CANADA PENSION PLAN

2021 to 2022

ANNUAL REPORT

Employment and Social Development Canada | Emploi et Développement social Canada

Canada

Annual report of the Canada Pension Plan for the 2021 to 2022 fiscal year

Note: In this report, the term "2021 to 2022 fiscal year" is used to refer to the fiscal year that began April 1, 2021 and ended March 31, 2022. The following is the annual report of the Canada Pension Plan for that fiscal year. All data and text in this report were written to reflect the Plan's state of affairs as at March 31, 2022.

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Her Excellency
The Governor General of Canada

Excellency:

We have the pleasure of submitting the Annual Report of the Canada Pension Plan for the fiscal year ending March 31, 2022.

Respectfully,

The Honourable Chrystia Freeland
Deputy Prime Minister
and Minister of Finance

The Honourable Steven MacKinnon
Minister of Labour and Seniors

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Fiscal year 2021 to 2022 at a glance

The maximum pensionable earnings of the Canada Pension Plan (CPP) increased from **$61,600** in 2021 to **$64,900** in 2022. The contribution rate for the **base CPP** remained unchanged at **9.9%**. The **CPP enhancement** continued its 7-year phase-in, which began on January 1, 2019, with a contribution rate of **1.5%** in 2022, for a combined contribution rate of **11.4%** in 2022.

In the fiscal year ending March 31, 2022:

CPP contributions[1] totalled $64.6 billion. An average of **6.4 million CPP beneficiaries** per month were paid, representing a total annual benefit value of **$52.9 billion**. **Those beneficiaries consist of:**

- **5.7 million** CPP retirement pensioners were paid **$41.9 billion[2]** and **1.8 million** post-retirement beneficiaries were paid **$932 million**
- **1.2 million** surviving spouses or common-law partners and **61,000** children of deceased contributors were paid **$5.1 billion**
- **332,000** people with disabilities and **79,000** of their children were paid **$4.7 billion**, and an additional **$40 million** was paid in post-retirement disability benefits
- **176,000** death benefits totalling **$454 million** were paid to the estates or next-of-kin of contributors

Operating expenses amounted to **$2.3 billion**, or **4.36%** of the **$52.9 billion** in benefits.

As at March 31, 2022, total CPP net assets were valued at **$548.1 billion**, of which **$539.3 billion** is managed by the Canada Pension Plan Investment Board (CPPIB) (operating as CPP Investments). The remaining **$8.8 billion** is managed by Employment and Social Development Canada (ESDC), which is responsible for the administration of the CPP program.

Note: Figures above have been rounded. A beneficiary may receive more than 1 type of benefit.

1 For more information on contributors, refer to the CPP Contributor's Report.

2 This amount is net of overpayments.

Canada Pension Plan in brief

Employees and self-employed people in Canada over the age of 18 contribute either to the CPP or to its sister plan, the Québec Pension Plan (QPP).

While the Government of Canada administers the CPP, it shares responsibility for the Plan with Canada's provincial governments. Québec manages and administers its own comparable plan, the QPP, and participates in decision-making for the CPP. The benefits of individuals who work and contribute to both the CPP and QPP over their careers are based on the sum of the contributions and credits accumulated under each plan.[3]

As of January 1, 2019, the CPP consists of 2 components:

- the base (or original) component, which began in 1966
- the enhanced component, which began in 2019 and serves as a top-up to the base

Note: More details are available in the CPP enhancement section, which appears later in this report.

Find more information on the **Québec Pension Plan**.

Contributions

The CPP is financed through mandatory contributions from employees, employers and self-employed people, and through the revenue earned on CPP investments. Workers start contributing to the Plan at age 18.[4] As shown in Table 1, the first $3,500 of annual earnings is exempt from contributions. Contributions are then made on earnings between $3,500 and $64,900 which is the year's maximum pensionable earnings (YMPE) for 2022.

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[3] In March 2022, almost 5% of CPP beneficiaries receive a benefit that includes past QPP contributions made at some point in their careers. A similar proportion (approximately 5%) of current CPP contributors have also contributed to the QPP at some point in their careers.

[4] Workers who were older than age 18 at the inception of the Plan started contributing on January 1, 1966.

As of January 1, 2022, employees contribute at a rate of 5.70% (4.95% to the base CPP and 0.75% to the CPP enhancement), and employers match that with equal contributions. Self-employed individuals contribute at the combined rate for employees and employers of 11.4% (9.9% to the base and 1.5% to the enhancement) on net business income, after expenses. The contribution rate will increase to 11.9% by 2023 (shared equally by employers and employees, while self-employed individuals contribute at the full rate).

In addition to providing retirement pensions, the CPP also provides disability, death, survivor, children's and post-retirement benefits.

Most benefit calculations are based on how much and for how long a contributor has paid into the CPP and at what age they begin to receive their pension. Generally, benefits are not paid automatically—everyone must apply. However, there are 2 exceptions:

- as of 2020, eligible seniors who have not yet started to collect their CPP retirement pension are proactively enrolled at age 70
- post-retirement benefits begin automatically the year after a worker made post-retirement contributions

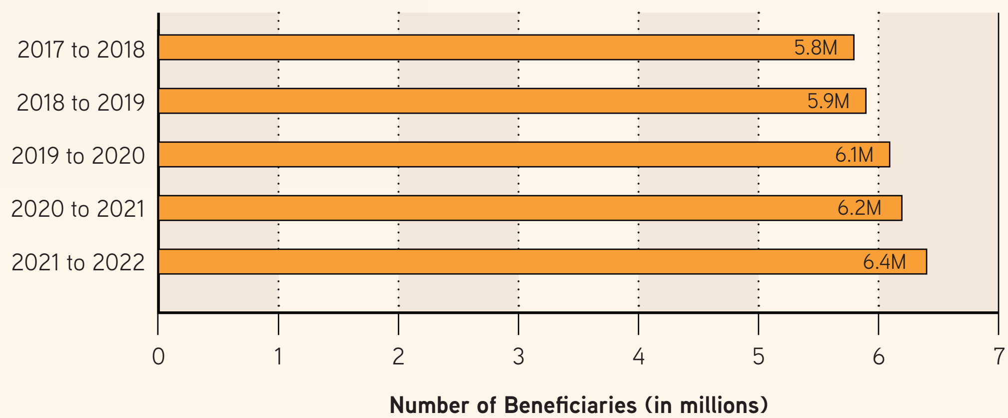
TABLE 1 **CPP contributions for 2022**

CPP contributions	Amount
Year's maximum pensionable earnings	$64,900.00
Year's basic exemption	$3,500.00
Year's maximum contributory earnings	$61,400.00
Year's maximum employee and employer contributions (5.70% each)	**$3,499.80**
Year's maximum self-employed person's contribution (11.4%)	**$6,999.60**

Beneficiaries and benefits

Given the aging of our population, the number of people receiving CPP benefits has increased steadily over the past decade. Expenditures on benefits have also increased. That increase reflects the increase in the number of beneficiaries, as well as the increase in value of the benefits paid to beneficiaries.[5]

FIGURE 1A **Number of CPP Beneficiaries by fiscal year (in millions)**



5 In this section, the monthly benefit amounts represent the average of the 12 monthly gross average amounts in the fiscal year, as determined from the CPP administrative data. Given that some individuals may have begun to collect or cease collecting their CPP benefits during the fiscal year, the average monthly payment amounts provided may not be equal to the total amount paid divided by the total number of beneficiaries, divided by 12.

FIGURE 1B Annual Benefit Expenditures by fiscal year (in $ billions)

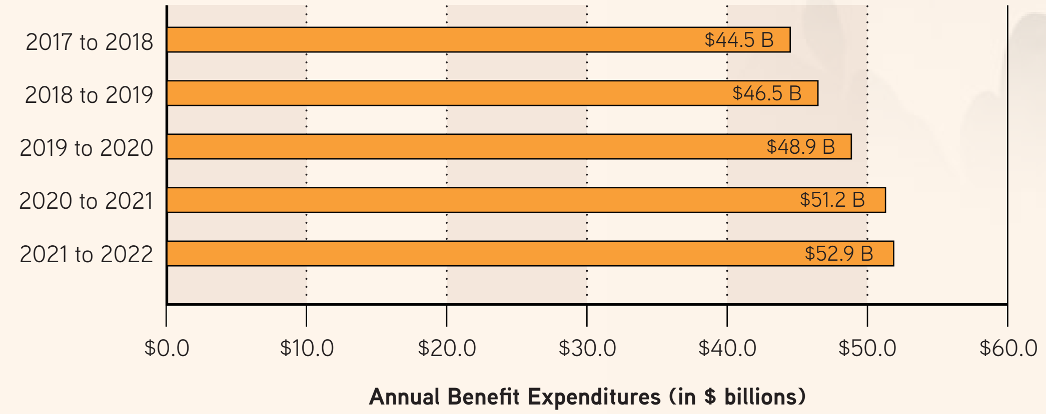
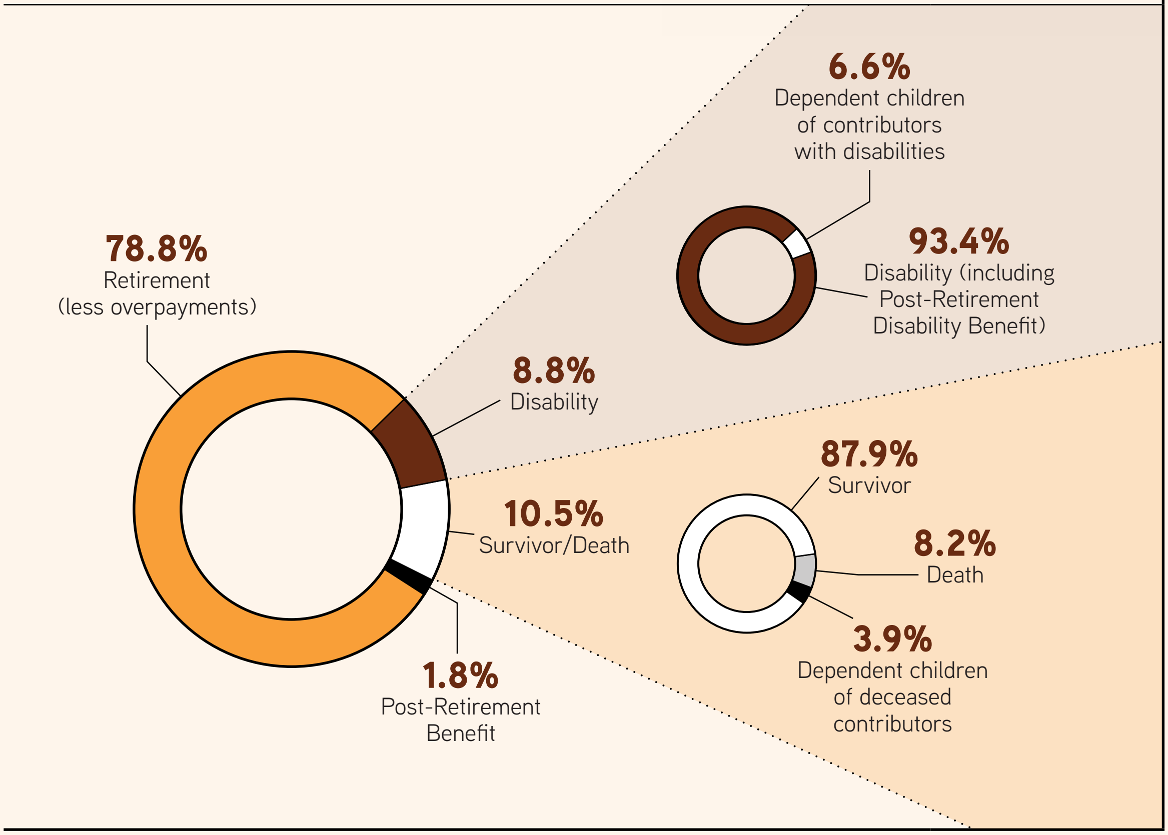


FIGURE 2 Percentage of expenditures by CPP benefit type in fiscal year 2020 to 2021



Source: Final audited consolidated financial statements of the CPP.
Note: Numbers may not add up to 100% due to rounding.

Retirement benefits

The CPP provides 2 retirement benefits:

- the CPP retirement pension
- the post-retirement benefit for individuals who continue to work and contribute while collecting the retirement pension

In the fiscal year ending March 31, 2022, retirement benefits (retirement pensions and post-retirement benefits[6]) represent 80.7% ($42.7 billion) of the total benefit amount paid out ($52.9 billion) by the CPP.

Retirement pensions

The monthly retirement pension is the CPP's primary benefit. To begin receiving a retirement pension, the applicant must have made at least 1 valid contribution to the Plan and must have reached the age of 60 (although the standard age is 65). The amount of the contributors' retirement pensions depends on how much and for how long they have contributed and at what age they begin to receive their pension.

In the fiscal year ending March 31, 2022, the CPP paid a total of $41.9 billion[7] in retirement pensions to 5.7 million pensioners. In January 2022, the maximum monthly retirement pension at age 65 was $1,253.59. The average monthly payment in fiscal year 2021 to 2022 was $614.38.

Adjustments for early and late receipt of a retirement pension

Canadians are living longer and healthier lives, and the transition from work to retirement is increasingly diverse. The CPP offers flexibility for older workers who are making the transition to retirement.

CPP contributors can choose when to start receiving their retirement pension based on their individual circumstances and needs. Contributors have the flexibility to take their retirement pension earlier or later than the standard age of 65. To ensure fair treatment of contributors and beneficiaries, people who take their retirement pension after age 65 receive a higher

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6 Less all net overpayments.

7 This net audited amount excludes all overpayments.

amount. This adjustment reflects the fact that these beneficiaries will, on average, contribute to the CPP for a longer period of time but receive their benefits for a shorter period of time. Conversely, those who take their retirement pension before age 65 receive a reduced amount, reflecting the fact that they will, on average, contribute to the CPP for a shorter period of time but receive their benefits for a longer period of time.

Retirement pension taken before age 65

The monthly pension amount for individuals who start receiving their retirement pension before age 65, is permanently reduced by 0.6% per month. This means that a contributor who starts receiving a retirement pension at age 60 receives an annual retirement pension that is 36% less than if it were taken at age 65.

Retirement pension taken after age 65

The monthly pension amount for individuals who start receiving their retirement pension after age 65 is permanently increased by 0.7% per month that they delay. This means that a contributor who delays receiving a retirement pension until age 70 receives an annual retirement pension that is 42% higher than if it were taken at age 65.

Because there is no additional financial advantage to waiting past age 70, as of 2020, individuals who have not yet applied for their retirement pension are proactively enrolled when they reach that age.

TABLE 2 **Maximum monthly retirement pension amounts taken from the ages of 60 and 70 for 2022**

Age	Maximum monthly retirement pension payment	Yearly adjustment
60	$802.00	-36.0%
61	$893.00	-28.8%
62	$983.00	-21.6%
63	$1,073.00	-14.4%
64	$1,163.00	-7.2%
65	$1,253.59	0.0%
66	$1,359.00	+8.4%
67	$1,464.00	+16.8%
68	$1,569.00	+25.2%
69	$1,675.00	+33.6%
70	$1,780.00	+42.0%

Note: Numbers in Table 2 have been rounded and calculated at the date the beneficiary turns the age referred to in the table (for example, at age 60 and 0 months).

Post-retirement benefits

The post-retirement benefit allows CPP retirement pension beneficiaries who keep working to increase their retirement income by continuing to contribute to the CPP, even if they are already receiving the maximum CPP retirement pension.

Contributions made while collecting a CPP or QPP retirement pension are treated differently than other contributions. Post-retirement contributions do not affect or change the amount of CPP retirement, disability or survivor's pensions, nor do they generate eligibility for a CPP survivor's pension or CPP disability pension. However, these post-retirement contributions can be used to qualify for the post-retirement disability benefit. Additionally, these contributions are not subject to division in the event of the end of a marriage or common-law relationship (this division is explained in greater detail in the section **Other Features: Credit Splitting**, later in this report).

Each year of post-retirement contributions results in a new post-retirement benefit that is payable the following year. This new post-retirement benefit is added to the individual's total CPP amount, which includes all previously earned post-retirement benefits. The amount of each post-retirement benefit increases annually with the cost of living and is payable until the death of the contributor. As each post-retirement benefit is based on a single year of contributions, a single individual could receive as many as 11 post-retirement benefits.

In the fiscal year ending March 31, 2022, 1.8 million CPP retirement pensioners received a total of $932 million in post-retirement benefits. The maximum monthly amount for a single post-retirement benefit at age 65 for 2022 was $36.26. The average monthly payment for a single post-retirement benefit in fiscal year 2022 was $14.54. However, many individuals make post-retirement contributions in multiple years and thus receive multiple post-retirement benefits. As a result, the average total monthly amount from the post-retirement benefit (reflecting the sum of their benefits) received was $46.70.

Disability benefits

The CPP administers the largest long-term disability plan in Canada. It provides 3 disability benefits:

- the monthly CPP **disability pension** provided to working-age contributors with sufficient recent contributions who have a severe and prolonged disability
- the **post-retirement disability benefit** provided to CPP retirement pension recipients under the age of 65 who meet the same disability criteria as the CPP disability pension
- a **flat-rate benefit provided to the dependent children** of beneficiaries with a disability

In the fiscal year ending March 31, 2022, a total of $4.7 billion in benefits were paid to 332,000 beneficiaries with a disability and to 79,000 children of beneficiaries with a disability. These benefits represented 8.8% of the total benefits paid out by the CPP in that year.

The disability pension includes a monthly flat-rate amount, which was $524.64 in 2022. It also includes an earnings-related portion that is equal to 75% of a retirement pension based on the individual's contributions to the Plan before the onset of their disability. In January 2022, the maximum disability pension was $1,464.83. The average monthly payment in fiscal year 2021 to 2022 was $976.41.

The post-retirement disability benefit was introduced in 2019 and provides income protection to CPP retirement pension recipients under the age of 65 who are found to have a disability.[8] It recognizes that many individuals make a gradual transition to retirement, such that they plan to continue to work and contribute to the Plan but may later become disabled. Eligible individuals receive the post-retirement disability benefit in addition to their retirement pension. The value of the post-retirement disability benefit amount is equal to the flat-rate component of the disability pension, which was $524.64 per month in 2022. A total of $40 million was paid in post-retirement disability benefits in fiscal year 2021 to 2022.

The benefit paid to dependent children of beneficiaries with disabilities is a flat-rate. In 2022, the amount was $264.53 per month. To be eligible, children must be under 18 years of age or under 25 and in full-time attendance at school or a post-secondary institution.

