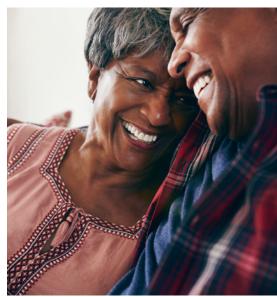
Pension Plan
Annual Report
2018











## Our mission

The mission of the Canada Mortgage and Housing Corporation (CMHC) defined benefit Pension Plan is to provide its members and beneficiaries with pension benefits in accordance with the provisions of the CMHC Pension Plan Rules. This is accomplished through efficient administration and prudent investment of the Pension Plan's assets to maximize returns while safeguarding assets.

CMHC supports the Government of Canada policy on access to information for people with disabilities. If you would like to obtain this publication in an alternative format, call 1-800-668-2642.

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# Report to Employees and Pensioners

CMHC offers a competitive defined benefit plan that provides postretirement income for our employees. On behalf of the Trustees of the pension fund, it is my pleasure to present the pension plan Annual Report for 2018.

As of January 1, 2018, all eligible employees of CMHC belong to the same defined benefit pension plan, a newly modified pension plan designed to offer a secure approach to planning for retirement while also giving

employees flexibility to make decisions they believe will best meet their financial needs. The plan applies to service accrued on or after January 1, 2018, with any pension benefits earned by employees through December 31, 2017 remaining unchanged.

I am pleased to report that the pension plan remains financially healthy and is fully funded on a going concern basis at 116% as reported in the annual actuarial valuation undertaken as at December 31, 2018.

Under the plan's governance framework, investment decisions are made in the long-term interest of plan beneficiaries and meet the obligations of the plan. Overall, investment returns were negatively affected in 2018 as a result of weaker global financial markets relating to trade tensions, lower oil prices, rising short-term interest rates, and concerns about the sustainability of global growth in 2019 and beyond. In 2018, the fund experienced a negative return of 0.9%, which was 1.1% below the benchmark. However, over the past 10 years, the fund's performance has on average exceeded its benchmark and the pension plan's objective remains to meet or exceed the benchmark over time.

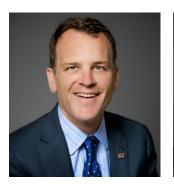
Each year, the Board of Directors determines the level of contributions in light of the financial position of the plan. In 2018, employees contributed a total of 9.5% of their base salary to the plan, while CMHC contributions were 10.7%. In 2018, in addition to regular contributions, the company contributed \$22.4 million in special payments. In addition, as part of the annual review of the level of indexation of benefits for post-2017 service, the Board decided that these benefits would be indexed at 100% of CPI as at January 1, 2020.

Our focus remains on the long-term sustainability of plan investments and we continue to implement a well-diversified portfolio that has among its goals reducing market risks relating to the plan.

Anne Giardini

Chair, Pension Fund Trustees

# Trustees of the CMHC Pension Plan



Evan Siddall

President and Chief Executive Officer



Etienne Pinel

Employee Representative
Pension Council Member



Anne Giardini Chair, Pension Fund Trustees and Member of the Board of Director



Christina Haddad Vice-President, Public Affairs



Michel Tremblay
Senior Vice-President, Policy and Research



Paul Greene Employee Representative Pension Council Member



Stephen Hall
Retiree Representative Pension
Council Member



Neil Levecque Vice-President, IT Strategy and Chief Data Officer

# Financial Highlights as at Dec. 31, 2018

Defined benefit (DB)

\$1,978.8 MILLION

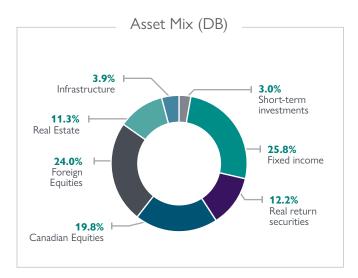
Net assets available for benefits

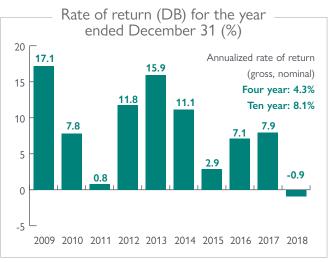
115.9%

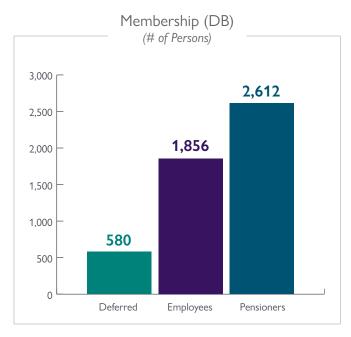
Fully funded on a going-concern basis (vs. 114.4% in 2017)

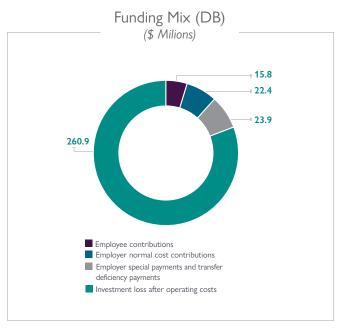
**95.2**%

Solvency ratio increased (vs. 91.4% in 2017)











On January 1, 2018, the CMHC Pension Plan (the "Plan") was modified and opened to new entrants. All eligible employees of the Corporation now belong to the newly modified Plan. This includes employees who were members of the CMHC Defined Contribution Pension Plan (DC Plan). Any benefits earned by employees up to December 31, 2017 remain unchanged. The new Pension Plan structure applies to service accrued on or after January 1, 2018.

