2.47	2.14
1997-01	0.25	6.85	2.09	1.39
2002-06	0.25	8.10	1.90	0.83
2007-11	0.20	9.10	1.79	0.36
2012-16	0.20	10.10	1.65	-0.11

Hence, the financial projections in this report indicate that the contribution rate increases now scheduled to occur over the next 20 years are not sufficient to meet the plan's financing objectives if benefit provisions remain as they are.

Contribution rates that would be sufficient to finance the projected expenditures are shown in the following table. (They were calculated using the formula provided in the CPP regulations.) These benchmark contribution rates are provided, as required by the legislation, for the consideration of federal and provincial finance ministers in setting contribution rates for the next 25 years.

Benchmark schedule determined by formula

5-year period	Annual increment in contribution rate	Contribution rate at end of period	Increase over contr. rates in existing schedule	Size of CPP fund at end of period
	(percentage point)	(per cent)	(per cent)	(as ratio to CPP expenditures)
1997-01	0.39	7.55	0.70	1.64
2002-06	0.33	9.20	1.10	1.56
2007-11	0.27	10.55	1.45	1.66
2012-16	0.25	11.80	1.70	1.79
2017-21	0.20	12.80	–	1.86

Annex B

The disability benefit: the last decade

In 1987, amendments to the plan eased the contributory requirements for CPP disability benefits. Where a claimant had previously required a minimum of five years in the plan, the threshold was lowered to two of the last three calendar years, or five of the last ten calendar years.

In 1989, new administrative practice lines were introduced which allowed non-medical factors to be taken into account – for example, the unemployment rate in a region; the availability of particular sorts of jobs in a region; and a person's skills. As well, persons over age 55 were considered disabled if they could not do the *particular* job they had, as opposed to any job.

Legislation approved in 1992 provided a new opportunity for "late" applicants for disability benefits. Previously, there were contributors who would have been entitled to disability benefits except that they applied too late. The legislation now provides that eligibility can be determined retroactively to when such persons actually became disabled.

Since mid-1994, comprehensive measures have been implemented to respond to the continued increase in CPP disability applications. These have taken place at all points in the system – initial applications; appeals; reassessments; communications with clients; removal of work disincentives and encouraging return-to-work efforts. Partly as a result of these measures, the growth of the disability caseload had nearly ceased by the end of 1995.

The most significant of these measures has been the adoption of new guidelines for determining medical eligibility, based in part on recent judicial decisions of the Pension Appeals Board. These stress the medical basis of disability determination and rule out socio-economic factors in adjudicating applications.

A vigorous program of reassessments was instituted to identify beneficiaries whose medical condition has sufficiently improved to make them no longer eligible for benefits.

Communication with beneficiaries has also been significantly improved. Clients are advised that they have a responsibility to report any improvement in their medical condition or a return to work.

CPP has also made it easier for beneficiaries to return to work. Full-time volunteer work or school attendance will no longer result in automatic cancellation of benefits. A trial work period of three months is also now permitted.

In 1995, a CPP/UI data-match initiative was established to detect possible overlap between clientele of these programs. And QPP medical adjudicators have been involved in reviewing a sample of CPP files to determine possible differences in decision-making. Evaluations from all these initiatives will provide ongoing information for adjusting program administration.

Annex C

Detailed information on steady-state financing

Steady-state financing defined

The idea behind steady-state financing is simple: contribution rates would increase faster than currently legislated in the short term so that the CPP fund can be built up to help pay for benefits in the future and reduce contribution rates in the long term. Steady-state financing is a form of partial funding.

The steady-state rate is that constant contribution rate which would maintain an approximately constant portion of funding over the next century – that is, the fund would remain an approximately constant proportion of the total liabilities of the plan at any point in time. Technically, a steady-state contribution rate can be defined as that constant contribution rate which, after an increase in contribution rates from the current 5.6 per cent rate, would result in the ratio of the projected fund at the end of a year to projected expenditures in the following year to be the same in year 2030 as in year 2100.

The determinants of the steady-state rate

As noted in Chapter 4, the level of the steady-state contribution rate depends on how much benefit expenditures can be reduced, the rate of earnings that can be achieved by the fund, and how quickly contribution rates move to the steady-state rate.