Survivor benefits

The CPP provides 3 survivor benefits:

- the monthly survivor's pension
- the flat-rate children's benefit provided to the dependent children of deceased beneficiaries
- the one-time, lump-sum death benefit

In the fiscal year ending March 31, 2022, a total of $5.6 billion in survivor benefits were paid. These benefits represented 10.5% of the total benefits paid out by the CPP in that year.

[8] Individuals who begin to receive their CPP retirement pension are no longer eligible to receive a CPP disability pension. An exception exists for individuals, whose disability began before the start of the retirement pension, allowing them to cancel their retirement pension in favor of a disability pension.

Survivor's pensions are paid to the surviving spouse or common-law partner of a contributor who made sufficient contributions to the Plan. In fiscal year 2021 to 2022, 1.2 million survivors received an average monthly pension of $344.46. The benefit amount varies depending on a number of factors, including the contributions the deceased made to the Plan, the age of the surviving spouse or common-law partner and whether the survivor also receives other CPP benefits.

The maximum survivor's pension for people under age 65 was $674.79 in January 2022. This included a flat-rate portion of $204.69 and an earnings-related portion, which is 37.5% of the deceased contributor's retirement pension. The maximum monthly amount at age 65 and over was $752.15, consisting of 60% of the deceased contributor's retirement pension.

There are special rules used to combine the CPP survivor's pension with either the retirement or the disability pension resulting in a single combined benefit.

The benefit paid to dependent children of deceased contributors is a flat-rate. In 2022, the amount was $264.53 per month. In fiscal year 2021 to 2022, 61,000 children of deceased contributors received this benefit. To be eligible, children must be under 18 years of age or under 25 and in full-time attendance at school or a post-secondary institution.

The CPP death benefit is a lump-sum payment provided to the estate of the contributor. For individuals that died prior to 2019, the death benefit amounted to 6 times the amount of the deceased contributor's monthly retirement pension, up to a maximum of $2,500. However, for individuals that died on or after January 1, 2019, the value of the death benefit is no longer based on earnings but is a flat-rate of $2,500. In fiscal year 2021 to 2022, the average death benefit payment was $2,495.54.[9]

Benefit summary

For up-to-date information on CPP amounts, refer to the **Canada Pension Plans and the Old Age Security Quarterly Reports**.

[9] This average amount is less than $2,500.00 because of benefits paid for deaths that occurred before changes that came into effect on January 1, 2019.

TABLE 3 Monthly payments by benefit type

Benefit type	Maximum monthly amount in January 2022	Average monthly amount (for fiscal year 2021 to 2022*)
Retirement pension	$1,253.59**	$614.38
Post-retirement benefit	$36.26**	$14.54
Disability pension	$1,464.83	$976.41
Benefit for children of disabled contributors	$264.53	$259.25
Benefit for children of deceased contributors	$264.53	$259.29
Survivor's pension – 65 and over	$752.15	$321.27
Survivor's pension – younger than 65	$674.79	$450.96
Death benefit (one-time payment)	$2,500.00	$2,495.54

* **Note:** The average amounts reported are the averages of the monthly gross average entitlement amount and do not represent the total benefit amounts paid for the fiscal year divided by the number of beneficiaries.

** **At age 65.**

Benefit protection provisions

The CPP includes provisions that help to compensate for periods when individuals may have relatively low or no earnings.

Under the base CPP, the value of a pension is based on the contributor's average earnings across their lifetime. For this reason, dropping periods of low or no earnings from the calculation will increase the average, and therefore, the amount of the base component of one's CPP benefit.

The calculation of benefits under the enhanced component of the CPP follows a different formula. However, the CPP enhancement provides similar protection by means of "drop-in" provisions that credit individuals with earnings in certain circumstances.

General drop-out provision

In the base component of the CPP, the general drop-out provision helps to offset periods of low or no earnings due to unemployment, schooling or other reasons. Up to 17% of a person's contributory period with the lowest earnings, representing a maximum of 8 years, can be dropped from the benefit calculation. This increases the benefit amount for most people.

Over 65 drop-out provision

In the base component of the CPP, the over 65 drop-out provision allows periods of relatively low earnings before age 65 to be replaced by higher earnings after age 65. It may help to increase the benefit amounts of individuals who continue to work and make CPP contributions after reaching age 65, but do not yet receive the CPP retirement pension.

Unlike the base CPP, which uses the average of an individual's earnings across their entire careers and then applies drop-outs, the value of the enhanced component of CPP benefits is based on an individual's best 40 years of earnings. The enhancement's 40-year calculation largely replicates the effects of the base CPP's general drop-out and over 65 drop-out provisions.

For a contributor who begins their pension at the standard age of 65, the best 40-year calculation will exclude the 7 years with the lowest earnings between the age of 18 and 65 from the calculation of the enhanced component of their pension, similar to the general drop-out in the base CPP.

The best 40-year calculation also allows an individual who continues to work and contribute after age 65 to use those later-life earnings to replace earlier years of lower earnings, similar to the over-65 drop-out in the base CPP.

Child-rearing provisions

In the base component of the CPP, the child-rearing drop-out provision excludes from the calculation of benefits the periods during which contributors took time off work, or reduced their participation in the workforce, to care for children under the age of 7. Every month until the child reaches 7 years of age can be excluded from the benefit calculation for a contributor who is eligible for this provision. In addition to increasing the amount of benefits, this provision may also assist people applying for survivor or disability benefits in meeting the contributory requirements for eligibility.

In the enhanced component of the CPP, the child-rearing drop-in provision will provide credits to the parents of young children who took time off work or reduced their participation in the labor force to care for children under the age of 7. Specifically, a credit is provided (or dropped in) for every year in which the parent provides care for a child under 7 years of age, if this credit is higher than the parent's actual earnings in that year. The value of the credit is based on the parent's earnings in the 5 years before the birth or adoption of the child. These dropped in credits will increase the parent's average earnings, which will increase the value of the enhanced component of their CPP benefits.

Disability exclusion and disability drop-in

In the base component of the CPP, periods during which individuals are disabled in accordance with the CPP legislation are not included in their contributory period. This ensures that individuals who are not able to pursue any substantial gainful work are not penalized.

In the enhanced component of the CPP, individuals who develop a disability in 2019 or later will have a credit "dropped in" for the months that they have a disability in accordance with the CPP legislation. The value of the credit is based on the individual's earnings in the 6 years before they develop a disability. These credits will be used to calculate the individual's retirement pension or any subsequent survivor's pension.

Other features

The CPP also includes many progressive features that recognize family and individual circumstances. These features include pension sharing, credit splitting, portability and indexation.

Indexation

CPP payments are indexed to the cost of living. Benefit amounts are adjusted in January of each year to reflect increases in the Consumer Price Index published by Statistics Canada. This means that as CPP beneficiaries age, the purchasing power of their CPP benefits are protected against inflation. In January 2022, benefits were indexed at a rate of 2.7%.

Pension sharing

Pension sharing allows spouses or common-law partners who are together and receiving their CPP retirement pensions to share a portion of each other's pensions. This feature also allows 1 pension to be shared between them even if only 1 person has contributed to the Plan. The amount that can be shared depends on the time the couple has lived together while contributing to the CPP. Pension sharing affords a measure of financial protection to the lower-earning spouse or common-law partner. Also, while it does not increase or decrease the overall pension amount paid, it may result in tax savings. Each person is responsible for any income tax that may be payable on the pension amount they receive.

Credit splitting

When a marriage or common-law relationship ends, the CPP credits accumulated by the couple during the time they lived together can be divided equally between them, if requested by or on behalf of either spouse or common-law partner. This is called "credit splitting." Credits can be split even if only 1 partner contributed to the Plan. Credit splitting may increase the amount of CPP benefits payable, or even create eligibility for benefits. It may also reduce the amount of benefits for 1 of the former partners. Credit splitting permanently alters the record of earnings, even after the death of a former spouse or common-law partner.

Portability

No matter how many times workers change jobs, and no matter in which province they work, CPP and QPP coverage is uninterrupted. Furthermore, CPP and QPP benefits will be paid to you no matter where you reside in the world.

Canada Pension Plan enhancement

The Government of Canada worked with the provinces and territories to strengthen the retirement income system by enhancing the CPP. Following a historic agreement in principle, in June 2016, by Canada's ministers of Finance, the CPP enhancement took effect on January 1, 2019.

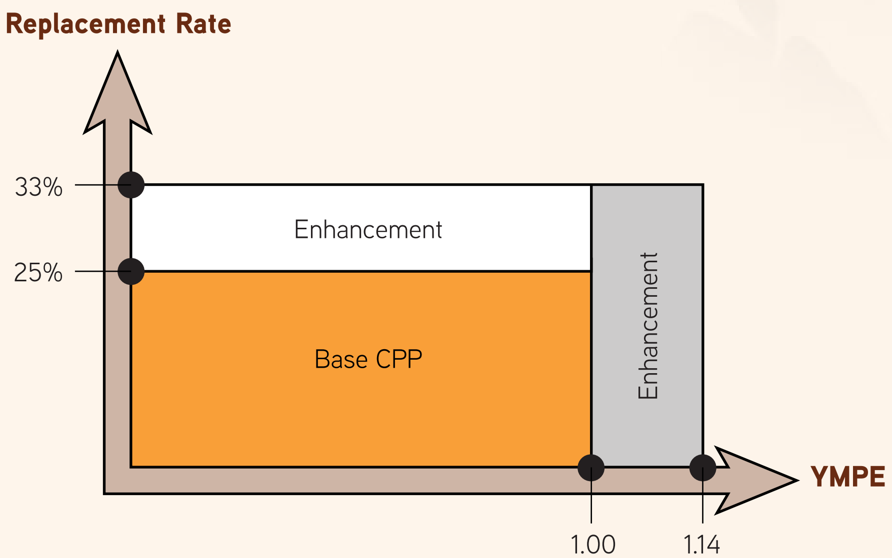
The CPP enhancement was designed to complement the base (or original) CPP. It serves as a top-up to the original part of the Plan, which first began in 1966. The CPP enhancement was designed to be fully funded, which means that benefits under the enhancement will build up gradually over time as individuals work and contribute. Each year of contributions to the enhanced CPP will allow workers to accrue partial additional benefits. Fully enhanced benefits will become available after about 40 years of contributions.

As indicated in figure 3, the fully enhanced CPP retirement pension will replace one-third of a contributor's eligible average earnings, up from the original one-quarter. The upper limit of eligible earnings covered by the CPP will also increase by 14%. Together, these changes, will gradually increase the maximum retirement pension by about 50%.

The enhancement will also increase post-retirement benefits and both the disability and survivor's pensions, based on the individual's contributions.

The enhancement does not affect eligibility for CPP benefits or the amount of benefits that individuals are already receiving. Individuals who did not work and make contributions to the CPP in 2019 or later are not affected by the enhancement.

FIGURE 3 Illustration of enhancement replacement rate and year's maximum pensionable earnings (YMPE)

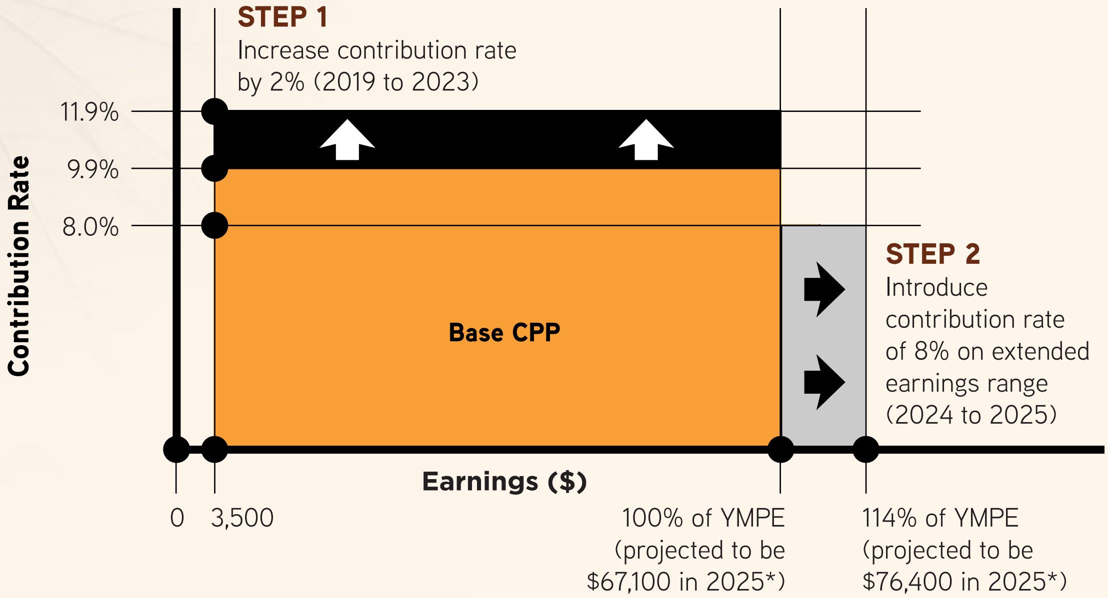


Contributions under the CPP enhancement

The enhancement's implementation began its 7-year phase-in in 2019. The changes to contributions are indicated in figure 4 and include the following key elements:

- the CPP contribution rate that is applied to the current eligible earnings range (from $3,500 to the upper limit, which is set at $64,900 in 2022) is increasing by 2 percentage points compared to the base CPP. This means the contribution rate will gradually increase from 9.9% to 11.9% by 2023 (shared equally by employers and employees, while self-employed individuals contribute at the full rate)
- in 2024, workers will begin contributing on an additional range of earnings. This range will start at the current earnings limit, called the YMPE, and will extend to a new limit that is 7% higher by 2024 and then 14% higher in 2025 and thereafter. The contribution rate on earnings in this new range will be 8% (shared equally by employers and employees, with self-employed individuals contributing at the full rate)

FIGURE 4 Illustration of phase-in of contributions



* Office of the Chief Actuary projection in the ***Thirtieth Actuarial Report on the Canada Pension Plan as at 31 December 2018***.

Find more information on the **CPP enhancement**.

International social security agreements

Many individuals have lived or worked in Canada and in other countries. Consequently, Canada has entered into social security agreements with other countries to help people in Canada and abroad to qualify for CPP benefits and pensions from partner countries. In March 2022, 14,366 individuals received CPP benefits as a result of an international social security agreement. Further, social security agreements enable Canadian companies and their employees who are sent to work temporarily outside of Canada to continue to contribute to the CPP and eliminate the need to contribute to the social security program of the other country for the same work.

As of March 31, 2022, Canada has concluded social security agreements with 61 countries, of which 60 are in force (consult Table 4). Negotiations towards social security agreements are ongoing with many other countries.

Canada has concluded social security agreements with the following countries:

TABLE 4 Social security agreements

Country	Date of entry into force of the agreement	Country	Date of entry into force of the agreement
Albania	August 1, 2022	Estonia	November 1, 2006
Antigua and Barbuda	January 1, 1994	Finland	February 1, 1988
Australia	September 1, 1989	France	March 1, 1981
Austria	November 1, 1987	Germany	April 1, 1988
Barbados	January 1, 1986	Greece	May 1, 1983
Belgium	January 1, 1987	Grenada	February 1, 1999
Brazil	August 1, 2014	Hungary	October 1, 2003
Bulgaria	March 1, 2014	Iceland	October 1, 1989
Chile	June 1, 1998	India	August 1, 2015
China*	January 1, 2017	Ireland	January 1, 1992
Croatia	May 1, 1999	Israel*	September 1, 2003
Cyprus	May 1, 1991	Italy	January 1, 1979
Czech Republic	January 1, 2003	Jamaica	January 1, 1984
Denmark	January 1, 1986	Japan	March 1, 2008
Dominica	January 1, 1989	Jersey and Guernsey	January 1, 1994

TABLE 4	**Social security agreements** *(continued)*		
Country	**Date of entry into force of the agreement**	**Country**	**Date of entry into force of the agreement**
Korea (Republic of)	May 1, 1999	**Romania**	November 1, 2011
Latvia	November 1, 2006	**Saint Lucia**	January 1, 1988
Lithuania	November 1, 2006	**Saint Vincent and the Grenadines**	November 1, 1998
Luxembourg	April 1, 1990	**Serbia**	December 1, 2014
Malta	March 1, 1992	**Slovak Republic**	January 1, 2003
Mexico	May 1, 1996	**Slovenia**	January 1, 2001
Morocco	March 1, 2010	**Spain**	January 1, 1988
Netherlands	October 1, 1990	**St. Kitts and Nevis**	January 1, 1994
New Zealand	May 1, 1997	**Sweden**	January 1, 1986
North Macedonia (Republic of)	November 1, 2011	**Switzerland**	October 1, 1995
Norway	January 1, 1987	**Trinidad and Tobago**	July 1, 1999
Peru	March 1, 2017	**Türkiye**	January 1, 2005
Philippines	March 1, 1997	**United Kingdom***	April 1, 1998
Poland	October 1, 2009	**United States of America**	August 1, 1984
Portugal	May 1, 1981	**Uruguay**	January 1, 2002

* The social security agreements with China, Israel and the United Kingdom provide an exemption from the obligation to contribute to the social security system of the other country for employers and their employees temporarily posted abroad. These agreements do not contain provisions concerning eligibility for pension benefits.

In addition, a social security agreement has been signed with Argentina. It will enter into force once legal procedures have been completed in both countries.

Collecting and recording contributions

All CPP contributions are remitted to the Canada Revenue Agency (CRA). The CRA also assesses and verifies earnings and contributions, advises employers and employees of their rights and responsibilities, conducts audits and reconciles reports and T4 slips. To verify that contributory requirements are met, the CRA applies a compliance and enforcement process that can vary from a computerized data match to an on-site audit.

As of March 31, 2022, the CRA reported that there are 2,147,145 employer accounts. In the fiscal year ending March 31, 2022, the CRA conducted 4,986 examinations to promote compliance with the requirements to withhold, report and remit employer source deductions. In this fiscal year, employers and employees accounted for approximately 95% of contributions, and the remaining 5% came from the self-employed. In fiscal year 2021 to 2022, contributions amounted to $64.6 billion.

Services to contributors and beneficiaries

Within ESDC, Service Canada provides Canadians with easy single point access to a wide range of government services and benefits.

In fiscal year 2021 to 2022, Service Canada continued its efforts to ensure that eligible Canadians are receiving public pension benefits to which they are entitled, and to encourage them to actively plan and prepare for their retirement. Information on the CPP is available on the internet, by phone, in person at Service Canada Centres and through scheduled and community outreach.