The Plan provides a defined benefit pension, which means that at retirement, members receive a retirement income based on a formula that can be calculated in advance. Subject to the applicable plan rules, the formula is based on a percentage of the average salary of the member's best five consecutive years multiplied by the number of years of benefit service. Since the introduction of the new Plan design, effective January 1, 2018, employees have the possibility to choose between two options. Option A provides a higher pension benefit at retirement but is subject to higher contribution rates than Option B. Every year, members have to elect the option they wish to participate in for the following year.

The plan provides survivor benefits for a member's eligible spouse or common-law partner and eligible dependent or children. For service accrued before 1 January 2018, benefits are indexed to the Consumer Price Index (CPI) in accordance with the Pension Plan rules. For service accrued after 1 January 2018, indexation of the benefits to the Consumer Price Index (CPI) is conditional in

accordance with the Pension Plan rules and approval from the Board of Directors. For 2018, that adjustment was made on January 1, 2019, when pension benefits were increased by 2.2%. This adjustment is based on the average change in the CPI over the 12-month period ending September 30, 2018 over the average change in the CPI of the 12-month period of the preceding year.

As per the Government of Canada directive, the Plan continues to move toward equal sharing of employer and employee contributions.

Effective December 31, 2017, the DC plan was closed to new entrants and no contributions were made to this plan. On January 1, 2018, all eligible employees started participating in the new defined benefit Pension Plan structure. The Office of the Superintendent of Financial Institutions (OSFI) approved the termination of the DC plan, effective July 31, 2018.

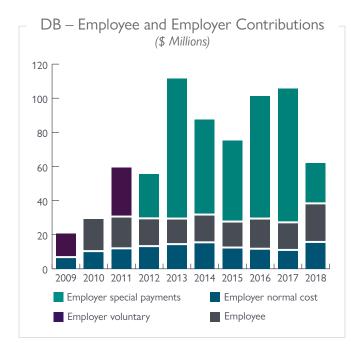
### Contribution

In 2018, the employee contribution rate was 7.75% up to YMPE (\$55,900), and at 10.25% for earnings above this level for members who election Option A. Members who elected Option B of the new Plan contributed at a rate of 5.25% up to YMPE, and 7.75% for earnings above this level. In total, employees contributed a total of \$15.8 million to the Plan.

CMHC's total contributions to the Plan in 2018 were \$46.3 million. This included full normal contributions as well as special payments of \$22.4 million related to the solvency deficit reported by the actuarial valuation as at December 31, 2017.

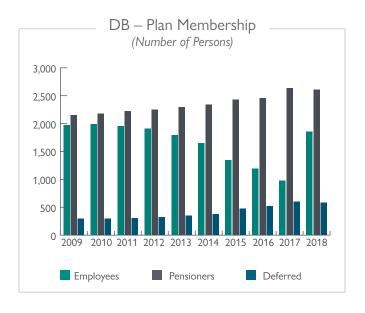
On an annual basis, CMHC reviews the level of employer and employee contributions to the Plan: firstly, with regard to the financial status of the Plan; and then secondly, in comparison to other plans, in order to benchmark the competitiveness of the Plan. The goal is to maintain a 50:50 cost-sharing ratio between employer and employee as outlined by Government of Canada directive (P.C. 2014-1380) pursuant to Section 89 of the Financial Administration Act, to align Crown corporation pension plans with those available to federal employees.

In March 2019, the Board approved the results of the actuarial valuation as at December 31, 2018 as well as the recommendations for employer contributions in 2019 and employee contributions in 2020. The actuarial valuation reports that the Plan is fully funded on a going concern basis with a surplus, but continues to have a deficit on a solvency basis. Based on these actuarial valuations, CMHC will make full normal contributions in 2019 and assess the level of special payments needed to fund the solvency deficit.



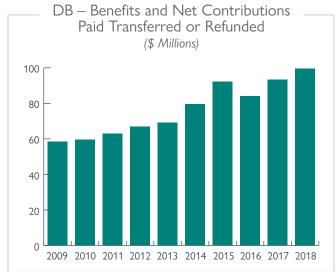
# Membership

At year-end, the Plan had 5,048 members including 1,856 employees, 2,612 pensioners and beneficiaries, and 580 members with deferred vested benefits. In 2018, the plan experienced an increase in membership when it was opened to new entrants.



## Total Benefits Paid in 2018

A total of \$99.6 million in pension benefits was paid to Plan members in 2018.



# General information on the CMHC Pension Plan

#### Regulatory Authorities

As a federally registered pension plans, CMHC's Defined Benefit Pension Plan is subject to the federal Pension Benefits Standards Act, 1985 (PBSA) and its regulations, and to the Income Tax Act (ITA). The Plan is registered with the OSFI and the Canada Revenue Agency (CRA). The Plan rules, as well as the Plan's funding and operations, must comply with the standards prescribed by the PBSA and ITA.

#### Communications

One of CMHC's key objectives is to promote increased awareness and understanding of its Pension Plan and the benefits it provides, while providing opportunities for member feedback.

In 2018, CMHC began offering financial planning sessions designed to enhance employee's knowledge and awareness of their financial wellness. These sessions provide employees with an overview on the principles of financial planning. CMHC's other ongoing communication activities included the Annual Statement of Pension Benefits that are sent to each Plan member, special bulletins providing details of the new defined benefit Pension Plan structure and the annual summary of the highlights of the DB Pension Council meetings.

#### Plan Documents

Information related to the Plan is available on CMHC's website, including a description of the governance of the Plan and key roles and responsibilities under the governance structure of the Plan.

Additional information can be obtained by contacting the CMHC pay and benefits centre at 1-800-465-9932.





# CMHC Pension Plan Governance

The concept of pension plan governance is commonly defined by pension authorities as the structures and processes for overseeing, managing and administering a pension plan to ensure all obligations of the plan are met.