Effect of the rate of return on the CPP fund

When evaluating pension plans, actuaries must make an assumption as to the rate of earnings that can be achieved on a plan's assets. In evaluating private employer-sponsored pension plans, most actuaries today assume real rates of return in the long term of 3.5 to 4 per cent. The steady-state rates shown in Chapter 4 were determined on the assumption that the CPP fund could achieve a rate of return in the middle of this range – 3.8 per cent. As shown in the following table, if a more prudent rate of return of 3 per cent were assumed in the actuarial calculations, the steady-state contribution rate would be about 0.6 of a percentage point higher. This holds for the existing plan or for a plan with reduced benefit expenditures.

In the future, if the rate of return on the fund turns out to be lower than what was assumed in setting contribution rates, future rates would have to be adjusted upwards. The greater the degree of funding, the more sensitive future contribution rates are to the rate of return on the fund.

Effect of benefit expenditures

The effect of reducing benefit expenditures was discussed in Chapter 4. For example, a 10 per cent reduction in benefit expenditures would reduce the steady-state contribution rate by 1.3 percentage points. A 15 per cent reduction in expenditures would reduce it by 1.9 percentage points.

Steady-state contribution rates with different rates of return on the fund

	Real rate of return of 3 per cent	Real rate of return of 3.8 per cent
	(per cent of contributory earnings)	
Existing plan	12.8	12.2
10 per cent reduced plan	11.5	10.9
15 per cent reduced plan	10.9	10.3

Effect of slower ramp-up to steady-state rate

The previous results were based on increases in contribution rates to reach the steady-state rate in six to eight years. If the ramp-up in contribution rates were slower, for example, nine to ten years, the steady-state rate would have to be a little higher.

As shown in the following table, a slower ramp would add about 0.2 percentage point to the long-term contribution rate. All future contributors would have to pay this higher rate.

Steady-state contribution rates with different rates of increase in the short term

	Ramp to reach steady-state rate in 6 years	Ramp to reach steady-state rate in 9 years
	(per cent of contributory earnings)	
1996	5.6	5.6
1997	6.0	6.0
1998	6.6	6.4
1999	7.4	6.8
2000	8.4	7.4
2001	9.6	8.0
2002	10.9[1]	8.6
2003		9.4
2004		10.2
2005		11.1[2]
2006	↓	↓
2030	10.9[1]	11.1[2]

[1] This rate is based on a reduction in benefits of 10 per cent. It would be 10.3 per cent if benefits were reduced by 15 per cent.

[2] This rate is based on a reduction in benefits of 10 per cent. It would be 10.5 per cent if benefits were reduced by 15 per cent.

Note: Based on a real rate of return of 3.8 per cent.

Impact of contribution rates on employers and employees

The following table shows the contributions that employers and employees together would pay if the contribution rates shown were applied to a worker earning the 1996 maximum pensionable earnings ($35,400) with the 1996 basic exemption ($3,500) – i.e. contributory earnings of $31,900. Contribution rates are now legislated to increase from 5.6 per cent in 1996 to 8.1 per cent in 2006. Under this schedule, maximum annual contributions will grow from $1,786 in 1996 to $2,580 in 2006. However, unless contribution rise faster than this, the CPP fund will be exhausted by year 2015 and contribution rates will have to rise sharply to 14.2 per cent by 2030.

The table also shows how contributions would rise under alternative ramps to a steady-state rate. If contribution rates are changed so that a steady-state is reached in six to eight years, additional contributions over those required by the existing schedule would be $50 in 1997 rising to $1,210 in year 2002. If contribution rates were increased so that a steady-state is reached in nine to ten years, additional contributions our those required by the existing schedule would be $50 in 1997 rising to $1,040 in year 2005.

Higher contributions over the next decade would result in lower contributions in the long term. For example, over the period 2030 to 2050, they would be about $1,000 lower each year.