Service Canada promotes the use of online services through:

- targeted mailing of inserts, including seasonal mailing such as at tax-filing period
- messaging added to correspondence to Canadians
- messaging promoted through the Government of Canada website
- messaging provided by telephone through its pensions call centre network
- information provided in person by employees at Service Canada Centres

Service Canada continues to advance its e-service agenda through enhancements to the online My Service Canada Account (MSCA). CPP clients can securely access their personal information online. MSCA provides a single point of access for people to apply for a CPP retirement pension. In fiscal year 2021 to 2022, approximately 158,000 people, representing 52% of all applications, applied for their CPP retirement pension online last year.

Using MSCA, CPP clients can:

- update their mailing address, telephone numbers and direct deposit information, if they live in Canada
- view and print copies of their tax slips for the current year and the previous 6 years
- view and print an official copy of their statement of contributions
- view the last 2 years of their payments
- print a benefit attestation letter
- apply for a voluntary federal income tax deduction
- add, modify or delete their consent to communicate information to an authorized person acting on their behalf

- apply for the CPP disability benefit
- upload documentation to support their CPP disability paper or online application
- submit their request for reconsideration of an initial decision made on their application for CPP or CPP-disability benefits/pensions/provisions
- submit their Declaration of Attendance at School or University online and upload a proof of enrolment to renew or re-establish their children's benefit

Since May 2021, individuals can also submit a CPP Survivor's Pension, CPP Death Benefit, and Child(ren's) Benefit application online through their MSCA. Since October 2021, individuals can also complete the online CPP Credit Split Form through their MSCA. More information is available on the **Service Canada** page.

For Service Canada, the successful launch of these initiatives supports improved service delivery to Canadians, including to some of Canada's most vulnerable citizens.

Processing benefits

Service Canada continues to deliver the CPP through a network of 10 processing centres located across the country. In fiscal year 2021 to 2022, Service Canada:

- processed approximately 7.9 million transactions, including 1.7 million transactions to put clients into pay for the first time and to renew benefits, and another 6.2 million benefit adjustments or account revisions
- made over 74.9 million payments valued at $52.9 billion to approximately 6.4 million beneficiaries, including $4.7 billion to 411,000 CPP disability beneficiaries
- supported 158,000 Canadians to apply for CPP retirement benefits online and fully automated the adjudication of 981,000 new post-retirement benefits
- answered 2.3 million CPP and Old Age Security enquiries through its specialized call centre agents and resolved 3.2 million calls through its interactive voice response system

The timely payment of CPP benefits remains a priority. Overall, Service Canada aims to pay eligible clients their CPP retirement pension within their first month of entitlement with an objective of achieving this 90% of the time. In fiscal year 2021 to 2022, the Department exceeded this objective and put 96% of clients in pay for their first month of entitlement (consult Table 5).

The Department continues to be committed to enhancing the delivery of the CPP disability benefits to make it easier for Canadians to access the benefits that they are entitled to. Service Canada has updated the CPP Disability Toolkit to help individuals, people supporting them in the application process, health care professionals, and non-government organizations access all required program information through a single document. Service Canada is actively modernizing pensions' correspondence to improve communication to pension beneficiaries through existing pension programs correspondence, including the CPP disability program. This includes simplifying, enhancing, and ensuring plain language in correspondence to clients.

TABLE 5 **Canada Pension Plan service standards**

Service standard	National objective	2021 to 2022 National result	Average processing time
CPP retirement benefit application Benefits are paid within the first month of entitlement	90%	96%	15 calendar days
CPP disability benefit application Decision is made within 120 calendar days of receiving a complete application	80%	87%	63 calendar days
CPP disability benefit for applicants with a terminal illness Decision is made within 5 business days of receiving a complete application	95%	92%	3 business days
CPP disability benefit for applicants with a grave medical condition Decision is made within 30 calendar days of receiving a complete application	80%	96%	12 calendar days
CPP disability benefit reconsiderations Decision is made within 120 calendar days of receiving the reconsideration request	80%	75%	94 calendar days

Appeals process

Clients who are not satisfied with a decision on their CPP application may ask the Minister of ESDC to reconsider, or administratively review, that decision. Clients may ask for reconsideration of their eligibility for a CPP benefit or the amount of the benefit.

Clients who are not satisfied with the Minister's reconsideration decisions concerning CPP benefits may appeal to the Social Security Tribunal of Canada (SST).

The SST is an independent administrative tribunal that makes decisions on social security appeals related to the Canada Pension Plan, the *Old Age Security Act* and the *Employment Insurance Act*.

The SST consists of 2 separate divisions: the **General Division** and the **Appeal Division**. The General Division is composed of 2 sections: Income Security and Employment Insurance.

The **General Division Income Security** section hears both CPP appeals and Old Age Security (OAS) appeals. The **Appeal Division** hears appeals from the General Division.

The SST has **service standards** of how many days it should take to complete appeals under normal circumstances (consult Table 6). The SST continues to assign **navigators** to guide under-represented appellants through the appeal process and it has expanded the service to include more appeal types. The SST continues to offer videoconference hearings from personal devices as an alternative to in-person hearings. The use of alternative dispute resolution at the Appeal Division simplifies and shortens the appeal process.

TABLE 6 **Appeal service standards**

Service standard	Objective	2021 to 2022 result	Average processing time
General Division – CPP appeals Complete decisions within 70 days of the parties being ready for a hearing	80%	54%	78 calendar days
General Division – CPP appeals Complete decisions within 30 days of the date the hearing is held	80%	77%	23 calendar days
Appeal Division – CPP appeals Make a decision on permission to appeal within 45 days of an appeal being filed	80%	94%	23 calendar days
Appeal Division – CPP appeals Make a final decision within 150 days of leave to appeal being granted	80%	91%	103 calendar days

Find more information on the Social Security Tribunal appeal service standards.

General Division Income Security

In fiscal year 2021 to 2022, the General Division Income Security section received 2,417 new appeals. Of those appeals, 2,189 were related to CPP benefits. As of March 31, 2022, the General Division Income Security section concluded 2,095 appeals, of which 1,866 related to CPP benefits. As of March 21, 2022, the General Division Income Security section had 2,318 active appeals, of which 2,043 related to the CPP benefit.

Appeal Division

In fiscal year 2021 to 2022, the Appeal Division received 172 appeals of decisions from the General Division Income Security section. Of these appeals, 133 were related to CPP benefits. As of March 31, 2022, the Appeal Division concluded 165 appeals, of which 130 related to CPP benefits. As of March 31, 2022, the Appeal Division Income Security section had 47 active appeals, of which 35 were related to CPP benefits.

Ensuring program integrity

To ensure the accuracy of benefit payments, the security and privacy of personal information and the overall quality of service, ESDC continues to enhance the efficiency, accuracy and integrity of its operations through various business improvement measures.

Meeting the expectations of Canadians, that government services and benefits are delivered to the right person, for the right amount, for the intended purpose and at the right time while ensuring responsible stewardship of program funds and protecting personal information, is a cornerstone of ESDC's service commitment. Enhanced and modernized integrity-related activities within the CPP are essential to meeting these expectations and ensuring the public's trust and confidence in the effective management of this program, ESDC remains committed in it's ongoing work to analyse and implement solutions, changes and improvement that enable this.

Integrity-related activities detect anomalies and potential issues with existing benefits and investigate them to bring resolution. This reduces program costs by preventing incorrect payments and identify systemic impediments to clients receiving their correct and full benefit entitlement. This is achieved with risk-based analysis measures, ensuring that appropriate and effective controls are in place, that causes of incorrect payments are identified and mitigated. Integrity-related activities also make use of modern analytical techniques to improve business intelligence and ensure that errors and fraud are managed throughout the program's life cycle.

As part of its effort to address overpayment situations, ESDC conducts reviews of benefit entitlements and investigations to address situations in which clients are suspected of receiving benefits to which they are not entitled. These activities resulted in $14.7 million in accounts receivable as overpayments in fiscal year 2021 to 2022. In addition, integrity-related activities prevented an estimated $22.5 million from being incorrectly paid in fiscal year 2021 to 2022 and a further estimated $62 million from being incorrectly paid in future years. The recovered overpayments are credited to the CPP, thereby helping to maintain the long-term sustainability of the Plan.

The mitigation of risks associated with false or inaccurate claims regarding the identity of an individual or an organization is fundamental to the integrity of the CPP program. This is why the Department has a sound identity management which starts with the Social Insurance Number (SIN) Program and extends to a policy for the registration, authentication and validation of identity across service delivery channels (in person, phone, mail and online).

This means clients know what is expected from them when asked to confirm their identity. The CPP program validates client's information against the Social Insurance Register which contains verified identity information that was validated against provincial source documents through the Vital Event Linkages initiative.

The Department also provides guidance and tools to staff responsible for identity management practices and monitors outcomes for the ongoing refinement of identity management policy instruments. This approach enhances data integrity and quality, improves security and the protection of personal information, and enhances the service experience for clients by reducing errors and eliminating inefficiencies, which could affect wait times for benefits.

Ensuring financial sustainability

As joint stewards of the CPP, Canada's federal and provincial finance ministers review the CPP's financial state every 3 years and make recommendations as to whether benefits and/or contribution rates should be changed. This process is referred to as the CPP triennial review. As of January 1, 2019, both components of the CPP – the base and the enhancement – are part of the review.

The ministers of Finance make their recommendations based on a number of factors, including the results of an examination of the CPP by the Chief Actuary of the Government of Canada. The Chief Actuary is required under the legislation to produce an actuarial report on the CPP every 3 years (in the first year of the legislated ministerial triennial review of the Plan). The CPP legislation also provides that, upon request from the federal Minister of Finance, the Chief Actuary prepare an actuarial report any time a bill is introduced in the House of Commons that has, in the view of the Chief Actuary, a material impact on the estimates in the most recent triennial actuarial report. This reporting ensures that the long-term financial implications of proposed changes to the Plan are given timely consideration by the ministers of Finance.

Changes to the CPP legislation governing the level of benefits or the rate of contributions and changes to the *Canada Pension Plan Investment Board Act* can be made only through an act of Parliament. Any such changes also require the agreement of at least $^{2}/_{3}$ of the provinces, representing at least $^{2}/_{3}$ of the population of the provinces.[10] The changes come into force only after a notice period, unless all of the provinces waive this requirement, and only after provinces have provided formal consent to the changes by way of orders-in-council. Québec participates in decision-making regarding changes to the CPP legislation to ensure a high degree of portability of QPP and CPP benefits across Canada, however, they do not have a role in governance of the CPPIB.

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[10] While territorial governments participate in the CPP Triennial Review process and are part of the discussion surrounding potential changes, their formal approval is not required to make major changes to the Plan, per the division of powers under the Constitution. All workers in Canada outside the province of Québec, including those in the territories, participate in the CPP.

Funding approach

When it was introduced in 1966, the CPP was designed as a pay-as-you-go plan with a small reserve. This meant that the benefits for 1 generation would be paid largely from the contributions of later generations. This approach made sense under the demographic and economic circumstances of the time, due to the rapid growth in wages and labour force participation as well as the low rates of return on investments. However, demographic and economic developments, as well as changes to benefits and an increase in disability claims in the following 3 decades, resulted in significantly higher costs. Starting in the mid-1980s, the finances of the CPP came under increasing pressure as assets declined and increases in contribution rates became necessary. In 1993, it was projected that the pay-as-you-go rate would be 14.2% by 2030 and that the reserve fund would be depleted by 2015. Continuing to finance the CPP on a pay-as-you-go basis would have meant imposing a heavy financial burden on the future Canadian workforce. This was deemed unacceptable by the federal and provincial governments.

Amendments were therefore made in 1997 to gradually raise the level of CPP funding. Changes were implemented to: increase the contribution rates over the short term, reduce the growth of benefits over the long term, and invest cash flows not needed to pay benefits in the financial markets through the CPPIB in order to achieve higher rates of return. A further amendment was included to ensure that any increase in benefits or new benefits provided under the CPP would be fully funded.

The reform package agreed to by the federal and provincial governments in 1997 included the introduction of dual funding objectives for the Plan at the time (for the base CPP):

- **the introduction of steady-state funding:** this replaced pay-as-you-go financing to build a reserve of assets and stabilize the ratio of assets to expenditures over time. Steady-state funding is based on a constant contribution rate that finances the base CPP without the full-funding requirement for increased or new benefits
- **the introduction of full funding for new or increased benefits:** this means that changes to the base CPP that increase or add new benefits are fully funded. In other words, benefit costs are paid as benefits are earned, and any costs associated with benefits that are already earned but not paid for are amortized and paid for over a defined period of time, consistent with common actuarial practice

The sum of the steady-state and full-funding rates is the minimum contribution rate required to fund the base CPP. So long as the base CPP's minimum contribution rate remains below the legislated contribution rate of 9.9%, the base component of the CPP is considered to be sustainable over the long term.

If the Chief Actuary determines that the base CPP is not sustainable – that is to say, that the minimum contribution rate is higher than the legislated contribution rate, then the ministers of Finance have a limited window in which to make changes to the Plan that restore its sustainability. Should the ministers of Finance not agree on a course of action, then automatic provisions in the CPP legislation would be triggered to sustain the base CPP. Specifically, an increase in the legislated rate would be phased in over 3 years, and indexation of benefits in pay would be suspended until the following triennial review.

The dual funding objectives for the base CPP of steady-state and full funding were introduced to improve fairness across generations. The move to steady-state funding eases some of the contribution burden on future generations. Under full funding, each generation that receives benefit enrichments is more likely to pay for them in full and not pass on the cost to future generations.

In keeping with the dual funding nature of the Plan, the CPP enhancement is fully funded to ensure fairness across generations. The CPP enhancement is designed so that the additional contributions along with projected investment income will be sufficient to fully pay the projected benefits at the legislated first and second additional contribution rates.

The *Additional Canada Pension Plan Sustainability Regulations*, which came into force on February 1, 2021, set forth what happens if the CPP enhancement is not sustainable under the legislated additional contribution rates.

These new regulations will apply only if the additional minimum contribution rates deviate to a certain extent and for a certain amount of time from their respective legislated rates and no action is taken by the ministers of Finance to address the deviation. In such case, adjustments would be made to current and future benefits and possibly to the additional contribution rates.

Actuarial reporting on the financial state of the CPP

The *Thirtieth Actuarial Report on the Canada Pension Plan as at 31 December 2018*,[11] prepared by the Office of the Chief Actuary, was tabled by the federal Minister of Finance in Parliament on December 10, 2019. This report was the first triennial CPP actuarial report to be in respect of both the base and enhanced components of the Plan, in accordance with the CPP legislation.

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[11] The *Thirtieth Actuarial Report on the Canada Pension Plan as at 31 December 2018* was prepared before the COVID-19 pandemic occurred and, as a result, does not reflect the potential impacts of the pandemic on the financial state of the CPP. The actual and projected impacts of the pandemic will be reflected in future CPP actuarial reports.

For both the base and additional components of the CPP, the Chief Actuary determines the minimum contribution rates required in accordance with regulations and states these rates in the actuarial report. The most recent regulations are the *Calculation of Contribution Rates Regulations, 2021*, which came into force on February 1, 2021.

The minimum contribution rates stated in the *Thirtieth Actuarial Report on the Canada Pension Plan as at 31 December 2018* were determined in accordance with the *Calculation of Contribution Rates Regulations, 2018*, which are identical to the 2021 Regulations that subsequently received formal provincial and federal approval.

For the base component of the CPP, the minimum contribution rate is 9.75% for years 2022 to 2033 and 9.72% for 2034 and thereafter. This rate is the sum of the base CPP steady-state and full-funding contribution rates. The steady-state contribution rate is determined to be 9.71% for 2022 and thereafter. The full-funding rate in respect of base CPP amendments is determined to be 0.04% for years 2022 to 2033 and 0.01% for 2034 and thereafter.

For the additional (enhanced) component of the CPP, the first and second additional minimum contribution rates are determined to be 1.98% for the year 2023 and thereafter, and 7.92% for 2024 and thereafter, respectively. The first additional minimum contribution rate for 2022 is determined to be 1.49%.

According to the financial projections of the *Thirtieth Actuarial Report on the Canada Pension Plan as at 31 December 2018*, the annual amount of contributions paid by Canadians into the base component of the CPP is expected to exceed the annual amount of expenditures (benefits paid out and operating expenditures) until 2021 inclusive, and to be less than the amount of expenditures thereafter. For the additional component of the CPP, contributions paid are projected to exceed expenditures until the year 2057 inclusive, and to be less than the amount of expenditures thereafter. Funds not immediately required to pay expenditures are transferred to the CPPIB according to different investment portfolios for the base and additional components of the Plan.

The assets under the base component of the CPP are expected to increase significantly over the next decade and then to continue increasing, but at a slower pace. Under the legislated contribution rate of 9.9%, the ratio of assets to the following year's expenditures is projected to slowly grow from a level of 7.5 to 9.5 over the long term. The accumulation of base CPP assets will help pay for benefits as the population continues aging and more and more baby boomers begin to collect their retirement pensions.

In 2022 and thereafter, as a result of the aging population, the amount of base CPP expenditures is projected to exceed contributions. When this occurs, investment income from the Plan's accumulated assets will provide the funds necessary to make up the difference. However, contributions will remain the main source of funding for benefits for the base Plan. The Report concludes that, despite the projected substantial increase in benefits paid as a result of an aging population, the base CPP legislated contribution rate of 9.9% exceeds the minimum contribution rate and the base CPP is expected to meet its obligations over the long term.

Assets under the additional component of the CPP are expected to increase rapidly over the next several decades as contributions are projected to exceed expenditures. The ratio of assets to the following year's expenditures is projected to increase rapidly until 2025 and then decrease after that, reaching a level of about 26 by 2075 and remaining at that level up to 2095. Due to the financing approach of the additional Plan, investment income will become a major source of revenues for it. Demographic changes affecting the base CPP, particularly the aging of the population and retirement of the baby boomers, will also affect the additional CPP, but to a lesser extent than the base CPP due to the different financing approaches of the 2 plans.

The Report confirms that the legislated first additional contribution rate of 2.0% for the year 2023 and thereafter and second additional contribution rate of 8.0% for 2024 and thereafter are sufficient, along with projected investment income, to fully pay the projected expenditures of the additional CPP over the long term. Further, the legislated additional rates are sufficiently close to the minimum rates such that no action is needed to address the differences.

The previous triennial report was the *Twenty-Seventh Actuarial Report on the Canada Pension Plan as at 31 December 2015*, which was tabled in Parliament on September 27, 2016. The CPP statute was subject to a series of amendments since that report. The effects of the amendments on the CPP were provided in supplemental actuarial reports.

The *Thirtieth Actuarial Report on the Canada Pension Plan as at 31 December 2018* takes into account all the amendments. It also takes into account the *Calculation of Contribution Rates Regulations, 2018* and the *Additional Canada Pension Plan Sustainability Regulations*, mentioned above.