Good corporate governance is at the heart of all of CMHC's activities and successes and is included in the governance framework for the Pension Plan. A sound framework ensures that the ongoing obligations of the Pension Plan to its stakeholders can be met, with effective decision-making processes, prudent and efficient management of resources, and regular communication. The governance structure of the Plan is outlined below, but more information regarding the roles and responsibilities of the key governance components of the Plan can be found in the Pension Governance section on CMHC's website.

CMHC's Plan governance structure is comprised of the Board of Directors, the Pension Fund Trustees, the Pension Fund Investment Committee, the Investments and Pension Fund Division, CMHC's President and Chief Executive Officer, the Executive Committee, and the Human Resources Sector (Total Rewards Strategy).

Two other bodies, the Pension Plan Coordination Committee and the Pension Council, play supportive roles for CMHC's pension governance structure.

The Pension Council consists of elected employee and retired members of the Pension Plan. Its functions are to promote awareness and understanding of the Plan among members, and to review financial, actuarial and administrative aspects of the Plan annually.



Left to right: Neil Levecque, Etienne Pinel, Christina Haddad, Stephen Hall, Anne Giardini, Paul Greene Absent: Evan Siddall, Michel Tremblay



Left to right: Matt Xu, Paul Greene, Kathryn Laflamme, Stephen Hall, Stéphane Poulin, Mark McInnis, Etienne Pinel Absent: Marie Murphy, Guylaine Boudreau, David Muriella



## Investment Framework

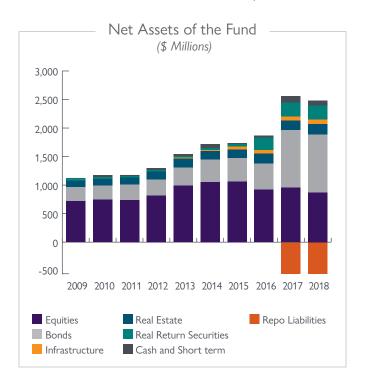
The overall long-term investment objective of the Pension Fund ("the Fund") is to achieve a total rate of return that will provide for pension benefit obligations with an acceptable level of volatility of expected contribution requirements. In pursuing this long-term objective, the Fund strives to maximize returns on investments within approved policies, which specify the limits and parameters within which risk may be taken.

The Statement of Investment Policies and Procedures (SIP&P) defines the investment framework of the Plan. The SIP&P established by the Trustees for the Fund sets out the policies necessary for the management and administration of the Fund. It includes further definition of permitted investments as well as the requirements for diversifying investments and managing financial risks.

It also includes policies for measuring, monitoring, and reporting on the performance of the Fund. The SIP&P conforms to the requirements of the PBSA and was updated and approved by Trustees in 2018.

The Fund's asset allocation policy recommended by Trustees and approved by the Board, is a key driver of the Fund's returns and contribution requirements. The Fund's asset allocation policy is based upon the principle of diversification of investments among various asset classes relative to the liabilities of the Plan. It is reviewed at least every five years.

The asset allocation policy has been established at 40% public equity investments, 41% fixed income securities and 19% real estate and infrastructure, on a net asset basis. The policy includes a permissible range around these percentage weights. Additionally, the policy allows for the use of a modest level of leverage of 25% of net asset value to purchase fixed income assets to reduce the interest rate risk of the portfolio.



Equity investments include Canadian and foreign equities. Fixed income is comprised of Canadian bonds and money market investments. Until the Fund has invested a target amount of 19% in real estate and infrastructure, the asset allocation policy is being adjusted to have a corresponding higher amount, for example, 44%, in public equity investments and a lower amount, for example, 15%, in real estate and infrastructure investments.

# Risk Management

The risk parameters under which the Fund is managed, are established by the Risk Appetite statement and asset allocation policy.

The Board of Director's specific requirements for managing these risks are addressed by a range of established policies and practices.

The financial risks relating to the Fund are managed primarily through the diversification of assets, as well as limits and parameters for credit risk, market risk, and liquidity risk.

More information relating to financial risks is provided in the notes to the financial statements.

Regular measurement and reporting of Pension fund performance is also vital. An extensive set of risk and return indicators is used to measure the Fund's ongoing performance. The Investment Committee and Trustees review these indicators and the Fund's performance, including compliance with investment and risk management policies.

### **Economic Environment**

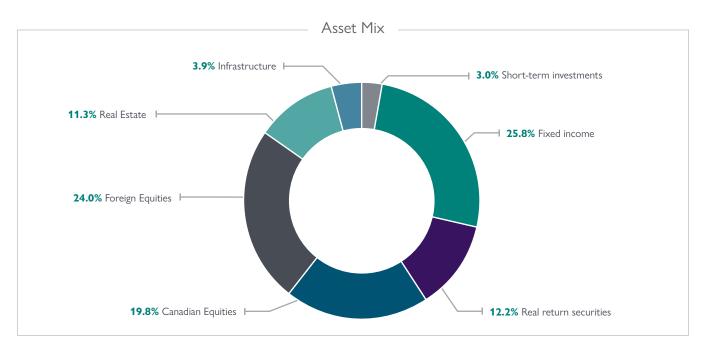
In 2018, the global economy continued to expand, and is estimated to have grown by 3.7%, led by strong growth in the U.S. and the developing economies. However, it was also a year characterised by trade tensions, lower oil prices, rising short-term interest rates and concerns about the sustainability of global growth in 2019 and beyond. The combination of these factors had a negative impact on equity markets, particularly in the closing months of the year.

## Pension Fund Performance

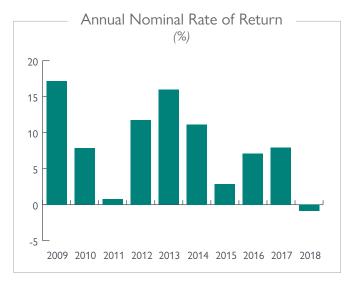
Internal investment managers actively manage the majority of the Fund's investments. Trustees also appoint external investment managers with a range of active and passive investment mandates. Portfolio managers are responsible for individual security selection within their mandates.