Contributions paid by employers and employees

	Existing schedule		Ramp to steady-state in 6 years[1]		
	Existing contribution rate	Contributions at 1996 maximum pensionable earnings	Contribution rate	Contributions at 1996 maximum pensionable earnings	Additional contributions compared to existing schedule
	(per cent)	(dollars)	(per cent)	(dollars)	(per cent)
1996	5.6	1,786	5.6	–	–
1997	5.85	1,870	6.0	1,910	50
1998	6.1	1,950	6.6	2,210	160
1999	6.35	2,030	7.4	2,360	330
2000	6.6	2,110	8.4	2,680	570
2001	6.85	2,190	9.6	3,060	880
2002	7.1	2,270	10.9	3,480	1,210
2003	7.35	2,350	10.9	3,480	1,130
2004	7.6	2,420	10.9	3,480	1,050
2005	7.85	2,500	10.9	3,480	970
2006	8.1	2,580	10.9	3,480	890
2007	8.3	2,650	10.9	3,480	830
2008	8.5	2,710	10.9	3,480	770
2009	8.7	2,780	10.9	3,480	700
2010	8.9	2,840	10.9	3,480	640
2020	12.3[2]	3,920	10.9	3,480	-450
2030	14.2[2]	4,530	10.9	3,480	-1,050
2040	14.3[2]	4,560	10.9	3,480	-1,080
2050	14.1[2]	4,500	10.9	3,480	-1,020

[1] Based on a 10 per cent reduction in benefit expenditures and a real rate of return of 3.8 per cent.

[2] These are pay-as-you-go contribution rates, since the fund is projected to decline to zero if the existing schedule is not increased.

Contributions paid by employers and employees (Cont'd)

	Ramp to steady-state in 9 years[1]		
	Contribution rate	Contributions at 1996 maximum pensionable earnings	Additional contributions compared to existing schedule
	(per cent)	(dollars)	(dollars)
1997	6.0	1,910	50
1998	6.4	2,040	100
1999	6.8	2,170	140
2000	7.4	2,360	260
2001	8.0	2,550	370
2002	8.6	2,740	480
2003	9.4	3,000	650
2004	10.2	3,250	830
2005	11.1	3,540	1,040
2006	11.1	3,540	960
2007	11.1	3,540	890
2008	11.1	3,540	830
2009	11.1	3,540	770
2010	11.1	3,540	700
2020	11.1	3,540	-380
2030	11.1	3,540	-990
2040	11.1	3,540	-1,020
2050	11.1	3,540	-960

[1] Based on a 10 per cent reduction in benefit expenditures and a real rate of return of 3.8 per cent.

Annex D

Unfunded liabilities

For employer-sponsored pension plans, actuaries calculate the value of the fund that must be set aside to pay for all the benefits promised by the plan. The purpose of having a fund is to provide security to beneficiaries in case the plan sponsor is no longer able to pay into the plan.

Any shortfall between the assets in the plan and the value of all the promises of the plan is called an unfunded liability. (Federal and provincial legislation governing employer-sponsored pension plans set rules governing the way in which any unfunded liabilities which may arise are to be paid off.)

In a public pension system financed on a pay-as-you-go basis, like the CPP has been up to now, one can argue that there is no unfunded liability per se, as the security of the plan is based on the ability and willingness of each working generation to pay for the pensions of the preceding generations.

Some years ago, however, the Auditor General asked the chief actuary of the CPP to calculate an unfunded liability value as if the plan were fully funded. On this basis, the 15th actuarial report estimated that CPP had an unfunded liability of $488 billion at the end of December 1993. The chief actuary now estimates that the unfunded liability has since grown to $556 billion at the end of 1995, and, under the current schedule of contribution rates, would grow by about $50 billion a year.

This calculation takes account of the current CPP fund which totals a little over two years of benefits. If it were a fully funded plan, there would be about 30 years of benefits in the fund.

This unfunded liability is the result of two factors. First, full benefits were phased in over 10 years when CPP was created in 1966, rather than requiring people to contribute for some 35-40 years. Even persons retiring today have only paid into the plan for some 30 years, whereas those retiring in 2006 and beyond will need 40 years of contributions for a full pension.

Second, no one – past or present – has paid the full cost of their CPP benefits. Today, workers are paying 5.6 per cent of their earnings. The 15th Actuarial Report estimated that the "full-cost" contribution rate – that is, the contribution rate that someone entering the workforce at age 18 and working to the normal retirement age would have to pay each year to fully cover the cost of his or her pension – is 10.5 per cent.