A panel of 3 independent actuaries, which was selected based on recommendations of the United Kingdom Government Actuary's Department, reviewed the *Thirtieth Actuarial Report on the Canada Pension Plan as at 31 December 2018*. The external panel's findings confirmed that the work performed by the Office of the Chief Actuary on the Report complied with all professional standards of practice and statutory requirements. The external panel also concluded that the methods and assumptions used for the Report were reasonable, confirming that the legislated contribution rates are sufficient to finance the CPP over the long term.

In addition to these main conclusions, the panel made a number of recommendations regarding the various aspects of the actuarial report, including data, assumptions, uncertainty, reporting, internal training and model documentation. The Government Actuary's Department affirmed that the reviewers carried out a sufficiently thorough review and that the work performed was appropriate and reasonable. As a result, Canadians can have confidence in the results of the *Thirtieth Actuarial Report on the Canada Pension Plan as at 31 December 2018* and the conclusions reached by the Chief Actuary about the long-term financial sustainability of the CPP.

The next triennial actuarial report on the CPP, which will report on the financial state of the base and additional components of the Plan as of December 31, 2021, is due by December 2022.

To view CPP actuarial reports, studies and reviews, consult the **Office of the Chief Actuary's website**.

Financial accountability

The CPP uses the accrual basis of accounting for revenues and expenditures. This method gives administrators a detailed financial picture and allows accurate matching of revenue and expenditures in the year in which they occur.

CPP accounts

Two separate accounts, the CPP Account and the Additional CPP Account, have been established in the accounts of the Government of Canada to record the financial elements of the base CPP and the enhanced CPP respectively (such as contributions, interest, earned pensions and other benefits paid, as well as administrative expenditures). The CPP accounts also record the amounts transferred to, or received from, the Investment Board. Spending authority, as per sections 108(4) and 108.2(4) of the CPP Legislation, is limited to the CPP net assets, which includes both accounts. It is important to note, however, that funds cannot be transferred between accounts such that the base CPP will be wholly funded from the CPP Account, while the enhancement will be funded from the Additional CPP Account. The CPP assets are not part of the federal government's revenues and expenditures.

In keeping with *An Act to amend the Canada Pension Plan and the Canada Pension Plan Investment Board Act*, which came into force on April 1, 2004, CPPIB is responsible for investing the remaining funds after the CPP operational needs have been met. The CPP Accounts' operating balances are managed by the Government of Canada.

CPP Investment Board

Created by an act of Parliament in 1997, the CPPIB is a professional investment management organization with a critical purpose: to help provide a foundation on which Canadians build financial security in retirement. The assets of the CPP not currently needed to pay pension, disability and survivor benefits are managed by CPPIB.

The organization is accountable to Parliament and to Canada's ministers of Finance, however it is governed independently from the CPP and operates at arm's length from governments. CPPIB's legislated mandate is to maximize investment returns without undue risk of loss. In doing so, it is required to act in the best interest of contributors and beneficiaries, and to take into account factors that may affect the funding of the CPP and its ability to meet its financial obligations.

CPPIB is headquartered in Toronto with offices around the world.

Find more information on the **CPPIB mandate, governance structure and investment policy**.

CPP assets and cash management

Pursuant to section 108.1 of the Canada Pension Plan and an administrative agreement between the CPP and CPPIB, amounts not required to meet specified obligations of the CPP are transferred weekly to CPPIB in order to gain a better return. The cash flow forecasts of the CPP determine the amount to be transferred to or from CPPIB.

ESDC continues to work closely with CPPIB, various government departments and banks to coordinate these transfers and manage a tightly controlled process. A control framework is in place to ensure that the transfer process is followed correctly and that all controls are effective. For instance, ESDC obtains confirmation at all critical transfer points and can therefore monitor the cash flow from one point to the next.

CPP net assets

In fiscal year 2021 to 2022, the CPP Fund grew to $548.1 billion. The Government of Canada held $8.8 billion of these assets to meet CPP pensions, benefits and operating expenses obligations. The remaining $539.3 billion is managed by CPPIB. In terms of net assets, the CPP Fund ranks as one of the world's largest retirement funds.

For the 10-year period ending March 31, 2022, the Fund held by CPPIB had an annualized net nominal rate of return of 10.8%. Over that 10-year period, the organization has contributed $329 billion in cumulative net income to the Fund, after all costs.

Investing for our future

CPPIB made the strategic decision in 2006 to move away from largely index-based investments towards the more active selection of investments in order to capitalize on its comparative advantages. CPPIB benefits from the CPP Fund's exceptionally long investment horizon, certainty of assets and scale. It has also developed a world-class investment team, which is complemented with top-tier external partners that support its internal capabilities. CPPIB takes a disciplined, prudent, long-term approach to managing the portfolio.

In managing the Fund, CPPIB pursues a diverse set of investment programs that stabilize performance and contribute to the long-term sustainability of the CPP. CPPIB ensures that the Fund has both asset and geographic diversification to make the Fund more resilient to single-market volatility. In order to build a diversified portfolio of CPP assets, investments are made in public equities, private equities, real estate, infrastructure and fixed income instruments. The investments have become increasingly international, benefitting from positive global growth in the world's largest investment markets, and fostering greater resiliency during periods of slow growth within specific regions.

CPPIB reporting

CPPIB reports its financial performance on a quarterly and annual basis. Legislation requires the organization to hold public meetings every 2 years in each province, excluding Québec, which operates the separate Québec Pension Plan.

The purpose of these meetings is for CPPIB to present its most recent annual report and to provide the public with the opportunity to ask questions about its policies, operations and future plans.

Other expenses

CPP expenses consist of pensions and benefits paid, operating expenses and benefit overpayments as detailed in the CPP consolidated statement of operations for the year ended March 31, 2022.

Operating expenses

CPP operating expenses of $2.3 billion in fiscal year 2021 to 2022 represent 4.35% of the $52.9 billion in benefits paid. Table 7 presents the CPP's operating expenses for the last 2 years.

TABLE 7 CPP operating expenses for fiscal years 2021 to 2022 and 2020 to 2021

Department, Agency, Crown Corporation	2021 to 2022 in millions of dollars	2020 to 2021 in millions of dollars
CPPIB*	1,428	1,417
Employment and Social Development Canada	546	527
Canada Revenue Agency	273	289
Treasury Board Secretariat	32	29
Administrative Tribunals Support Service of Canada	18	17
Public Services and Procurement Canada	6	5
Office of the Superintendent of Financial Institutions (where the Office of the Chief Actuary is housed)/Finance Canada	3	3
Total	**2,306**	**2,287**

* The operating expenses do not include the transaction costs and investment management fees since these are presented as part of net investment income (loss). For more details, refer to the "Canada Pension Plan consolidated statement of operations" and the financial statements of the CPPIB's Annual Report.

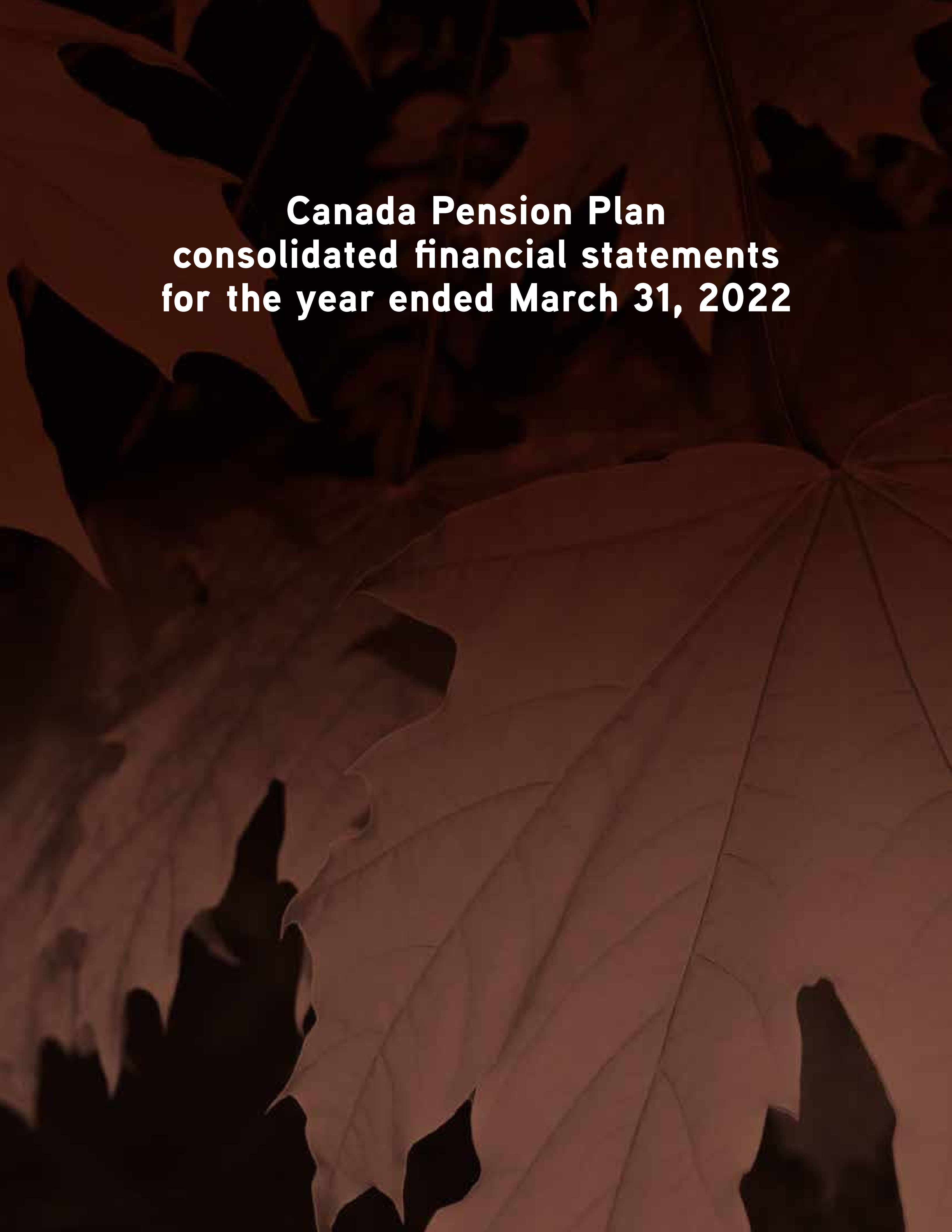
Overpayment of benefits

Consistent with its mandate to manage the CPP effectively, ESDC has procedures in place to detect benefit overpayments. During fiscal year 2021 to 2022, overpayments totaling $129 million were detected, $77 million in overpayments were recovered and debts of $4 million were forgiven. The above figures represent a net increase of $48 million in the accounts receivable for the year.

Looking to the future

The Canada Pension Plan is reviewed by ministers of Finance every 3 years to ensure that it continues to meet the evolving needs of Canadians. The 2019 to 2021 Triennial Review began in late 2019, following the tabling of the ***Thirtieth Actuarial Report on the Canada Pension Plan as at December 31, 2018***. The 2019 to 2021 Triennial review concluded on January 15, 2022, with no changes required to the plan.

Canada Pension Plan consolidated financial statements for the year ended March 31, 2022



Employment and Social Development Canada

Emploi et Développement social Canada

Canada Pension Plan

Canada Pension Plan

Consolidated Financial Statements for the year ended March 31, 2022

Canada

Canada Pension Plan
Management's Responsibility for Financial Statements

The consolidated financial statements of the Canada Pension Plan are prepared in accordance with the *Canada Pension Plan* by the management of Employment and Social Development Canada. Management is responsible for determining that the applicable financial reporting framework is acceptable and is responsible for the integrity and objectivity of the information in the consolidated financial statements, including the amounts which must, of necessity, be based on best estimates and judgment. The significant accounting policies are identified in Note 2 to the consolidated financial statements. The financial information presented throughout the Annual Report is consistent with the consolidated financial statements.

To fulfill its accounting and reporting responsibilities, management has developed and maintains books of account, financial and management controls, information systems and management practices. These systems are designed to provide reasonable assurance that financial information is reliable, that assets are safeguarded and that transactions are properly authorized and recorded in accordance with the *Canada Pension Plan*, the *Canada Pension Plan Investment Board Act* and the *Financial Administration Act* and their accompanying regulations.

The Auditor General of Canada, the external auditor of the Canada Pension Plan, conducts an independent audit of the consolidated financial statements in accordance with Canadian generally accepted auditing standards and provides a report to the Minister of Employment, Workforce Development and Disability Inclusion.

Robertson, Karen Digitally signed by Robertson, Karen Date: 2022.08.29 14:57:24 -04'00'	Tremblay, JeanFrancois 0 Digitally signed by Tremblay, JeanFrancois 0 Date: 2022.08.31 08:56:26 -04'00'
Karen Robertson, CPA, CMA Chief Financial Officer Employment and Social Development Canada	Jean-François Tremblay Deputy Minister Employment and Social Development Canada

Gatineau, Canada
August 31, 2022

Office of the Auditor General of Canada
Bureau du vérificateur général du Canada

INDEPENDENT AUDITOR'S REPORT

To the Minister of Employment, Workforce Development and Disability Inclusion

Opinion

We have audited the consolidated financial statements of the Canada Pension Plan, which comprise the consolidated statement of financial position as at 31 March 2022, and the consolidated statement of operations, consolidated statement of changes in financial assets available for benefit payments and consolidated statement of cash flow for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements of the Canada Pension Plan for the year ended 31 March 2022 are prepared, in all material respects, in accordance with the basis of accounting described in Note 2 to the consolidated financial statements.

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Consolidated Financial Statements* section of our report. We are independent of the Canada Pension Plan in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Emphasis of Matter - Basis of Accounting

We draw attention to Note 2 to the consolidated financial statements, which describes the basis of accounting. The consolidated financial statements are prepared to assist management of the Canada Pension Plan in complying with the financial reporting provisions of the *Canada Pension Plan* legislation. As a result, the consolidated financial statements may not be suitable for another purpose. Our opinion is not modified in respect of this matter.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation of the consolidated financial statements in accordance with the basis of accounting described in Note 2 to the consolidated financial statements, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Canada Pension Plan's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Canada Pension Plan or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Canada Pension Plan's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Canada Pension Plan's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Canada Pension Plan's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Canada Pension Plan to cease to continue as a going concern.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Canada Pension Plan to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision, and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Mathieu Le Sage, CPA, CGA
Principal
for the Auditor General of Canada

Ottawa, Canada
31 August 2022

Canada Pension Plan
Consolidated Statement of Financial Position
As at March 31

	2022	2021
	(in millions of dollars)	
Financial assets		
Cash (Note 3)	**404**	364
Receivables (Note 4)	**9,444**	6,159
Investments (Note 6)	**678,874**	595,952
Pending trades receivable (Note 6)	**7,964**	2,663
	696,686	605,138
Liabilities		
Payables and accrued liabilities (Note 8)	**1,632**	1,466
Investment liabilities (Note 6)	**123,304**	98,158
Pending trades payable (Note 6)	**24,168**	3,191
	149,104	102,815
Financial assets available for benefit payments	**547,582**	502,323
Non-financial assets		
Premises, equipment and others	**496**	505
Assets available for benefit payments	**548,078**	502,828

Actuarial obligation in respect of benefits (Note 13)
Contractual obligations and commitments (Note 14)
Contingent liabilities (Note 15)

The accompanying notes are an integral part of these consolidated financial statements.

Approved by:

Robertson, Karen
Digitally signed by Robertson, Karen
Date: 2022.08.29 14:57:39 -04'00'

Karen Robertson, CPA, CMA
Chief Financial Officer
Employment and Social Development Canada

Tremblay, JeanFrancois 0
Digitally signed by Tremblay, JeanFrancois 0
Date: 2022.08.31 09:53:41 -04'00'

Jean-François Tremblay
Deputy Minister
Employment and Social Development Canada

Canada Pension Plan
Consolidated Statement of Operations
for the year ended March 31

	Budget 2022	Actual 2022	Actual 2021[1]
	(Note 9)	(in millions of dollars)	
Revenues			
Contributions	65,882	**64,640**	55,331
Net investment income			
Investment income (Note 10)		**36,319**	86,802
Investment-related expenses (Note 10)		**(475)**	(1,535)
	24,770	**35,844**	85,267
	90,652	**100,484**	140,598
Expenses			
Pensions and benefits			
Retirement	43,230	**41,856**	40,281
Survivor	4,922	**4,885**	4,808
Disability	4,529	**4,355**	4,441
Disabled contributor's child	347	**312**	318
Death	440	**454**	432
Orphan	225	**219**	211
Post-Retirement	-	**932**	799
Post-Retirement Disability	-	**40**	37
Net overpayments (Note 4)	-	**(125)**	(112)
	53,693	**52,928**	51,215
Operating expenses (Note 11)	2,070	**2,306**	2,192
	55,763	**55,234**	53,407
Net increase in assets available for benefit payments	34,889	**45,250**	87,191
Assets available for benefit payments, beginning of year	502,828	**502,828**	415,637
Assets available for benefit payments, end of year	537,717	**548,078**	502,828

1 Certain comparatives have been reclassified to conform to the current year's presentation.

The accompanying notes are an integral part of these consolidated financial statements.

Canada Pension Plan
Consolidated Statement of Changes in Financial Assets Available for Benefit Payments
for the year ended March 31

	Budget 2022	**Actual 2022**	Actual 2021
	(Note 9)	(in millions of dollars)	
Net increase in assets available for benefit payments	34,889	**45,250**	87,191
Changes in non-financial assets	-	**9**	(10)
Increase in financial assets available for benefit payments	34,889	**45,259**	87,181
Financial assets available for benefit payments, beginning of year	502,323	**502,323**	415,142
Financial assets available for benefit payments, end of year	537,212	**547,582**	502,323

The accompanying notes are an integral part of these consolidated financial statements.

Canada Pension Plan
Consolidated Statement of Cash Flow
for the year ended March 31

	2022	2021
	(in millions of dollars)	
Cash flows from operating activities		
Net increase in assets available for benefit payments	**45,250**	87,191
Adjustments for non-cash items:		
Amortization of premises and equipment	**61**	60
(Gains) on debt financing liabilities (Note 6j)	**(4,137)**	(3,751)
Adjustments for net changes in operating assets and liabilities:		
(Increase) in investments	**(82,922)**	(60,488)
(Increase) Decrease in pending trades receivable	**(5,301)**	4,281
Increase (Decrease) in investment liabilities	**17,429**	(26,958)
Increase (Decrease) in pending trades payable	**20,977**	(2,511)
(Increase) Decrease in other assets and receivable	**(3,288)**	209
Increase in accounts payable and accrued liabilities	**166**	98
	(11,765)	(1,869)
Cash flows from financing activities		
Proceeds from debt financing liabilities (Note 6j)	**17,229**	12,839
Repayments of debt financing liabilities (Note 6j)	**(5,375)**	(11,034)
	11,854	1,805
Cash flows from capital activities		
Acquisitions of premises and equipment	**(49)**	(45)
	(49)	(45)
Net increase (decrease) in cash	**40**	(109)
Cash, beginning of year	**364**	473
Cash, end of year	**404**	364

The accompanying notes are an integral part of these consolidated financial statements.