The Fund's net assets available for benefits at December 31, 2018 were \$1,978.8 million, compared to \$2,042.3 million at the end of 2017. The decrease in net assets was mainly attributable to the decline in equity markets throughout the year combined with a decrease in special payments made by the employer.

The Fund's performance is measured against a passive benchmark portfolio that is based on the strategic asset allocation policy. The total investment return for the Fund in 2018 was -0.9%, which was 1.1% below the benchmark which returned 0.2%.

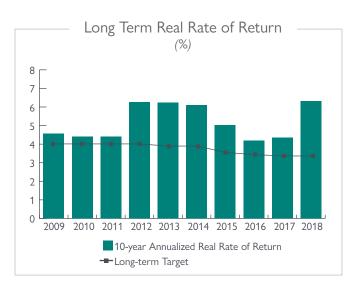


The overall return of the fund in 2018 was adversely impacted by the fall in equity markets. Over the past 10 years, the Fund's performance has on average exceeded its benchmark by about 0.4% on an annualized basis.



It is important to focus on the real rate of return achieved over the long-term, given the pension plan rules regarding the indexation of pension benefits. More specifically, for service accrued before 1 January 2018, benefits are indexed to the CPI in accordance with the Pension Plan rules. For service accrued after 1 January 2018, indexation of the benefits to the CPI is conditional in accordance with the Pension Plan rules and approval from the Board of Directors.

The real rate of return is the nominal rate of return less inflation. The Fund's 10-year annualized real rate of return was 6.3%, which is significantly higher than the long-term real rate of return objective and actuarial assumption of 3.2%.



# Performance by Asset Class

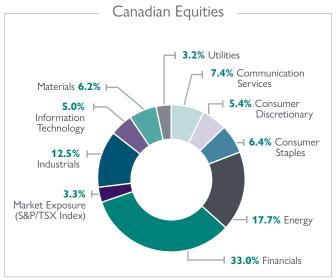
The Pension Fund recognizes that asset class selection is an important factor in the long term performance of the Fund. The Fund periodically reviews the merits of each asset class to assess the optimal mix required to meet its long term objectives. The periodic asset allocation review is approved by the Board. Each asset class is assigned a benchmark to measure the effectiveness of individual investment strategies, to carefully monitor investment activities, and to evaluate whether those objectives are being met.

#### Canadian Equities

Portfolio managers invest in companies based on fundamental factors and select companies with long term growth potential and reasonable valuations. The portfolio is intended to be well balanced across sectors and provide predictable dividend distributions.

The portfolio generated a return of -8.8% in 2018 compared to the benchmark return of -8.9%. The Energy, Consumer Discretionary and Materials sectors underwent considerable pressure during the second half of the year while the Information Technology and Consumer Staples sectors were more resilient and provided positive returns.

The portfolio remains tilted toward quality stocks and companies with attractive and sustainable growth prospects with overweight exposure to more stable sectors and underweight cyclical segments of the market. This allocation has continued to benefit the portfolio's performance relative to the index over a long-term horizon.



#### Foreign Equities

Foreign equities broaden our exposures beyond what is available in the Canadian market. US equity investments are managed passively, whilst non-U.S. foreign equity investments are managed passively and actively.

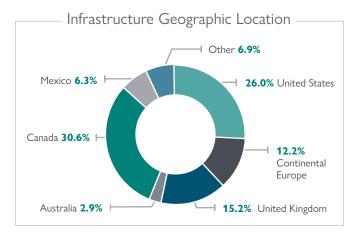
The US equity market was one of the strongest international markets in 2018. The US equity portfolio returned 7.4% in 2018, relatively in line with the benchmark.

The return of the non-U.S. foreign equity investments was -7.0% in 2018 compared to the benchmark return of -5.4%. We also maintain a currency hedging program aimed at reducing the volatility of returns over time when measured in Canadian dollars.

Foreign Equities 4.1% Utilities 5.9% Communication Real Estate 4.2% Services Materials **6.5**% **10.8%** Consumer Discretionary 13.0% H 10.2% Consumer Information Staples Technology **5.2%** Energy Industrials 12.0% Health Care 12.6% H 15.6% Financials

The Real Asset portfolio returned 8.7% in 2018 compared to the benchmark return of 13.3%.





#### Real Estate, Infrastructure and Other Real Assets

Portfolio managers invest in a select portfolio of Real Estate assets. The Fund's Real Estate holdings provide exposure to an important asset class. The process of selecting Real Estate investment opportunities involves thorough analysis of markets, property locations, legal and financial implications, environmental conditions and potential returns. Investments are financed in part through mortgages on properties. The holdings are diversified by commercial property type and by region.

The pension plan continued to expand its allocation to global Real Estate and Infrastructure investments in 2018 as additional opportunities arose. Infrastructure investments are considered after an extensive due diligence process and are largely focused on industries that operate within predictable regulatory environments and provide stable cash flows.

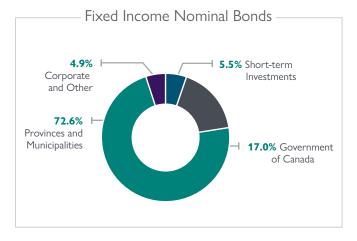
The Fund also made its first commitment to an Other Real Assets investment within the fourth quarter of 2018 in order to further diversify its Real Asset portfolio.

#### **Fixed Income**

The fixed income portfolio is composed of nominal and real return bonds. Whereas a nominal bond pays a fixed coupon over time, real return bonds pay a coupon that is periodically adjusted for inflation and therefore provides protection against the risk of inflation. The Pension Fund allocates to fixed income to reduce the overall portfolio volatility, provide investment income and to limit the interest rate risk inherent in the plan's liabilities. The fund invests in securities issued by the Government of Canada, by various provincial entities and to corporate entities in Canada. We evaluate our corporate fixed income portfolio against stringent criteria to minimize credit risk and include only investment grade issuers.

The nominal Universe portion of the Fund's fixed income portfolio returned 1.5% in 2018 compared to the benchmark return of 1.4%. The outperformance of the Universe is mainly related to the Fund's overweight position in provincial and credit exposures. These securities provide higher yields compared to Government of Canada bonds and over time help provide the portfolio with higher income levels.

The Long Government Portfolio returned 1.5%, matching the benchmark. The real return portion of the Fund's fixed income portfolio returned -1.4% in 2018.



#### **Operations Management**

The net assets of the Pension Fund decreased by \$63.5 million in 2018.

Investment losses of \$17.7 million were driven by significant losses in fair value of investments offset by an increase in investment income. The returns were in large part driven by the decline in equity markets.

As a result of continued solvency deficits reported in the December 31, 2017 actuarial valuation, CMHC made solvency special payments in the amount of \$22.4 million and solvency transfer deficiency payments of \$1.5 million, a decrease of \$53.6 million and \$0.9 million, respectively, from the previous year.

Total contributions to the Plan in 2018 were \$43.5 million lower than in 2017 mainly due to the decrease in special payments slightly offset by an increase in employee contributions because of a higher number of members in the Plan. Plan Benefit payments increased by \$6.3 million in 2018 when compared to 2017 due to higher numbers of commuted value and transfer payments.

The Fund annually assesses its overall operating expenses against average costs for funds of its size and asset mix in Canada. The Fund's operating costs are slightly lower than its peers.





All federally registered pension plans are required to undertake an actuarial valuation annually for regulatory purposes unless the solvency ratio is greater than 120%. The principal purposes of an actuarial valuation include determining the financial position of a plan and providing the basis for contributions from the employer.

An independent external actuary completes the actuarial valuation which must meet stringent legislative standards. It addresses long-term demographic trends, retirement experience and a wide variety of other factors that are analyzed in depth to determine whether changes in the Pension Plan's basic assumptions are needed. Management reviews the valuation report which is then approved by the Board of Directors and filed with OSFI and CRA.

Any differences between actuarial assumptions and future experience will emerge as gains and losses in future valuations, and will affect the financial position of the Plan, and the contributions required to fund it at that time. The actuarial valuation focuses on two fundamental aspects of the funded status of CMHC's registered defined benefit plan: going concern and solvency. These measure the sufficiency of the Fund's assets to meet the Plan's liabilities from two different perspectives.

Going concern valuation: The going concern valuation assumes that the Plan continues indefinitely. This valuation uses the expected long-term investment return associated with the Fund's diversified mix of assets at the valuation date to value the Plan.

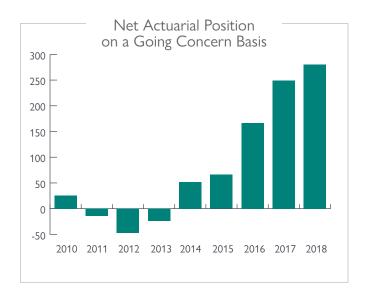
Solvency valuation: The solvency valuation assumes a hypothetical immediate termination of the Plan and that no further contributions are made. This valuation uses the interest rates prevailing at the valuation date to value the Plan based on an assumption that all assets are invested only in high quality fixed income-related investments.

The December 31, 2018 valuation reported that the Plan has a surplus on a going concern basis with an actuarial surplus of \$280.0 million and a going concern funded ratio of 115.9%. As at 31 December 2018, the actuarial value of net assets was \$2,044.4 million and the actuarial value of liabilities was \$1,764.4 million.

As permitted by the PBSA, the actuarial value of assets used for the determination of the going concern funded position is determined through a method that smoothes fluctuations in actual investment returns relative to expected investment returns over five years. The going concern funded ratio improved 1.5 percentage points since last year's valuation because of a higher than expected investment return on the actuarial value of assets and a younger demographic of active members.

The funded position on a going concern basis, as determined by the actuarial valuations filed with regulators, is shown in the chart.

The December 31, 2018 valuation also reported that the Plan continues to have a deficit on a solvency basis with an actuarial deficit of \$99.3 million and a solvency funded ratio of 95.2%. The solvency funded ratio improved because of a higher discount rate and a younger demographic of active members as mentioned above. The actuarial value of net assets in this valuation is based on the Fund's market value of net assets at December 31, 2018 and was \$1,974.8 million (net of termination costs of \$3.7 million). The actuarial value of liabilities on a solvency basis was \$2,074.1 million.



# Actuarial Opinion

Mercer (Canada) Limited was retained by Canada Mortgage and Housing Corporation to perform an actuarial valuation of the CMHC Pension Plan for purposes of determining the pension obligations of the Plan, and changes therein, for the year ended 31 December 2018, for inclusion in the Plan's financial statements prepared in accordance with Section 4600 of the Chartered Professional Accountant Handbook. The objective of the Plan's financial statements is to fairly present the financial position of the Plan as at 31 December 2018 on a going concern basis. The results of our valuation might not be appropriate for and should not be relied upon or used for any other purposes.

We have reviewed the net assets available for benefits as of 31 December 2018 for internal consistency and we have no reason to doubt its substantial accuracy. We have also tested the membership data received from CMHC for the year ended 31 December 2018 and found the results of these tests to be satisfactory.