1. Authority, Objective and Responsibilities

a) Description of the Canada Pension Plan

The Canada Pension Plan (CPP) is a federal/provincial plan established by an Act of Parliament in 1965 and its operations began in 1966. It is a compulsory and contributory social insurance program operating in all parts of Canada except Quebec, which operates the Québec Pension Plan (QPP), a comparable program.

The CPP's objective is to provide a measure of protection to workers and their families against the loss of earnings due to retirement, disability or death. The CPP is financed by contributions and investment returns. Employers and employees pay contributions equally to the CPP. Self-employed workers pay the full amount.

The CPP is administered by the Government of Canada (GoC) and the provinces. The Minister of Employment, Workforce Development and Disability Inclusion is responsible for the administration of the CPP, under the *Canada Pension Plan*; the Minister of National Revenue is responsible for collecting contributions. The Minister of Finance and her provincial counterparts are responsible for setting CPP contribution rates, pension and benefit levels and funding policy.

The CPP Investment Board (CPPIB), known as CPP Investments in the CPPIB Annual Report, is a federal crown corporation that was established in December 1997 pursuant to the *Canada Pension Plan Investment Board Act* (CPPIB Act) and its transactions are governed by the *CPPIB Act* and its accompanying regulations. CPPIB's assets are to be invested with a view to achieving a maximum rate of return without undue risk of loss, with regard to the factors that may affect the funding of the CPP and its ability to meet its financial obligations on any given business day.

Under section 108.1 and 108.3 of the *Canada Pension Plan*, CPPIB is responsible for managing the amounts that are being transferred from the CPP that are not immediately needed to pay CPP pensions, benefits and operating expenses. It acts in the best interests of the beneficiaries and contributors under the *Canada Pension Plan*.

CPPIB and its wholly-owned subsidiaries are exempt from Part I income tax under paragraph 149(1)(*d*) of the *Income Tax Act* (Canada) on the basis that all of the shares of CPPIB are owned by Her Majesty the Queen in right of Canada.

CPPIB is designed to operate at arm's length from the government. It is required to be accountable to the public, to Parliament (through the federal Minister of Finance) and to the provinces. It provides regular reports of its activities and the results achieved. The financial statements of CPPIB are audited annually by an external firm and are included in its annual report.

As stated in the *Canada Pension Plan*, changes to the CPPIB Act and major changes to the *Canada Pension Plan* require the agreement of at least two-thirds of the provinces, representing at least two-thirds of the population of all the provinces.

On December 15, 2016, the *Canada Pension Plan*, the CPPIB Act and the *Income Tax Act* (Canada) were amended to reflect the CPP enhancement (Additional CPP). The CPP enhancement is being implemented through a phased-in approach over a 7-year period which began on January 1, 2019. It increases the amount of CPP contributions and the corresponding pensions and post-retirement benefits that will be paid on CPP contributions made after December 31, 2018.

As a result, the CPP consists of two separate accounts, one for the base CPP (CPP Account) and one for the additional CPP (Additional CPP Account), collectively referred to as the CPP Accounts, where the financial activities are recorded in the Account to which they relate (Note 17). The financial transactions affecting the CPP Accounts are governed by the *Canada Pension Plan* and its regulations. Pursuant to subsections 112(1) and 112(2) of the *Canada Pension Plan*, one set of annual financial statements is published on a consolidated basis to include the accounts of the CPP and CPPIB.

b) Pensions and Benefits

Retirement pensions – According to the provisions of the *Canada Pension Plan*, a retirement pension is payable to CPP contributors who have made at least one valid contribution to the Plan. The monthly pension consists of three components: (i) a base component equal to 25% of the contributor's average monthly pensionable earnings below the annual threshold during the pensionable period; (ii) a first additional component equal to 8.33% of the average of the contributor's 480 highest monthly pensionable earnings during the pensionable period, which began in January 2019; and (iii) a second additional component equal to 33.33% of the average of the contributor's 480 highest monthly additional pensionable earnings during the pensionable period, which begins in January 2024.

The normal age to begin collecting the retirement pension is 65. However, contributors can either elect to take an actuarially-reduced pension as early as age 60, or an actuarially-increased pension as late as age 70. The maximum monthly pension payable at age 65 in 2022 is $1,253.59 (2021 –$1,203.75).

Post-retirement benefits – According to the provisions of the *Canada Pension Plan*, a post-retirement benefit (PRB) is payable to each individual between the ages of 60 and 70 who has continued to work and has made contributions to the Plan while collecting their CPP or QPP retirement pension. Contributions are mandatory for working retirement pension recipients until the age of 65, at which point they may elect to cease contributing. Contributions are no longer allowed after reaching age 70. The PRB becomes payable the year after contributions were made. The maximum monthly PRB at age 65 in 2022 is $36.26 (2021 – $30.09).

Disability pensions – According to the provisions of the *Canada Pension Plan*, a disability pension is payable to a working-age contributor who meets both the medical and contributory requirements. The amount of the disability pension to be paid includes a flat rate portion and an amount equal to 75% of the earned retirement pension. The disability pension ends automatically at age 65, when recipients are automatically converted to receive the retirement pension. The maximum monthly disability pension in 2022 is $1,464.83 (2021 – $1,413.66).

Post-retirement disability benefits – According to the provisions of the *Canada Pension Plan*, a post-retirement disability benefit is payable to an individual under the age of 65 in receipt of a retirement pension who meets the same medical and contributory criteria as the disability pension. The post-retirement disability benefit is equal to the flat rate portion of the disability pension and is added to individual's retirement pension. Like the disability pension, the post-retirement disability benefit ends automatically at age 65, when the recipient becomes eligible for benefits under the Old Age Security program. The maximum monthly post-retirement disability benefit in 2022 is $524.64 (2021 – $510.85).

Survivor's pensions – According to the provisions of the *Canada Pension Plan*, a survivor's pension is payable to the spouse or common-law partner of a deceased contributor who made sufficient contributions to the Plan. The pension amount depends on the age of the survivor and whether the survivor also receives other CPP benefits. Survivors aged 65 or older receive a pension equal to 60% of the deceased contributor's retirement pension. Survivors under the age of 65 receive a pension equal to 37.5% of the deceased contributor's retirement pension, plus a flat rate. The maximum monthly pension payable to a survivor under the age of 65 in 2022 is $674.79 (2021 - $650.72) and to a survivor 65 and over in 2022 is $752.15 (2021 – $722.25).

Disabled contributor's child and orphan benefits – According to the provisions of the *Canada Pension Plan*, each child of a contributor who is receiving a disability pension or a post-retirement disability benefit or a child of a deceased contributor is entitled to a benefit as long as the child is under the age of 18, or is between the ages of 18 and 25 and attending school full-time. The flat rate monthly benefit in 2022 is $264.53 (2021 – $257.58).

Death benefits – According to the provisions of the *Canada Pension Plan*, a death benefit is a one-time payment to, or on behalf of, the estate of a contributor who made sufficient contributions to the Plan. The death benefit is a flat-rate payment of $2,500 in 2022 (2021 – a flat-rate payment of $2,500).

Pensions and benefits indexation – As required by the *Canada Pension Plan*, pensions and benefits are indexed annually to the cost of living, as determined by the Consumer Price Index for Canada. The rate of indexation for 2022 is 2.7% (2021 – 1.0%).

2. Significant Accounting Policies

a) Basis of Accounting

These financial statements have been prepared in accordance with the significant accounting policies described below in compliance with the *Canada Pension Plan*. The financial statements are presented on a consolidated basis to include the accounts of the CPP and CPPIB and include a consolidated statement of financial position, a consolidated statement of operations, a consolidated statement of changes in financial assets available for benefit payments and a consolidated statement of cash flow.

The CPP, which is managed by both the GoC and the provinces, is not considered to be part of the reporting entity of the GoC. Accordingly, its financial activities are not consolidated with those of the GoC.

b) International Financial Reporting Standards

CPPIB, which is a significant component of the CPP consolidated financial statements, prepares its financial statements in accordance with International Financial Reporting Standards (IFRS). CPPIB qualifies as an investment entity and reports the results of its operations in accordance with IFRS 10 - *Consolidated Financial Statements*. As a consequence, CPPIB's consolidated financial statements represent the results of operations of CPPIB and its wholly owned subsidiaries that were created to provide investment-related services to support its operations. Operating subsidiaries of this nature include those that provide investment advisory services or subsidiaries that were created to provide financing to CPPIB.

Wholly owned subsidiaries that are managed by CPPIB to hold investments are referred to herein as investment holding subsidiaries. Such subsidiaries are not consolidated in CPPIB’s consolidated financial statements but instead are measured and reported at fair value through profit and loss (FVTPL) in accordance with IFRS 9, *Financial Instruments*, and reported as investments in CPPIB’s Consolidated Balance Sheet.

There is no impact on financial assets available for benefit payments and net increase in assets available for benefit payments as a result of CPPIB preparing its financial statements in accordance with IFRS. Certain incremental financial statement disclosures from CPPIB financial statements related to investments and investment liabilities are included as supplementary information in these consolidated financial statements.

c) Financial Instruments

The CPP, through CPPIB, classifies its financial assets and financial liabilities, in accordance with IFRS 9, as follows:

Financial assets are either classified at FVTPL or at amortized cost. The classification depends on (a) the business model for managing the financial assets and (b) the cash flow characteristics of the financial assets. Financial assets are classified at FVTPL on the basis that they are part of a portfolio of investments which is managed to maximize returns without undue risk of loss and whose performance is evaluated on a fair value basis in accordance with investment strategies and risk management of CPPIB. Financial assets classified at FVTPL include investments in equities, fixed income, absolute return strategies, infrastructure, real estate, securities purchased under reverse repurchase agreements, cash collateral pledged on securities borrowed and derivatives. Financial assets carried at amortized cost include cash and cash equivalents, pending trades receivable and other assets.

Financial liabilities are either classified at FVTPL or at amortized cost. A financial liability is classified at FVTPL if it is classified as held for trading, it is a derivative, or it is designated as such on initial recognition. Financial liabilities at FVTPL are derivative liabilities and securities sold short. Financial liabilities designated at FVTPL include debt financing liabilities, securities and loans sold under repurchase agreements, cash collateral received on securities lent, short-term secured debt and other investment liabilities. Financial liabilities at amortized cost include pending trades payable and accounts payable and accrued liabilities.

The CPP, through CPPIB, recognizes a financial asset or a financial liability when, and only when, it becomes a party to the contractual provisions of the financial instrument. Investments, investment receivables, investment liabilities, pending trades receivable and pending trades payable are recorded on a trade date basis.

A financial asset is derecognized under the following situations: (a) when the contractual rights to receive the cash flows from the financial asset expire, (b) when CPP, through CPPIB, has transferred the financial asset and substantially all the risks and rewards of the asset, or (c) in cases where CPP, through CPPIB, has neither retained nor transferred substantially all risks and rewards of the asset, it no longer retains control over the asset. CPP, through CPPIB, derecognizes a financial liability when the obligation under the liability is discharged, cancelled or expires.

Upon initial recognition, financial instruments are measured at fair value. They continue to be measured at fair value or amortized cost. Subsequent changes in the fair value are recorded as realized and unrealized gains and losses on investments and included in net investment income (loss), along with the interest and dividend incomes from such financial instruments.

d) Valuation of Investments and Investment Liabilities

Investments and investment liabilities are recorded on a trade date basis and are stated at fair value. Fair value is an estimate of the amount of consideration that would be agreed upon in an arm’s length transaction between knowledgeable, willing parties who are under no compulsion to act.

In an active market, fair value is best evidenced by an independent quoted market price. In the absence of an active market, fair value is determined by valuation techniques that make maximum use of inputs observed from markets. These valuation techniques include using recent arm’s length market transactions, if available, or current fair value of another investment that is substantially the same, discounted cash flow analysis, option pricing models and other accepted industry valuation methods, that may include the use of estimates made by management, appraisers or both where significant judgment is required.

e) Contributions

Contributions include CPP contributions earned for the year. The Canada Revenue Agency (CRA) collects contributions and measures them using the assessment of tax returns. In determining the amount of contributions earned for the year, the CRA considers cash received and contributions assessed, and makes an estimate for contributions related to tax returns not yet assessed. This estimate is subject to review. Adjustments, if any, are recorded as contributions in the year they are known.

f) Investment Income

Income from investments includes realized and unrealized gains and losses on private, public and other investments, realized and unrealized gains and losses on investments held by investment holding subsidiaries, and interest, dividends and other income. Gains and losses on private investments is generated from private equities, infrastructure and real estate. Gains and losses on public and other investments is generated from public equities, fixed income, absolute return strategies, derivatives and other. Interest and other income are recognized as earned. Dividend income is recognized on the ex-dividend date, which is when the right to receive the dividend has been established. Interest, dividends and other income also includes dividend income received from investment holding subsidiaries.

g) Investment-Related Expenses

Investment-related expenses include the following types of expenses:

Management fees include payments to external managers who invest and manage capital committed by CPP, through CPPIB, and are expensed as incurred.

Performance fees include payments to external managers when CPP, through CPPIB, earns a return that exceeds a set rate of return and are expensed as incurred.

Transaction-related expenses include incremental costs that are directly attributable to the acquisition, maintenance, restructuring or disposal of an investment. Such expenses include a variety of non-recurring expenses, including due diligence on potential investments, legal and tax advisory fees required to support transactions involving private market assets, or, in the case of public markets, custodial fees and commissions paid when trading securities. They are expensed as incurred.

Taxes incurred by CPP, through CPPIB, includes taxes in a number of foreign jurisdictions and also indirect taxes. Taxes consists largely of taxes on dividends, interest income and capital gains related to investments in equities, debt and investment holding subsidiaries. The majority of these taxes are collected at source. Withholding taxes, net of deductions for refundable amounts, are recognized at the same time as the related dividend or interest income and refundable withholding tax is presented as other investment receivables. Other income tax, which is not collected at source, is recognized in the same period as the related income or gain. Deferred tax on capital gains is recognized as other investment liabilities, based on the expected future payment when CPP, through CPPIB, is in a gain position in the applicable market. Changes in the deferred tax liability in the year are recorded as an expense or recovery within taxes. All uncertain tax positions, such as disputed withholding tax refunds, are assessed each reporting period.

Financing expenses include interest and other costs that are incurred when borrowing funds or securities. They are composed of expenses from debt financing liabilities, securities and loans sold under repurchase agreements, prime brokerage and other securities lending and borrowing transactions. Gains and losses associated with certain interest rate derivatives used as part of financing activities are also included in financing expenses. They are expensed as incurred.

All investment-related expenses borne by the investment holding subsidiaries are recognized as part of the unrealized gain or loss on investment holding subsidiaries.

h) Foreign Currency Translation

Transactions, including purchases and sales of investments, income and expenses, are translated at the rate of exchange prevailing on the date of the transaction. Investments and monetary assets and liabilities denominated in foreign currencies are translated into Canadian dollars at exchange rates prevailing on the year-end date. Non-monetary items in a foreign currency are measured at historical cost and are translated using the exchange rates at the dates of the initial transactions.

Foreign currency transaction gains and losses on financial instruments classified at FVTPL are included with associated fair value gains and losses in investment income.

i) Pensions and Benefits

Pensions and benefits expenses are recorded when incurred and are net of overpayments established during the year. Accruals are recorded at year-end for pensions and benefits owed to beneficiaries but not paid, based on management's best estimate.

j) Tax Deductions Due to the Canada Revenue Agency

Tax deductions due to the CRA consist primarily of voluntary and non-resident taxes withheld from pensions and benefit payments to CPP beneficiaries (refer to Note 8).

k) Net Overpayments

Net overpayments comprise overpayments of pensions and benefits that were established during the year less remissions of debts granted.

l) Operating Expenses

Operating expenses are recorded as incurred.

m) Other Claims and Legal Actions

The CPP records an allowance for claims and legal proceedings when it is likely that there will be a future payment and a reasonable estimate can be made.

n) Related Party Transactions

Inter-entity transactions are transactions between commonly controlled entities. Inter-entity transactions are recorded on a gross basis and are measured at the carrying amount, except for the following:

(i) Inter-entity transactions are measured at the exchange amount when undertaken on similar terms and conditions to those adopted if the entities were dealing at arm's length, or when the costs of goods or services are provided on a recovery basis.

(ii) Goods or services received without charge between commonly controlled entities are not recorded.

Related parties include key management personnel having authority and responsibility for planning, directing and controlling the activities of the CPP, including their close family members. Related party transactions, other than inter-entity transactions, are recorded at the exchange amount.

o) Measurement Uncertainty

The preparation of the consolidated financial statements in accordance with the *Canada Pension Plan* requires management to make estimates, judgments and assumptions that affect the amounts recognized for assets and liabilities, principally the valuation of financial instruments, which are not actively traded. The ongoing impact of COVID-19 and evolving geopolitical landscape continue to have widespread impacts around the world, including an increase in market volatility. Uncertainty about these estimates, judgments and assumptions and continuous impacts from the COVID-19 pandemic may result in outcomes that could require a material adjustment to the carrying amount of the affected assets or liabilities in the future.

Significant estimates, judgments and assumptions are also required for the revenues and expenses during the reporting period, principally in determining the estimated contributions, and actuarial obligation in respect of benefits. Although the actuarial obligation in respect of benefits is reviewed triennially as per Note 13, management makes estimates, judgments and assumptions based on the best information available at the time of the preparation of these financial statements. Measurement uncertainty exists in these consolidated financial statements. Actual results could significantly differ from those estimates.

3. Cash

Cash consists of the total cash held by the CPP Accounts and CPPIB. The CPP Accounts were established in the accounts of Canada by the *Canada Pension Plan* to record the contributions, interest, pensions, benefits and operating expenses of the CPP. The CPP Accounts also record the amounts transferred to or received from CPPIB. As at March 31, 2022, the deposit with the Receiver General for Canada in the CPP Accounts is $101 million (2021 – $139 million) and CPPIB's cash is $303 million (2021 – $225 million) for a total of $404 million (2021 – $364 million).