To our knowledge, the actuarial valuation as at 31 December 2018 reflects the Plan's provisions at that date. The actuarial method prescribed by the Chartered Professional Accountant Handbook was used. The actuarial assumptions were selected by CMHC as their best long-term estimates of future events, in consultation with Mercer. Nonetheless, the future experience of the Plan will inevitably differ, perhaps significantly, from the assumptions and will result in gains or losses which will be revealed in future valuations.

In our opinion, the data on which the valuation is based is sufficient and reliable for the purposes of the valuation and the actuarial assumptions are in accordance with accepted actuarial practice in Canada.

Our valuation and related report were prepared, and our opinions given, in accordance with accepted actuarial practice in Canada.



Actuaries of the CMHC Pension Plan Ottawa, Ontario April 18, 2019

Pascal Berger, FCIA, FSA

Sasal Junge

Principal

Nicolas Lafontaine, FCIA, FSA

Senior Associate

# Independent Auditor's Report

#### To the Trustees of Canada Mortgage and Housing Corporation Pension Plan

#### **Opinion**

We have audited the financial statements of the Canada Mortgage and Housing Corporation Pension Plan (the "Plan"), which comprise the statement of financial position as at 31 December 2018, and the statement of changes in net assets available for benefits and statement of changes in pension obligations for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects the financial position of the Plan as at 31 December 2018, and its changes in net assets available for benefits and its changes in pension obligations for the year then ended in accordance with Canadian accounting standards for pension plans.

#### **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 Financial Statements section of our report. We are independent of the Plan in accordance with the ethical requirements that are relevant to our audit of the 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.

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

Management is responsible for the preparation and fair presentation of the financial statements in accordance with Canadian accounting standards for pension plans, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the 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 Plan or to cease operations, or has no realistic alternative but to do so.

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

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

Our objectives are to obtain reasonable assurance about whether the 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 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 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 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 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 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 Plan to cease to continue as a going concern.
- Evaluate the overall presentation, structure, and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

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.

Chartered Professional Accountants
Licensed Public Accountants
Ottawa, Canada, 2019

# Financial Statements

### Canada Mortgage and Housing Corporation Pension Plan

#### STATEMENT OF FINANCIAL POSITION

As at 31 December

(in thousands of Canadian dollars)	2018	2017
ASSETS		
Investments (note 3)	2,492,742	2,584,369
Accrued interest and dividends receivable	8,950	9,086
Cash	125	795
Contributions receivable		
Employer	436	473
Employees	302	166
Accounts receivable and other assets	1,585	64
	2,504,140	2,594,953
LIABILITIES		
Securities sold under repurchase agreements	500,564	518,959
Mortgages payable (note 6)	9,428	9,705
Accounts payable and accrued liabilities	15,377	23,958
	525,369	552,622
Commitments and contingent liabilities (note 13)		
NET ASSETS AVAILABLE FOR BENEFITS	1,978,771	2,042,331
PENSION OBLIGATIONS (note 7)	1,764,726	1,726,124
SURPLUS	214,045	316,207

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

On behalf of the Trustees:

Anne Giardini

Chair, Pension Fund Trustees

Evan Siddall

Trustee of the Pension Fund

President and Chief Executive Officer of CMHC

### Canada Mortgage and Housing Corporation Pension Plan

#### STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS

Year ended 31 December (in thousands of Canadian dollars)	2018	2017
NET ASSETS AVAILABLE FOR BENEFITS		
Beginning of year	2,042,331	1,871,412
INCREASE IN NET ASSETS		
Investment earnings (note 4)		
Change in fair value of investments	(80,995)	117,690
Investment income	63,261	50,018
	(17,734)	167,708
Contributions (note 8)		
Employer	46,304	94,574
Employees	15,782	11,062
	62,086	105,636
	44,352	273,344
DECREASE IN NET ASSETS		
Benefits paid (note 9)	84,475	79,327
Transfers and refunds	15,078	13,954
Operating expenses (note 10)	8,359	9,144
	107,912	102,425
INCREASE (DECREASE) IN NET ASSETS AVAILABLE FOR BENEFITS	(63,560)	170,919
NET ASSETS AVAILABLE FOR BENEFITS		
End of year	1,978,771	2,042,331

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

#### Canada Mortgage and Housing Corporation Pension Plan

#### STATEMENT OF CHANGES IN PENSION OBLIGATIONS

Year ended 31 December (in thousands of Canadian dollars) 2018 2017 Pension obligations, beginning of year 1,726,124 1,644,787 Increase (decrease) in pension obligations Interest accrued on benefits 88,096 87,031 Changes in actuarial assumptions 60,666 Benefits accrued 35,611 27,086 Benefits paid (note 9) (84,475) (79,327)Transfers and refunds (15,078)(13,954)Experience loss (gain) 14,324 (5,109)Other loss 124 4,944 Net increase in pension obligations 38,602 81,337 Total pension obligations, end of year (note 7) 1,764,726 1,726,124

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

#### Canada Mortgage and Housing Corporation Pension Plan

#### **NOTES TO FINANCIAL STATEMENTS**

Year ended 31 December 2018

#### 1. DESCRIPTION OF PLAN

#### a) General

The Canada Mortgage and Housing Corporation Pension Plan (the Plan or the Fund) is a compulsory contributory pension plan for all employees who satisfy certain eligibility conditions. Under the Plan, contributions are made by Plan members and the Plan Sponsor, Canada Mortgage and Housing Corporation (CMHC). The Plan's registration number with the Office of the Superintendent of Financial Institutions (OSFI) is 55086 and it is subject to the Pension Benefits Standards Act, 1985 (PBSA).