4. Receivables

Receivables are comprised of the following, as at March 31:

	2022	2021
	(in millions of dollars)	
Contributions	**9,186**	5,899
Québec Pension Plan	**120**	114
Beneficiaries		
Balance of pensions and benefits overpayments	**241**	193
Allowance for doubtful accounts	**(149)**	(113)
Others	**46**	66
	9,444	6,159

Contributions receivable represent the estimated amount to be collected by the CRA and transferred to the CPP relating to contributions earned at year end and adjusted for tax returns not yet assessed. The amount includes an estimate that takes into consideration the number of contributors and the average contribution to be received, which is based on the average earnings and the CPP contribution rate. On an annual basis, the model used to make the estimate is reviewed. The difference between the estimate and the actual amount has not been significant in the past.

The CPP has procedures to detect benefits overpayments. During the year, overpayments totalling $129 million (2021 – $122 million) were established and debts totalling $4 million (2021 – $9 million) were forgiven as per the remission provisions of the *Canada Pension Plan*. A further $77 million (2021 – $79 million) was recovered through collection of payments and withholdings from beneficiaries.

5. Investment Activities Risk Management

The CPP, through the investment activities carried out by CPPIB, is exposed to a variety of financial risks. These risks include market risk, credit risk and liquidity and leverage risk. CPPIB employs the Integrated Risk Policy (Policy), which establishes accountability of the Board of Directors, the various committees, including the Risk Committee, and the investment departments to manage investment related risks. CPPIB manages and mitigates investment risks through the Policy approved by the Board of Directors at least once every fiscal year. This Policy contains risk limits and risk management provisions that govern investment decisions in accordance with the mandate of CPPIB.

Upper and lower absolute risk limits within the Policy govern the amount of total investment risk that CPPIB can take in the base CPP Investment Portfolio and additional CPP Investment Portfolio (collectively the CPPIB Investment Portfolios). CPPIB monitors potential investment losses in CPPIB Investment Portfolios daily and reports to the Board of Directors on at least a quarterly basis.

The ongoing impact of COVID-19 and evolving geopolitical landscape continue to have widespread impacts around the world, including in increase in market volatility. Throughout this volatile environment, CPP, through CPPIB, continues to remain within all risk limits established by its Board of Directors, including limits related to market, credit, liquidity and leverage risks.

As part of the ongoing monitoring, CPP, through CPPIB, perform scenarios analysis to quantify the impact of potential stress events and identify potential vulnerabilities that may not be fully captured by the standard risk models. This includes how severe market or geopolitical events could affect the Investment Portfolios. Ad hoc analysis is also performed on various plausible stress scenarios based on current global events, such as potential impacts of inflation or the effects on the global economy and CPPIB's investments from Russia's invasion of Ukraine. The resulting potential loss estimates are actively monitored to ensure the Investment Portfolios remain within stated risk appetites.

(i) ***Market Risk:*** Market risk (including equity risk, interest rate risk, credit spread risk and currency risk) is the risk that the fair value of an investment or investment liability will fluctuate because of changes in market prices and rates.

Equity Risk: Equity risk is the risk that the fair value of an investment or investment liability will fluctuate because of changes in equity prices, which is a significant source of risk of the CPPIB Investment Portfolios.

The CPP, through CPPIB, invests in both publicly traded and private equities. With all other variables held constant, a 1% decrease/increase in the S&P 500 Index would result in a loss/profit of $1,218 million (2021 – $1,184 million) on public equity investments. This calculation assumes that equities other than the S&P 500 Index would move in accordance with their historical behaviour conditional on a 1% decrease/increase in the S&P 500 Index.

Interest Rate Risk: Interest rate risk is the risk that the fair value of an investment or investment liability will fluctuate because of changes in market interest rates.

Applicable to debt instruments and interest-rate-sensitive derivatives, with all other variables held constant, a 1 basis point increase/decrease in nominal risk-free rates would result in a decrease/increase of $104 million (2021 - $89 million) in the value of investments directly impacted by interest rate changes.

Credit Spread Risk: Credit spread risk is the difference in yield on certain securities compared to a comparable risk-free security (i.e. government issued) with the same maturity date. Credit spread risk is the risk that the fair value of these securities will fluctuate because of changes in credit spread.

With all other variables held constant, a 1 basis point widening of credit spread rates would result in a decrease in net assets by $30 million (2021 - $34 million).

Currency Risk: The CPP, through CPPIB, is exposed to currency risk through holdings of investments or investment liabilities in various currencies. Fluctuations in the relative value of foreign currencies against the Canadian dollar can result in a positive or negative effect on the fair value or future cash flows of these investments and investment liabilities.

In Canadian dollars, the net currency exposures, after allocating foreign currency derivatives, as at March 31, are as follows:

(in millions of dollars)	**2022**		2021	
Currency	**Net Exposure**	**% of Total**	Net Exposure	% of Total
United States Dollar	**296,341**	**55**	280,198	56
Euro	**39,127**	**7**	31,580	6
Chinese Renminbi	**25,953**	**5**	23,391	5
British Pound Sterling	**16,828**	**3**	16,238	3
Other	**73,927**	**14**	73,636	15
Total Foreign Exposure	**452,176**	**84**	425,043	85
Canadian Dollar	**87,190**	**16**	72,223	15
	539,366	**100**	497,266	100

As at March 31, 2022, with all other variables and underlying values held constant, a 10% appreciation/depreciation of the Canadian dollar against all other currencies would result in a decrease/increase in net investments by $45,218 million (March 31, 2021 - $42,504 million).

(ii) ***Credit Risk:*** Credit risk is the risk of the potential permanent loss of investment value due to direct or indirect counterparty exposure to a defaulted entity and/or financial losses due to deterioration of an entity's credit quality. The CPP's, through CPPIB, credit risk arises primarily through its investment in non-investment grade entities such as debt securities and over-the-counter derivatives (as discussed in Note 6i). The carrying amounts of these investments are presented in Note 6.

(iii) ***Liquidity and leverage Risk:*** Liquidity and leverage risk is the risk of being unable to generate sufficient cash or its equivalent in a timely and cost-effective manner to meet pensions and benefit payments, investment commitments and investment liabilities as they come due. Leverage risk increases when excessive financial obligations heighten market and liquidity risks during periods of stress. The CPP manages this risk through cash flow planning for both short- term and long-term requirements. The cash flow is prepared for a two-year period and updated on a weekly basis to inform CPPIB of the funds required by CPP to meet its financial obligations (refer to Note 17). In order to manage liquidity risk, various forms of leverage are used to manage certain other risks and enhance fund returns.

Liquidity risk is also managed by investing certain assets in a liquid portfolio of publicly traded equities, money market securities and marketable bonds, to ensure liquid securities are available for investment obligations and for transfer of funds to CPP to meet benefit payment obligations over various time horizons including any 10-day period. Also, the CPP, through CPPIB, supplements its management of liquidity risk through its ability to raise funds through the issuance of commercial paper and term debt and transacting in securities sold under repurchase agreements (refer to Note 6 and Note 7).

CPPIB maintains $1,500 million (2021 – $3,000 million) of unsecured credit facilities to meet potential liquidity requirements. There were no credit facilities drawn as at March 31, 2022 and March 31, 2021.

6. Investments and Investment Liabilities

As stated in Note 1, the role of CPPIB is to invest the assets with a view to achieving a maximum rate of return without undue risk of loss, with regard to the factors that may affect the funding of the CPP and the ability of the CPP to meet its financial obligations on any given business day. To achieve its mandate, CPPIB has established investment policies in accordance with its regulations. These set out the manner in which their assets shall be invested and their financial risks managed and mitigated through the Integrated Risk Framework.

In an active market, the fair value is best evidenced by an independent quoted market price. In the absence of an active market, valuation can be significantly more complex and often subjective, requiring judgment. As a result, CPPIB categorizes the fair value of its investments and investment liabilities within the three levels of the fair value hierarchy:

- Level 1 – Quoted prices in active markets for identical assets or liabilities;
- Level 2 – Inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (as prices) or indirectly (derived from prices); and
- Level 3 – Inputs for the asset or liability that are not based on observable market data (unobservable inputs)

The fair values of Level 3 investments are determined using valuation techniques that use models with unobservable inputs while maximizing the use of inputs observed from market and therefore, are particularly judgmental. As each investment holding subsidiary is largely composed of Level 3 investments, the entire subsidiary is classified as Level 3.

The total of CPPIB's net investments not actively traded as at March 31, 2022 consists of investments categorized in Level 2 and 3, and is valued at $416,864 million (2021 - $346,099 million), of which $299,556 million (2021 - $265,706 million) are all investments held by investment holding subsidiaries.

Significant changes in the unobservable inputs would result in a significantly higher or lower value measurement. As at March 31, 2022, with all other variable held constant, the use of reasonable alternative assumptions would result in a decrease of $8,600 million (2021 - $9,000 million) or increase of $10,100 million (2021 - $9,500 million) in net assets.

The Consolidated Schedule of Investment Portfolio below provides information on investments and investment liabilities held by both CPPIB and its investment holding subsidiaries, as at March 31:

	2022	2021[2]
	(in millions of dollars)	
Cash and cash equivalents	**15,341**	14,532
Equities		
Public equities	**159,385**	175,083
Private equities	**173,730**	159,062
Total Equities	**333,115**	334,145
Fixed income		
Bonds	**108,319**	98,560
Other debt	**40,956**	31,322
Money market securities	**1,368**	143
Total Fixed income	**150,643**	130,025
Absolute return strategies	**34,681**	29,008
Infrastructure	**45,600**	39,954
Real estate	**41,650**	38,704
Investment receivables		
Securities purchased under reverse repurchase agreements and cash collateral pledged on securities borrowed	**56,809**	7,127
Derivative assets	**2,933**	3,636
Other	**5,915**	2,770
Total Investment receivables	**65,657**	13,533
Total Investments[1]	**686,687**	599,901
Investment liabilities		
Debt financing liabilities	**(49,507)**	(39,997)
Securities and loans sold under repurchase agreements and cash collateral received on securities lent	**(43,629)**	(33,150)
Securities sold short	**(29,003)**	(22,275)
Derivative liabilities	**(4,775)**	(3,004)
Short-term secured debt	**(1,196)**	(1,234)
Other	**(929)**	(2,052)
Total Investment liabilities[1]	**(129,039)**	(101,712)
Pending trades receivable[1]	**8,525**	3,077
Pending trades payable[1]	**(26,807)**	(4,000)
Net Investments	**539,366**	497,266

1 Consists of all the financial assets and liabilities held by both CPPIB and its investment holding subsidiaries. In contrast, the CPP's Consolidated Statement of Financial Position presents all financial assets and liabilities held by investment holding subsidiaries at fair value as investments. This results in a difference of $7,813 million (March 31, 2021 - $3,949 million), $5,735 million (March 31, 2021 - $3,554 million), $561 million (March 31, 2021 - $414 million) and $2,639 million (March 31, 2021 - $809 million) as compared to investments, investment liabilities, pending trades receivable and pending trades payable, respectively, as presented in the CPP's Consolidated Statement of Financial Position. Refer to Note 2b) for further details.

2 Certain comparatives have been reclassified to conform to the current year's presentation.

a) *Cash and Cash Equivalents*

Cash and cash equivalents includes cash on hand and short-term deposits, commercial paper, bank accepted bills, floating rate deposit notes and treasury bills with a maturity of 90 days or less. Fair value is determined using cost, which, together with accrued interest income, approximates fair value due to the short-term or floating rate nature of these assets.

b) *Equities*

Equities consist of public and private investments.

(i) Public equity investments are made directly or through funds, including hedge funds. Fair value for publicly traded equities, including equity short positions, is based on quoted market prices. Fair value for fund investments is generally based on the net asset value reported by the external administrators or managers of the funds.

(ii) Private equity investments are generally made directly or through ownership in limited partnership funds. As at March 31, 2022, private equities included direct investments with a fair value of $96,623 million (2021 – $97,749 million). The fair value for investments held directly is primarily determined using accepted industry valuation methods such as earnings multiples of comparable publicly traded companies or discounted cash flows. Recent market transactions, where available, are also used. In the case of investments held through a limited partnership fund, fair value is generally based on net asset value or relevant information reported by the general partner using similar accepted industry valuation methods.

c) *Fixed Income*

(i) Bonds include non-marketable and marketable bonds. Fair value for non-marketable Canadian provincial government bonds is calculated using discounted cash flows based on current market yields of instruments with similar characteristics. In the case of marketable bonds, including bond short positions, fair value is based on quoted prices or calculated using discounted cash flows based on benchmark yield curves and credit spreads pertaining to the issuer.

(ii) Other debt includes investments in direct private debt, asset-backed securities, distressed mortgage funds, private debt funds, hedge funds and investments in royalty-related income streams. Fair value for direct investments in private debt and asset-backed securities is based on quoted market prices or broker quotes or recent market transactions, if available. Where the market price is not available, fair value is calculated using discounted cash flows based on significant inputs such as projected cash flows and discount rates using current market yields of instruments with similar characteristics.

(iii) Money market securities consist of term deposits, treasury bills, commercial paper and floating rate note, all of which have a maturity of over 90 days. Fair value is determined using cost, which, together with accrued interest income, approximates fair value due to the short-term or floating rate nature of these securities.

d) *Absolute Return Strategies*

Absolute return strategies include investments in hedge funds whose objective is to generate positive returns regardless of market conditions, that is, returns with a low correlation to broad market indexes. The underlying securities of the funds could include, but are not limited to, equities, fixed income securities and derivatives. Fair value for these fund investments is generally based on the net asset value as reported by the external administrators or managers of the funds.

e) Infrastructure

Infrastructure investments are generally made directly, but can also occur through limited partnership funds.

Fair value of these investments is primarily determined using discounted cash flows based on significant inputs including projected cash flows and discount rates using current market yields of instruments with similar characteristics. Fair value for investments held through limited partnership funds are generally based on the net asset value as reported by the external managers of the funds.

As at March 31, 2022, infrastructure investments include direct investments with a fair value of $45,548 million (2021 – $39,928 million) and $52 million in fund investments (2021 – $26 million).

f) Real Estate

Real estate investments are generally made through direct private investments, or through ownership of real estate funds. Private real estate investments are managed by investment partners primarily through co-ownership arrangements.

Fair value for private real estate investments is determined using accepted industry valuation methods such as discounted cash flows. Fair value is also determined using net asset value provided by the investment partner. Fair value for real estate funds is generally based on the net asset value reported by the external managers of the funds.

As at March 31, 2022, real estate investments include direct investments with a fair value of $40,059 million (2021 - $36,078 million) and $ 1,591 million in fund investments (2021 – $2,626 million).

g) Securities Purchased under Reverse Repurchase Agreements and Securities and Loans Sold under Repurchase Agreements

Securities purchased under reverse repurchase agreements represent the purchase of securities with a simultaneous agreement to sell them back at a specified price at a specified future date and are accounted for as an investment receivable. The purchased securities under these agreements are not recognized on the consolidated statement of financial position. The fair value of securities to be resold under reverse repurchase agreements is monitored and additional collateral is obtained, when appropriate, to protect against credit exposure. In the event of counterparty default, the CPP, through CPPIB, has the right to liquidate the collateral held.

Securities and loans sold under repurchase agreements are accounted for as collateralized borrowing because they represent the sale of securities with a simultaneous agreement to buy them back at a specified price at a specified future date. The securities and loans sold under these agreements continue to be recognized on the consolidated statement of financial position with any changes in fair value recorded as net gain (loss) on investments and included in net investment income (loss).

Interest earned on reverse repurchase agreements is included in interest income within investment income. Interest incurred on repurchase agreements is included in financing expenses.

Reverse repurchase and repurchase agreements are carried at the amounts at which the securities or loans were initially acquired or sold, which, together with accrued interest income or expense, approximates fair value due to the short-term nature or variable interest rate of these agreements.

The fair value of the securities purchased under reverse repurchase agreements, as at March 31, 2022, are all within 1 year from the reporting date, $56,178 million (2021 – $6,062 million).

The fair value of the securities and loans sold under repurchase agreements, as at March 31, 2022, are all within 1 year from the reporting date, $35,915 million (2021 – $30,489 million).

h) Securities Borrowed and Lent

Securities borrowing and lending agreements are transactions in which CPP, through CPPIB, borrows securities from or lends securities to third parties. Borrowed securities are not recognized on the consolidated statement of financial position. Lent securities remain on the consolidated statement of financial position as CPP, through CPPIB, retains substantially all of the risks and rewards of ownership of the transferred securities.

Collateral received or pledged is generally in the form of cash, equities or fixed income securities. Cash collateral received is accounted for as an investment liability while equities and fixed income securities received as collateral are not recognized on the consolidated statement of financial position. Cash collateral pledged is accounted for as an investment receivable, while securities collateral pledged by CPP, through CPPIB, in securities borrowing agreements remain on the consolidated statement of financial position. Costs relating to securities borrowing and lending are included in financing expenses.

The fair value of the cash collateral pledged on securities borrowed as at March 31, 2022, are all within 1 year from the reporting date, $631 million (2021 – $1,065 million).

The fair value of the cash collateral received on securities lent as at March 31, 2022, are all within 1 year from the reporting date, $7,714 million (2021 – $2,661 million).

i) Derivative Assets and Liabilities

A derivative is a financial contract, the value of which is derived from the value of underlying assets, indexes, interest rates, currency exchange rates or other market-based factors. Derivatives are transacted through regulated exchanges, centrally cleared or negotiated in over-the-counter markets. CPPIB uses different types of derivative instruments, which include futures and forwards, swaps, options and warrants.

Fair value for exchange-traded derivatives, which includes futures, options and warrants, is based on quoted market prices. Fair value for over-the-counter derivatives, which includes forwards, swaps, options and warrants, is determined based on valuation techniques that make maximum use of inputs observed from markets such as option pricing models, discounted cash flows and consensus pricing from independent brokers and/or third-party vendors.

j) Debt Financing Liabilities

Debt financing liabilities consist of commercial paper payable, term debt and loans. Commercial paper payable is carried at the amount originally issued, which, together with accrued interest expense, approximates fair value due to the short-term nature of these liabilities. Fair value for term debt is based on quoted market prices. The fair value of loans is based on the discounted cash flows method or cost with accrued interest. Interest expense and associated costs on debt financing liabilities are included in financing expenses.

The terms to maturity of the contractual value of the debt financial liabilities held directly by CPPIB as at March 31, 2022, are as follows: within 1 year, $2,564 million (2021 - $5,374 million), and 1 year to 5 years, $19,856 million (2021 - $13,530 million), and 6 years to over 10 years, $23,750 million (2021 - $16,719 million).

The terms to maturity of the contractual value of the debt financing liabilities held by investment holding subsidiaries as at March 31, 2022, are as follows: within 1 year, $84 million (2021 - $250 million), 1 year to 5 years, $4,108 million (2021 - $2,310 million), and 6 years to over 10 years, $1,106 million (2021 - $959 million).