Prior to 1 July 2016, the Plan comprised a defined benefit (DB) component and a defined contribution (DC) component. The DB component applied to employees hired prior to 4 April 2013 or otherwise eligible to participate in the DB component as specifically provided therein. The DC component applied to new employees hired on and after 4 April 2013 who were not eligible to join the DB component of the Plan.

Effective 1 July 2016, CMHC closed the DC component of the Plan and established a new DC plan, which was accepted by Canada Revenue Agency (CRA) for registration under section 147.1 of the Income Tax Act. On 1 December 2016, the entire balance of the DC component of the Plan was transferred to the new DC plan.

In 2015, CMHC announced that the DB plan would be modified and re-opened to new entrants beginning 1 January 2018. Any benefits earned by Plan members in the former DB plan up to 31 December 2017 will remain unchanged and all plan modifications will only apply to service starting 1 January 2018.

Effective 31 December 2017, the DC plan was closed to new entrants and all eligible employees started contributing to a modified defined benefit pension plan. Effective 31 July 2018, the DC plan was terminated.

For the purposes of the notes to the financial statements, Plan refers to the current modified DB plan only, unless the former DC plan is specified.

In 2017 and 2018, the Fund established wholly owned corporations that enter into investments in real estate and infrastructure.

The following is a summary of the Plan as at 31 December 2018. For more complete information, reference should be made to the Pension Plan Rules.

Under the Pension Plan Rules, pension benefits are determined by a formula based on a percentage of the average salary of the member's best five consecutive years multiplied by the number of years of benefit service. The pension is payable at the normal retirement date of a member or upon retirement allowing for certain early retirement provisions in accordance with the Pension Plan Rules. The plan provides survivor benefits for a member's eligible spouse or common-law partner and eligible dependent or children. For service accrued before 1 January 2018, benefits are indexed to the Consumer Price Index (CPI) in accordance with the Pension Plan rules. For service accrued after 1 January 2018, indexation of the benefits to the CPI is conditional in accordance with the Pension Plan rules and approval from the Board of Directors. Benefits are integrated with the Québec/Canada Pension Plan from age 65.

#### c) Funding policy

The PBSA requires that CMHC, being the Plan Sponsor, fund the benefits determined under the Plan. The determination of the value of these benefits is made on the basis of actuarial valuations. The PBSA and its regulations require that valuations be performed annually, unless the solvency ratio is greater than 120%. These valuations are prepared in line with the Standards of Practice – Pension Plans as prescribed by the Canadian Institute of Actuaries (Note 7).



#### 2. SIGNIFICANT ACCOUNTING POLICIES

#### a) Basis of presentation

These financial statements have been prepared on a going concern basis in accordance with the Canadian accounting standards for pension plans as set out in Section 4600, Pension Plans (Section 4600), in Part IV of the CPA Canada Handbook – Accounting, which prescribes accounting policies specific to investments and pension obligations. These financial statements present the information of the Plan as a separate reporting entity independent of the Plan Sponsor and Plan members.

In accordance with Section 4600, investments, including those in which the Plan has a controlling interest, are presented on a non-consolidated basis.

For accounting policies that do not relate to investments or pension obligations, International Financial Reporting Standards (IFRS) are applied. To the extent that IFRS is inconsistent with Section 4600, Section 4600 takes precedence.

The objective of these financial statements is to assist Plan members and other users in reviewing the activities of the Plan or the benefit security of an individual Plan member's benefits. The financial statements do not purport to reflect the financial status of the Plan if terminated on the statement date, the funding requirements of the Plan or the pension expense that should be included in the financial statements of the Plan Sponsor. Because the financial statements pertain to the Plan as a whole, they provide no information about the portion of assets attributable to any individual member or group of members.

#### b) Accounting estimates

The preparation of financial statements in accordance with Canadian accounting standards for pension plans requires management to make estimates and assumptions that affect the reported amount of assets and liabilities at the date of the financial statements, the reported amounts of changes in net assets available for benefits during the year and the reported amount of the actuarial present value of accrued pension benefits and net assets available for benefits at the date of the financial statements (Note 7). These estimates are based on management's best knowledge of current events and actions that the Plan may undertake in the future. Actual results may differ from these estimates.

#### c) Investments

Investments consist of short-term investments, bonds and debentures, real return securities, equities, foreign currency forward contracts, real estate and infrastructure.

#### Valuation of investments

Purchases and sales of investments are recorded on the settlement date. Investments are measured at fair value, which is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date under current market conditions. The Fund follows IFRS 13, Fair Value Measurement, to determine the fair value of its investments.

The following describes how the fair value of investments is determined:

- i) Short-term investments consist of Government of Canada Treasury bills and are valued at quoted market bid prices.
- ii) Bonds, debentures and real return securities are valued primarily by indicative quotes obtained from multi-dealer consensus pricing services. For those instruments where observable quotes are not available, estimated values are calculated using discounted cash flow techniques and trade prices for similar securities as appropriate.
- iii) Canadian and United States (U.S.) equities' fair value is based on closing bid price quotes from active markets. Other foreign equities' fair value is the net asset value per unit, as reported by the investment fund managers. The net asset value is calculated based on the quoted market prices of the fund's assets less the fund's liabilities, divided by the total number of outstanding units.
- iv) Foreign currency forward contracts, which the Fund enters into to manage its exposure to foreign currencies, are valued by discounting estimated future cash flows using observable discount rate curves constructed using foreign exchange and interest rates.

- v) Real estate comprises direct investments in real estate (properties held to earn rental income or for capital appreciation, or both), investments in wholly owned real estate corporation established under Section 149 of the Income Tax Act, and investments in real estate pooled funds. Real estate is valued at estimated fair values based on independent appraisals completed at least once every three years plus net working capital.
- vi) Infrastructure and other real assets comprise investments in infrastructure and other real asset funds, respectively. The fair value is the net asset value per unit reported by the investment fund managers. The net asset value is based on independent appraisals of the underlying infrastructure, infrastructure-related assets and other real assets held by these funds.