The following table provides a reconciliation of debt financing liabilities arising from financing activities in the Consolidated Statement of Cash Flow:

	For the years ended	
(in millions of dollars)	**March 31, 2022**	March 31, 2021
Balance, beginning of year	**36,449**	38,395
Proceeds	**17,229**	12,839
Repayments	**(5,375)**	(11,034)
Non-cash changes in fair value[1]	**(4,137)**	(3,751)
Balance, end of year	**44,166**	36,449

1 Includes foreign exchange gains of $1,087 million (March 31, 2021 - $3,211 million).

k) Securities Sold Short

Securities sold short represent securities that are sold, but not owned, by the CPP, through CPPIB. The CPP, through CPPIB, has an obligation to cover these short positions, which are accounted for as an investment liability based on the fair value of the securities sold. Collateral is pledged to the counterparty, as required (refer to Note 7). Interest and dividend expenses on securities sold short are included in net investment income (loss).

As at March 31, 2022, securities sold short of $29,003 million (2021 – $22,275 million) are considered repayable within one year based on the earliest period in which the counterparty could request payment under certain conditions.

l) Short-term Secured Debt

Short-term secured debt consists of cash advances from prime brokers that are fully collateralized by securities. Short-term secured debt is carried at the amounts at which the funding was initially transferred, which together with accrued interest, approximates fair value due to the short-term nature of the debt and variable interest rate. Interest expense on short-term secured debt is included in financing expenses.

The terms to maturity of the undiscounted value of short-term secured debt as at March 31, 2022, are $1,196 million (2021 - $1,234 million).

7. Collateral

Collateral transactions are conducted to support CPPIB's investment activities under the terms and conditions that are common and customary to collateral arrangements. These arrangements may be transacted by CPPIB or its investment holding subsidiaries in their normal course of business.

The net fair value of collateral held and pledged directly by CPPIB as at March 31 was as follows:

	2022	2021
	(in millions of dollars)	
Third-party assets held as collateral on:[1]		
Reverse repurchase agreements	**55,897**	6,056
Derivative transactions	**538**	2,049
Securities lent[2,4]	**8,935**	3,292
Own and third-party assets pledged as collateral on:		
Repurchase agreements	**(35,518)**	(30,457)
Securities borrowed[3,4]	**(32,298)**	(25,027)
Short-term secured debt[5]	**(1,429)**	(1,502)
Derivative transactions	**(10,634)**	(3,545)
Debt financing liabilities	**(535)**	-
	(15,044)	(49,134)

1 The fair value of collateral sold or repledged as at March 31, 2022 was $16,233 million (2021 – $3,148 million).
2 The fair value of securities lent as at March 31, 2022 was $9,054 million (2021 - $3,252 million).
3 The fair value of securities borrowed as at March 31, 2022 was $21,888 million (2021 – $20,670 million) of which $21,752 million was used (2021 – $20,091 million) for short selling activity.
4. Cash collateral payable of $7,714 million (2021 – $2,661 million) as at March 31, 2022 consists of collateral receivable of $140 million and collateral payable of $7,854 million that qualify for netting (2021 ─ nil and $2,661 million, respectively).
5 Represents securities pledged as collateral on short-term cash borrowings from prime brokers.

The net fair value of collateral held and pledged directly by investment holding subsidiaries as at March 31 was as follows:

	2022	2021[4]
	(in millions of dollars)	
Own and third-party assets pledged as collateral on:		
Repurchase agreements	**(292)**	-
Securities borrowed[1,2]	**(8,469)**	(4,752)
Derivative transactions[2]	**(574)**	(347)
Private equities[3]	**(10,156)**	(9,493)
Debt financing liabilities	**(10,037)**	(7,864)
	(29,528)	(22,456)

1 The fair value of securities borrowed as at March 31, 2022 was $4,967 million (2021 – $2,976 million) of which $4,967 million (2021 – $2,976 million) was used for short selling activity.
2 The cash collateral at the prime brokers may be used for securities borrowed and derivatives transacted by broker.
3 Collateral on loans represents securities pledged as collateral on loan borrowings of the investees.
4 Certain comparatives have been reclassified to conform to the current year's presentation.

8. Payables and Accrued Liabilities

Payables and accrued liabilities are comprised of the following, as at March 31:

	2022	2021
	(in millions of dollars)	
Operating expenses	**935**	865
Pensions and benefits payable	**407**	330
Tax deductions on benefits due to Canada Revenue Agency	**290**	271
	1,632	1,466

9. Comparison of Results Against Budget

The budget amounts included in the Consolidated Statement of Operations and the Consolidated Statement of Changes in Financial Assets Available for Benefit Payments are derived from the amounts that were originally budgeted in the *2021-2022 Employment and Social Development Canada Departmental Plan*, tabled in Parliament in February 2021 and amounts forecasted by the Office of the Superintendent of Financial Institutions.

10. Investment Income and Investment-Related Expenses

CPPIB qualifies as an investment entity (refer to Note 2b). Investment income on investments made through investment holding subsidiaries is presented as unrealized gains or losses. Investment-related expenses borne by the investment holding subsidiaries are a reduction in the net asset values of the investment holding subsidiaries and thus are a component of the unrealized gains or losses on investment holding subsidiaries. All realized and unrealized gains and losses are presented as net gains or losses in CPPIB's consolidated financial statements.

The following table provides further details on investment income and investment-related expenses of CPPIB, for the year ended March 31:

	2022	2021[1]
	(in millions of dollars)	
Investment Income of CPP		
Interest income	**1**	1
Investment Income of CPPIB		
Interest, dividends, and other income	**11,647**	8,884
Realized gains on private investments	**1,242**	258
Unrealized (losses) gains on private investments	**(830)**	1,117
Realized and unrealized (losses) gains on public and other investments	**(8,217)**	33,042
Unrealized gains on investment holding subsidiaries (see details in the table below)	**32,476**	43,500
Total investment income	**36,319**	86,802
Investment-related expenses of CPPIB		
Management fees	**(20)**	(18)
Performance fees	**(38)**	(23)
Transaction-related	**(321)**	(186)
Taxes	**(232)**	(272)
Financing	**136**	(1,036)
Total Investment-related expenses	**(475)**	(1,535)

The following table presents supplemental information on unrealized gains on investment holding subsidiaries, for the year ended March 31:

	2022	2021[1]
	(in millions of dollars)	
Investment Income of Investment holding subsidiaries		
Interest, dividends, and other income	**7,952**	4,455
Realized gains on private investments	**21,352**	9,598
Unrealized gains on private investments	**7,630**	25,302
Realized and unrealized gains on public and other investments	**1,643**	9,084
Total investment income	**38,577**	48,439
Investment-related expenses of Investment holding subsidiaries		
Transaction-related	**(246)**	(209)
Taxes	**(60)**	(839)
Financing	**(120)**	(114)
Total Investment-related expenses	**(426)**	(1,162)
Net investment income before dividends paid to CPPIB	**38,151**	47,277
Dividends paid to CPPIB	**(5,675)**	(3,777)
Total unrealized gains on investment holding subsidiaries	**32,476**	43,500

[1] Certain comparatives have been reclassified to conform to the current year's presentation.

11. Operating Expenses

CPP's operating expenses are composed of costs incurred by various GoC departments (refer to Note 16) for the administration of the CPP's activities as well as CPPIB's operating expenses. CPPIB's personnel, general and administrative expenses are presented as operating expenses. Management fees, performance fees, transaction-related, taxes and financing are presented as investment-related expenses in Note 10.

Operating expenses are as follows, for the year ended March 31:

		2022			2021	
(in millions of dollars)	**GoC**	**CPPIB**	**Total**	GoC	CPPIB[1]	Total
Personnel related costs	**425**	**1,013**	**1,438**	408	938	1,346
Collection of contributions and investigation services	**273**	**-**	**273**	289	-	289
Information technology and data services	**-**	**178**	**178**	-	158	158
Program policy and delivery	**153**	**-**	**153**	148	-	148
Professional services	**-**	**115**	**115**	-	115	115
Amortization of premises and equipment	**-**	**61**	**61**	-	60	60
Premises and equipment	**-**	**26**	**26**	-	21	21
Communications	**-**	**20**	**20**	-	14	14
Support services of the Social Security Tribunal	**18**	**-**	**18**	17	-	17
Cheque issue and computer services	**6**	**-**	**6**	5	-	5
Others	**3**	**15**	**18**	3	16	19
	878	**1,428**	**2,306**	870	1,322	2,192

1 Certain comparatives have been reclassified to conform to the current year's presentation.

12. Financial Sustainability of the Canada Pension Plan

As of January 1, 2019, the CPP has two components: the base and additional CPP. The CPP consisted only of the base CPP prior to 2019, and this component continues. The additional CPP is the new enhancement to the CPP as of 2019. Both the base and additional CPP are financed by contributions and investment returns. Employers and employees pay contributions equally to the base and additional CPP, and self-employed workers pay the full amount.

Base CPP

At the time of the Plan's inception in 1965, the demographic and economic conditions made pay-as-you-go financing appropriate. The pay-as-you-go financing, along with a small reserve equivalent to about two years' worth of expenditures, meant the pensions and benefits for one generation would be paid largely from the contributions of later generations. However, changing demographics and economic conditions over time led to increasing CPP costs, and by the mid-1990s the fall in the level of assets of the CPP resulted in a portion of the reserve being required to cover expenditures. Therefore, for the CPP benefit provisions to have remained unchanged, the contribution rate would have needed to be increased regularly.

As a result, the base CPP was amended in 1997 to restore its long-term financial sustainability and to improve fairness across generations. This was achieved by changing its financing approach from a pay-as-you-go basis to a form of partial funding called steady-state funding, along with incremental full funding rules for new or enhanced benefits, and by reducing the growth of benefits over the long term. In addition, a new investment policy was put in place, along with the creation of CPPIB. Moreover, the statutory periodic reviews of the Plan by the federal and provincial governments were increased from once every five years to every three years.

Key among the 1997 changes were the introduction of self-sustaining provisions to safeguard the base CPP. In the event that the projected minimum contribution rate is greater than the legislated contribution rate and no recommendations are made by the Finance Ministers to correct the situation, the contribution rate would automatically increase and the indexation of the current benefits would be suspended.

The federal and provincial finance ministers took additional steps in 1999 to strengthen the transparency and accountability of actuarial reporting on the CPP by endorsing regular independent peer reviews of actuarial reports and consultations by the Chief Actuary with experts on the assumptions to be used in the actuarial reports.

Additional CPP

With the challenge facing younger generations of securing adequate retirement savings at a time when fewer can expect to work in jobs that will include a workplace pension plan, the federal and provincial governments agreed in 2016 to expand the CPP by creating the additional CPP. The additional CPP took effect on January 1, 2019.

In accordance with the *Canada Pension Plan*, the additional retirement, survivor, and disability benefits provided by the additional Plan are financed by additional contribution rates that are no lower than the rates that:

i) are the lowest constant rates that can be maintained over the foreseeable future, and
ii) result in projected revenues (contributions and investment income) that are sufficient to fully pay the projected expenditures of the additional CPP over the foreseeable future.

The financing of the additional CPP is a result of the 1997 reforms to the Plan, specifically the requirement to fully fund any increased or new benefits. Similar to the base CPP, the Canada Pension Plan legislation includes self-sustaining provisions that provide for actions to be taken if the additional minimum contribution rates deviate significantly from their legislated values and no recommendations are made by the Finance Ministers to correct the situation. These actions are described in the Additional Canada Pension Plan Sustainability Regulations, which came into force on February 1, 2021. Since the additional minimum contribution rates from the most recent 30th Actuarial Report as at December 31, 2018 fall within the no action ranges there is no impact on the financial statements as at March 31, 2022.

Triennial Actuarial Report

As stipulated in the *Canada Pension Plan*, a triennial actuarial report is prepared by the Chief Actuary every three years and when there are any legislative changes to the Plan between triennial updates. The most recent triennial report, the 30th Actuarial Report on the CPP as at December 31, 2018, was tabled in Parliament on December 10, 2019, before the COVID-19 pandemic and the start of the conflict between Ukraine and the Russian Federation. As such, the projections and analysis included in that report did not reflect the potential effects of these two events.

As both these events evolve, the economic, demographic and investment environment continue to be subject to sustained volatility and unpredictability. The assumptions, actuarial obligations and other financial information disclosed in Notes 12 and 13 do not reflect the potential impacts of the pandemic nor the conflict between Ukraine and the Russian Federation. The potential impacts of these events are not known at this time.

Given the legislative framework of the CPP, the next triennial report will be prepared as at December 31, 2021 and is expected to be tabled in Parliament in late 2022. The report will include updated data, experience, and economics and demographic assumptions.

A number of assumptions were used in the 30th CPP Actuarial Report to project the base and additional CPP's revenues and expenditures over the long projection period of over 75 years, and to determine the minimum contribution rates. The assumptions provided in the table below represent the best estimates according to the Chief Actuary's professional judgment relating to demographic, economic, investment and other factors; and have been peer reviewed by an independent actuaries panel.

	30th Actuarial Report (as at December 31, 2018)[1]		27th Actuarial Report (as at December 31, 2015)[1]	
Total Fertility Rate	1.62 (2027+)		1.65 (2019+)	
Mortality	Statistics Canada Life Tables (CLT 3-year average table: 2014-2016) with assumed future improvements		Canadian Human Mortality Database (CHMD 2011) with assumed future improvements	
Canadian life expectancy	Males	Females	Males	Females
at birth in 2019	86.9 years	89.9 years	87.0 years	89.9 years
at age 65 in 2019	21.4 years	23.9 years	21.5 years	23.9 years
Net Migration Rate	0.62% of population ((for 2021+)		0.62% of population ((for 2016+)	
Participation Rate (age group 18-69)	79.2%	(2035)	79.1%	(2035)
Employment Rate (age group 18-69)	74.4%	(2035)	74.4%	(2035)
Unemployment Rate (ages 15+)	6.2%	(2030+)	6.2%	(2025+)
Rate of Increase in Prices	2.0%	(2019+)	2.0%	(2017+)
Real Wage Increase	1.0%	(2025+)	1.1%	(2025+)
Real Rate of Return	Base CPP Assets	4.0%	4.0%	
(average 2019-2093)	Additional CPP Assets	3.4%	3.6%[3]	
Retirement Rates for Cohort Age 60	Males	27.0% (2021+)	Males	34.0% (2016+)
	Females	29.5% (2021+)	Females	38.0% (2016+)
CPP Disability Incidence Rates (per 1,000 eligible)	Males	2.95% (2019+)	Males	3.17% (2020+)[2]
	Females	3.65% (2019+)	Females	3.72% (2020+)[2]

1 Assumptions of the 30th Actuarial Report and the 27th Actuarial Report are expected to gradually converge to their ultimate value. Years in the brackets indicate when the ultimate assumptions value is expected to be reached.

2 The ultimate disability incidence rates assumption of the 27th Actuarial Report has been adjusted based on the 2018 eligible population in order to compare with the assumption for this 30th Actuarial Report on the same basis.

3 The expected 75-year (2019-2093) average real rate of return on the additional CPP assets was determined under the 28th and 29th CPP Actuarial Reports, supplementing the 27th Actuarial Report.

According to the 30th CPP Actuarial Report, with the legislated contribution rate of 9.9% for the base CPP, assuming all assumptions are realized, the base CPP assets are expected to increase significantly, with the asset/expenditure ratio remaining relatively stable at a level of 7.6 over the period 2021 to 2031 and then growing to reach 8.8 in 2050 and 9.5 in 2095.

The minimum contribution rate, which is the lowest rate to sustain the base CPP, is determined to be 9.75% of contributory earnings for years 2022 to 2033 and 9.72% for years 2034 and thereafter (9.79% for the year 2019 and thereafter in the 27th CPP Actuarial Report).

The partial funding nature of the base CPP means that contributions as opposed to investment income are the main source for financing base CPP expenditures. The *30th* CPP Actuarial Report confirms that, based on the Chief Actuary's best-estimate assumptions, the current legislated contribution rate of 9.9% is higher than the minimum contribution rate needed to sustain the base CPP, and thus is sufficient to finance the base CPP over the long term. By 2050, investment income is expected to represent approximately 37% of revenues. Under the legislated contribution rate and the assumed average expected nominal return on base CPP assets of 5.6% over the period 2019 to 2030, total base CPP assets available for benefit payments are expected to grow to approximately $688 billion by the end of 2030.

As at March 31, 2022, the value of base CPP assets available for benefit payments is $534.5 billion (2021 – $496.1 billion).

For the additional CPP, the 30th CPP Actuarial Report projects that with the legislated first and second additional contribution rates of 2.0% for 2023 and thereafter and 8.0% for 2024 and thereafter, assuming all assumptions are realized, total additional CPP assets are expected to increase rapidly over the first several decades as contributions are projected to exceed expenditures. The ratio of assets to the following year's expenditures is projected to increase rapidly until 2025 and then decrease after that, reaching a level of about 26 by 2075 and remaining at that level for the years following up to 2095.

The first additional minimum contribution rate applicable to contributory earnings below the Year's Maximum Pensionable Earnings is 1.49% in 2022 and 1.98% for the year 2023 and thereafter. The second additional minimum contribution rate applicable to contributory earnings above the Year's Maximum Pensionable Earnings up to the Year's Additional Maximum Pensionable Earnings is 7.92% for the year 2024 and thereafter. The phased-in legislated first additional contribution rates of 0.3%, 0.6%, and 1.0% apply respectively to the first three years after the valuation year, that is, to the triennial review period of 2019-2021.

The full funding nature of the additional CPP means that investment income as opposed to contributions is the main source for financing additional CPP expenditures. The 30th CPP Actuarial Report confirms that, on the basis of the Chief Actuary's best-estimate assumptions, the current legislated contribution rates of 2.0% for 2023 and thereafter and 8.0% for 2024 and thereafter are higher than the minimum contribution rates needed to sustain the additional CPP, and thus are sufficient to finance the additional CPP over the long term. By 2050, investment income is expected to represent approximately 61% of revenues. Under the current legislated contribution rates and the average expected nominal return on additional CPP assets of 4.4% over the period 2019 to 2030, total additional CPP assets available for benefit payments are expected to grow to approximately $191 billion by the end of 2030.

As at March 31, 2022, the value of additional CPP assets available for benefit payments is $13.6 billion (2021 - $6.7 billion).

As at March 31, 2022, the value of total CPP assets available for benefit payments of $548.1 billion (2021 - $502.8 billion) represents approximately 9.2 times the 2023 planned expenditures of $59.3 billion (2021 - 8.7 times the 2022 planned expenditures of $58.0 billion).

Sensitivity Tests

A variety of tests was performed to measure the sensitivity of the long-term projected financial position of both components of the CPP to future changes in the demographic, economic, and investment environments. Key best-estimate demographic, economic, and investment assumptions were varied individually to measure the potential impacts on the financial state of both components of the CPP.

Lower-cost and higher-cost alternatives for three important assumptions are shown in the table below. For each test, the assumptions for the lower-cost and higher-cost alternatives were developed considering alternative assumed mortality improvement rates, real wage increases and real rates of return. It is possible that a lower-cost scenario for the base CPP will be a higher-cost scenario for the additional CPP, and vice versa. This is the case, for example, for the test regarding the real wage increase, described below.

		Lower-Cost		Best-Estimate		Higher-Cost	
Mortality (base and additional CPP):							
Canadian life expectancy at age 65 in		Males	21.0	Males	23.3	Males	25.8
2050 with future improvements		Females	23.4	Females	25.6	Females	28.0
Real wage increase	Base CPP	1.7%		1.0%		0.3%	
	Additional CPP	0.3%		1.0%		1.7%	
Average real rate of	Base CPP Return	4.95%		3.95%		2.95%	
(2019-2093)	Additional CPP	4.38%		3.38%		2.38%	

The table below summarizes, for both the base and the additional CPP, the sensitivity results of the minimum contribution rates to the changes in mortality, real wage increase and real rate of return on investments assumptions:

Assumption	Scenario	Base CPP Minimum Contribution Rate (%)	Additional CPP Minimum Contribution Rates (%)	
			First	Second
		2034+	2023+	2024+
	Best Estimate	9.72	1.98	7.92
Mortality	Higher Mortality	9.38	1.80	7.20
	Lower Mortality	10.06	2.15	8.60
Real Wage Increase	Higher Wage Increase	9.29	2.22	8.88
	Lower Wage Increase	10.15	1.78	7.12
Real Rate of Return on Investments	Higher Real Return	8.82	1.49	5.96
	Lower Real Return	10.62	2.69	10.76

Mortality

Mortality is a very important demographic assumption as it affects the length of the benefit payment period. If male and female life expectancies at age 65 were to increase by approximately 2.4 years more than expected by 2050, the base CPP minimum contribution rate for 2034 and thereafter would increase to 10.06%, above the base CPP legislated contribution rate of 9.9%. For the additional CPP the first and second additional minimum contribution rates would increase to 2.15% and 8.60%, respectively. These would be above the legislated rates of 2% and 8%, respectively.

On the other hand, if male and female life expectancies at age 65 were to be about 2.2 years lower than expected by 2050, the base CPP minimum contribution rate for years 2034 and thereafter would decrease to 9.38% while the first and second additional CPP minimum contribution rates would decrease to 1.80% and 7.20%, respectively.

Real Wage Increase:

Real wage increases directly affect the amount of future CPP contributions. Note that for this test, the opposite effects for the base and additional CPP are attributable to the different financing approaches. As a result of the different financing approaches, the base CPP is more dependent on contributions while the additional CPP is more dependent on investment income.

For the base CPP, if an ultimate real wage increase of 0.3% is assumed for 2019 and thereafter, the base CPP minimum contribution rate for years 2034 and thereafter would increase to 10.15%. On the other hand, for the additional CPP, under the same assumption, the first and second additional minimum contribution rates would decrease to 1.78% and 7.12%, respectively.

For the base CPP, if an ultimate real wage increase of 1.7% is assumed for 2025 and thereafter, the base CPP minimum contribution rate for years 2034 and thereafter would decrease to 9.29%. On the other hand, for the additional CPP, under the same assumption, the first and second additional minimum contribution rates would increase to 2.22% and 8.88%, respectively.

Real Rate of Return:

Real rates of return can fluctuate greatly from year to year and can have a significant impact on the size of assets and on the ratio of assets to the following year expenditures.

If for the base CPP, the average real rate of return is assumed to be 1% lower (2.95% vs 3.95%) over the next 75 years (2019 to 2093), the base CPP minimum contribution rate for years 2034 and thereafter will increase to 10.62%. For the additional CPP if the average real rate of return is assumed to be 1% lower (2.38% vs 3.38%) over the same period then the first and second additional minimum contribution rates increase to 2.69% and 10.76%, respectively.

However, if for the base CPP the average real rate of return is assumed to be 1% higher (4.95% vs 3.95%) over the next 75 years, the base CPP minimum contribution rate decreases to 8.82%. For the additional CPP, if the average assumed real rate of return over the same period is 1% higher (4.38% vs 3.38%) then the first and second additional minimum contribution rates decrease to 1.49% and 5.96%, respectively.

13. Actuarial Obligation in Respect of Benefits

The 30th CPP Actuarial Report is a triennial report that measures the actuarial obligations of both the base and additional CPP under an open group approach, which is consistent with the funding nature of both components. It also provides information under a closed group approach, in footnotes. The open group approach takes into consideration all current and future participants of the CPP, including their future contributions and associated benefits, to determine whether current assets and future contributions will be sufficient to pay for all future expenditures. The closed group approach includes only current participants of the CPP, with no new entrants permitted and no new benefits accrued.

The choice of the methodology used to produce a social security system's balance sheet is mainly determined by the system's financing approach. Partially funded plans like the base CPP represent a social contract where, in any given year, current contributors allow the use of their contributions to pay current beneficiaries' benefits. This social contract creates claims for current and past contributors to contributions of future contributors. As such, the proper assessment of the financial sustainability of partially funded plans by means of their balance sheets should reflect these claims. The open group approach does account explicitly for these claims by considering the benefits and contributions of both the current and future plan participants. In comparison, the closed group methodology does not reflect these claims since only current participants are considered. The legislated methodologies to determine the steady-state and incremental full funding contribution rates of the base CPP are based on the open group approach (in accordance with the *Calculation of Contribution Rates Regulations, 2021*[1])

The determination of the additional minimum contribution rates (in accordance with the *Calculation of Contribution Rates Regulations, 2021*[1]) also requires the use of an open group approach. Since the open group methodology is based on projections of future income and expenditures, the requirement of the additional CPP open group assets to be at least 100% of its open group actuarial obligations ensures that, at the valuation date, the projected additional contributions and investment income are sufficient to cover the projected additional expenditures over the long term.

To determine the base and additional CPP actuarial obligations under the open group approach and the legislated contribution rates, the base and additional CPP's revenues and expenditures were projected using the assumptions of the 30th CPP Actuarial Report shown in Note 12. The projection period longer than 75 years that is used to calculate the minimum contribution rates is necessary to ensure that the future expenditures for cohorts that will enter the labour force during that time are included in the liabilities. The present values of the assets and obligations of the base CPP and additional CPP are determined using a discount rate equal to the assumed nominal rates of return on the base CPP and additional CPP assets respectively.

[1] The minimum contribution rates stated in the 30th CPP Actuarial Report as at 31 December 2018 were determined in accordance with the *Calculation of Contribution Rates Regulations, 2018*, which are identical to the 2021 Regulations that subsequently received formal provincial and federal approval.

Base CPP:

The table below presents the asset excess (shortfall) and the assets to actuarial obligation ratio of the base CPP under open and closed group approaches at valuation dates of the current and previous actuarial reports with the legislated contribution rate of 9.9%:

	30th Actuarial Report as at December 31, 2018		**27th Actuarial Report as at December 31, 2015**	
(in billions of dollars)	Open Group	Closed Group	Open Group	Closed Group
Assets[1]	2,691.1	371.7	2,547.4	285.4
Actuarial obligation[2]	2,674.4	1,257.1	2,546.1	1,171.1
Asset excess (shortfall)	16.7	(885.4)	1.3	(885.7)
Assets to actuarial obligation ratio	100.6%	29.6%	100.1%	24.4%

[1] Includes only current assets for closed group but also includes future contributions for the open group.
[2] Obligations include operating expenses.

The base CPP was never intended to be a fully funded plan and the financial sustainability of the base CPP is not assessed based on its actuarial obligation in respect of benefits. According to the 30th CPP Actuarial Report, the CPP is intended to be long-term and enduring in nature, a fact that is reinforced by the federal and provincial governments' joint stewardship through the established strong governance and accountability framework of the CPP. Therefore, if the base CPP's financial sustainability is to be measured based on its asset excess or shortfall, it should be done on an open group basis that reflects the partially funded nature of the base CPP, that is, its reliance on both future contributions and invested assets as a means of financing its future expenditures.

Additional CPP:

For the additional CPP, with the first and second legislated contribution rates of 2.0% and 8.0%, respectively, the table below presents the asset excess (shortfall) and the assets to actuarial obligation ratio under open and closed group approaches at the valuation date:

	As at January 1, 2019[1]	
(in billions of dollars)	Open Group	Closed Group
Assets[2]	740.3	-
Actuarial obligation[3]	686.6	-
Asset excess (shortfall)	53.7	-
Assets to actuarial obligation ratio	107.8%	N/A[4]

1 Commencement date of the additional CPP and the last measurement date for the 30th Actuarial Report.
2 Includes only current assets for closed group but also includes future contributions for the open group.
3 Obligations include operating expenses.
4 As at December 31, 2018, under the closed group approach, the actuarial obligations, assets, and assets excess/shortfall of the additional CPP are all $0.

Using the open group approach, the Chief Actuary confirms that both the base CPP and additional CPP, based on the best-estimate assumptions selected and under the legislative contribution rates, will continue to meet their financial obligations and are sustainable in the long term.

14. Contractual Obligations and Commitments

The nature of CPP's and CPPIB's activities can result in some large multi-year contracts and agreements whereby the CPP and CPPIB will be obligated to make future payments in order to carry out its activities.

Operating costs are charged to the CPP in accordance with various memoranda of understanding (MoU) between the CPP and various GoC departments for the administration of the CPP's activities (refer to Note 16). The MoUs require written notice of termination at least one year before the termination date. Therefore, as at March 31, 2022, the operating costs of $856 million (2021 - $811 million) are an estimation of the costs, based on the MoUs, that will be charged to the CPP Accounts in the next fiscal year. Operating costs are expected to continue to be charged to the CPP Accounts in the upcoming fiscal years, but cannot be reasonably estimated beyond one year.

The CPP, through CPPIB, has entered into commitments related to the funding of investments. These commitments are generally payable on demand based on the funding needs of the investment subject to the terms and conditions of each agreement. As at March 31, 2022, the unfunded commitments for CPPIB and its investment holding subsidiaries totalled $1,083 million (2021 – $1,057 million) and $54,064 million (2021 - $44,244 million), respectively.

15. Contingent Liabilities

a) Appeals relating to the payment of pensions and benefits

At March 31, 2022, there were 6,432 appeals (2021 – 5,112) relating to the payment of CPP disability pensions. These contingencies are reasonably estimated, using historical information, at an amount of $53.9 million (2021 – $43.4 million), and have been recorded as an accrued liability in these consolidated financial statements.

b) Other claims and legal proceedings

In the normal course of operations, the CPP is involved in various claims and legal proceedings. The total amount claimed in these actions and their outcomes are not determinable at this time. The CPP records an allowance for claims and legal proceedings when it is likely that there will be a future payment and a reasonable estimate of the loss can be made. No such allowance was recognized in the consolidated financial statements for the 2021-22 and 2020-21 fiscal years for these claims and legal proceedings.

c) Guarantees

As part of certain investment transactions, the CPP, through CPPIB and its investment holding subsidiaries, agreed to guarantee, as at March 31, 2022, up to $228 million (2021 – $505 million) and $7,006 million (2021 - $6,128 million), respectively, to other counterparties in the event certain investee entities default under the terms of loan and other related agreements, or fail to perform under specified non-financial contractual obligations.

d) Indemnifications

The CPP, through CPPIB, provides indemnifications to its officers, directors, certain others and, in certain circumstances, to various counterparties and other entities. CPPIB may be required to compensate these indemnified parties for costs incurred as a result of various contingencies such as changes in laws, regulations and litigation claims. The contingent nature of these indemnification agreements prevents CPPIB from making a reasonable estimate of the maximum potential payments CPPIB could be required to make. To date, CPPIB has not received any material claims nor made any material payments pursuant to such indemnifications.

16. Related Party Transactions

The CPP enters into transactions with the GoC in the normal course of business, which are recorded at the exchange value. The costs are based on estimated allocations of costs and are charged to the CPP in accordance with various memoranda of understanding (MoU). Details of these transactions are provided in the GoC operating expenses in Note 11 and contractual obligations in Note 14.

Expenses for the year are comprised of the following, for the year ended March 31:

	2022	2021
	(in millions of dollars)	
Employment and Social Development Canada		
Program policy and delivery	**546**	527
Canada Revenue Agency		
Collection of contributions andinvestigation services	**273**	289
Treasury Board Secretariat		
Health Insurance Plan	**32**	29
Administrative Tribunals Support Service of Canada		
Support services of the SocialSecurity Tribunal	**18**	17
Public Services and Procurement Canada6		
Cheque issue and computer services	**6**	5
Office of the Superintendent of Financial Institutions and Department of Finance		
Actuarial and other services	**3**	3
	878	870

The CPP receives audit services without charge from the Office of the Auditor General of Canada. The value of these audit services is not material for the purpose of these consolidated financial statements and has not been recorded.

17. Supplementary Information

The administration of the CPP is shared between various GoC departments. The GoC transfers to CPPIB amounts that are not immediately needed to pay CPP pensions, benefits and operating expenses, and CPPIB invests those amounts. The GoC, through various federal departments, manages the remainder of the assets, as well as the collection of the CPP contributions and the administration and payments of the CPP benefits.

For accountability purposes, the following tables present summary information on the levels of assets and liabilities and sources of income and expenses managed by the GoC and CPPIB broken out by the base CPP and additional CPP respectively. CPPIB's expenses are presented as investment-related expenses (refer to Note 10) and operating expenses (refer to Note 11).

	As at March 31, 2022						
	Base CPP			Additional CPP			CPP
(in millions of dollars)	GoC	CPPIB	Total	GoC	CPPIB	Total	Total
Financial assets and liabilities							
Cash	78	297	375	23	6	29	404
Receivables	8,382	38	8,420	1,024	-	1,024	9,444
Net investments	-	526,752	526,752	-	12,614	12,614	539,366
Payables and accrued liabilities	(674)	(877)	(1,551)	(66)	(15)	(81)	(1,632)
	7,786	526,210	533,996	981	12,605	13,586	547,582
Non-financial assets	-	484	484	-	12	12	496
Assets available for benefit payments	7,786	526,694	534,480	981	12,617	13,598	548,078

	For the year ended March 31, 2022						
	Base CPP			Additional CPP			CPP
(in millions of dollars)	GoC	CPPIB	Total	GoC	CPPIB	Total	Total
Revenues							
Contributions	57,724	-	57,724	6,916	-	6,916	64,640
Net investment income							
Investment income	1	36,145	36,146	-	173	173	36,319
Investment-related expenses	-	(469)	(469)	-	(6)	(6)	(475)
	57,725	35,676	93,401	6,916	167	7,083	100,484
Expenses							
Pensions and benefits	(52,889)	-	(52,889)	(39)	-	(39)	(52,928)
Operating expenses	(697)	(1,408)	(2,105)	(181)	(20)	(201)	(2,306)
	(53,586)	(1,408)	(54,994)	(220)	(20)	(240)	(55,234)
Net Increase in assets available for benefit payments	4,139	34,268	38,407	6,696	147	6,843	45,250

	As at March 31, 2021						
	Base CPP			Additional CPP			CPP
(in millions of dollars)	GoC	CPPIB	Total	GoC	CPPIB	Total	Total
Financial assets and liabilities							
Cash	119	222	341	20	3	23	364
Receivables	5,642	40	5,682	477	-	477	6,159
Net investments	-	490,994	490,994	-	6,272	6,272	497,266
Payables and accrued liabilities	(595)	(842)	(1,437)	(22)	(7)	(29)	(1,466)
	5,166	490,414	495,580	475	6,268	6,743	502,323
Non-financial assets	-	493	493	-	12	12	505
Assets available for benefit payments	5,166	490,907	496,073	475	6,280	6,755	502,828

	For the year ended March 31, 2021[1]						
	Base CPP			Additional CPP			CPP
(in millions of dollars)	GoC	CPPIB	Total	GoC	CPPIB	Total	Total
Revenues							
Contributions	51,407	-	51,407	3,924	-	3,924	55,331
Net investment income							
Investment income	1	86,375	86,376	-	426	426	86,802
Investment-related expenses	-	(1,527)	(1,527)	-	(8)	(8)	(1,535)
	51,408	84,848	136,256	3,924	418	4,342	140,598
Expenses							
Pensions and benefits	(51,201)	-	(51,201)	(14)	-	(14)	(51,215)
Operating expenses	(692)	(1,312)	(2,004)	(178)	(10)	(188)	(2,192)
	(51,893)	(1,312)	(53,205)	(192)	(10)	(202)	(53,407)
Net Increase in assets available for benefit payments	(485)	83,536	83,051	3,732	408	4,140	87,191

1 Certain comparatives have been reclassified to conform to the current year's presentation.

Pursuant to Section 108.1 and 108.3 of the *Canada Pension Plan* and the Agreement dated as of April 1, 2004, amounts not required to meet specified obligations of the CPP are transferred weekly to CPPIB. The funds originate from employer and employee contributions to the CPP and interest income generated from the deposit with the Receiver General.

CPPIB remits cash to the CPP as required, including the periodic return, on at least a monthly basis, of funds required to meet CPP pensions, benefits and operating expenses obligations.

The accumulated transfers to/from CPPIB, since inception, are as follows:

		2022	
(in millions of dollars)	**Base CPP**	**Additional CPP**	**Total**
Accumulated transfers to CPPIB, beginning of year	**613,349**	**5,857**	**619,206**
Transfers of funds to CPPIB	**43,005**	**6,190**	**49,195**
Accumulated transfers to CPPIB, end of year	**656,354**	**12,047**	**668,401**
Accumulated transfers from CPPIB, beginning of year	**(465,684)**	**-**	**(465,684)**
Transfers of funds from CPPIB	**(41,486)**	**-**	**(41,486)**
Accumulated transfers from CPPIB, end of year	**(507,170)**	**-**	**(507,170)**
Net accumulated transfers to CPPIB	**149,184**	**12,047**	**161,231**

		2021	
(in millions of dollars)	Base CPP	Additional CPP	Total
Accumulated transfers to CPPIB, beginning of year	572,812	2,323	575,135
Transfers of funds to CPPIB	40,537	3,534	44,071
Accumulated transfers to CPPIB, end of year	613,349	5,857	619,206
Accumulated transfers from CPPIB, beginning of year	(425,268)	-	(425,268)
Transfers of funds from CPPIB	(40,416)	-	(40,416)
Accumulated transfers from CPPIB, end of year	(465,684)	-	(465,684)
Net accumulated transfers to CPPIB	147,665	5,857	153,522