#### Investment earnings

Investment earnings consist of changes in the fair value of investments and investment income.

The change in the fair value of investments comprises unrealized gains and losses from changes in fair value in the period including appraisal adjustments on real estate valuations, as well as realized gains and losses on the sale of investments.

Investment income is recorded on an accrual basis. Interest income is recognized using the effective interest method. Infrastructure fund income represents cash distribution entitlements of the Fund, and real estate income represents net rental revenue after expenses. As real estate is valued on a fair value basis, depreciation and amortization are not charged to income. Dividend income is recognized on the ex-dividend date when the right to the dividend is established.

#### Investment transaction costs

Transaction costs, which are incremental costs incurred on the purchase and sale of investments, are expensed as incurred.

#### d) Short-term assets and liabilities

Due to their short-term nature, cash, contributions receivable, accounts receivable, accrued interest and dividends receivable, and accounts payable and accrued liabilities are measured at cost, which approximates fair value.

#### e) Securities sold under repurchase agreements

Repurchase agreements consist of the sale of securities with the commitment to repurchase the securities from the original buyer at a specified price and future date in the near term. These are measured at fair value. Proceeds received from these agreements are generally invested in short-term investments.

#### f) Mortgages payable

Mortgages are measured at amortized cost, which approximates fair value. Mortgages associated with real estate are made at commercial mortgage rates.

#### g) Pension obligations

Pension obligations for the Plan are determined based on an actuarial valuation prepared by an independent firm of actuaries. The valuation is prepared on a going concern basis and uses the projected unit credit method and management's best estimate of future events.

#### h) Contributions

Contributions for current service are recorded in the year in which the related payroll costs are incurred. Contributions for past service and special payments are recorded in the year they are made. Transfer deficiency payments are recorded in the year to which they relate.

#### i) Benefits paid

Benefits are recorded in the period in which they are paid. Benefit payments that are due as at year-end are recorded in accounts payable and accrued liabilities.

#### j) Foreign currency translation

Foreign currency transactions are translated into Canadian dollars at the rate of exchange prevailing at the dates of the transactions. The fair values of the investments and cash balances denominated in foreign currencies are translated at the rates in effect at year-end. The realized and unrealized gains and losses arising from these translations are included in the change in fair value of investments

#### k) Current and future changes in accounting policies

IFRS 9, Financial Instruments replaced IAS 39, Financial Instruments: Recognition and Measurement effective 1 January 2018. IFRS 9 does not have an impact on the Fund's financial statements.

#### 3. INVESTMENTS

#### a) General

The following table shows the cost and fair value of the Fund's investments.

	2018		2017	
(in thousands)	Cost <sup>1</sup>	Fair value	Cost <sup>1</sup>	Fair value
Liability hedging assets				
Fixed income				
Short-term investments	58,495	58,531	97,207	97,178
Bonds and debentures				
Government of Canada	179,386	182,662	215,638	210,813
Provinces/municipalities	780,822	777,459	738,131	754,732
Corporate/other	52,408	52,786	44,757	46,354
Total bonds and debentures	1,012,616	1,012,907	998,526	1,011,899
Real return securities	246,991	241,545	237,347	237,163
	1,318,102	1,312,983	1,333,080	1,346,240
Growth assets				
Equity				
Canadian	219,825	393,107	220,979	453,691
U.S.	217,349	243,639	211,638	240,592
Other foreign <sup>2</sup>	270,963	231,415	259,022	258,822
Total equity	708,137	868,161	691,639	953,105
Real assets				
Real estate <sup>3</sup>	138,569	233,793	119,495	209,247
Infrastructure <sup>2</sup>	73,389	77,805	70,804	75,777
Total real assets	211,958	311,598	190,299	285,024
	920,095	1,179,759	881,938	1,238,129
Total	2,238,197	2,492,742	2,215,018	2,584,369

<sup>(1)</sup> Represents amortized cost for fixed income.

<sup>(2)</sup> Other foreign equity and infrastructure include foreign currency forward contracts with a negative fair values of \$3.9 million and \$2.3 million, respectively (2017 – positive fair values of \$0.7 million and \$0.8 million, respectively).

<sup>(3)</sup> Real estate includes \$106.9 million held by the Fund's subsidiaries (2017 – \$99.1 million), which is reported net of the subsidiaries' mortgage liabilities of \$119.1 million (2017 – \$122.5 million) and net working capital of \$0.2 million (2017 – \$0.5 million).

The Fund has investments of \$501 million (2017 – \$511 million) that are part of securities sold under repurchase agreements. The Fund continues to earn investment income and recognize changes in fair value on these investments in the statement of changes in net assets available for benefits.

#### b) Fair value hierarchy

Investments recorded at fair value are classified using a fair value hierarchy that reflects the significance of the inputs used in making the measurements:

- · Level 1: Assets and liabilities that are measured based on unadjusted quoted prices in active markets for identical assets or liabilities. An active market is one where transactions are occurring with sufficient frequency and volume to provide pricing information on an ongoing basis.
- · Level 2: Assets and liabilities that are measured based on observable inputs other than Level 1 prices. Level 2 inputs include prices obtained from third-party pricing services based on independent dealers' quotes for identical assets or liabilities in markets that are not considered sufficiently active. Level 2 also includes fair values obtained by discounted cash flow or other valuation techniques making maximum use of directly or indirectly observable market data.
- · Level 3: Financial assets and liabilities not quoted in active markets are measured based on discounted cash flow or other valuation methodologies where significant inputs are not based on observable market data.

The following table presents the fair value hierarchy for the Fund's investments.

		201	18			20	17	
(in thousands)	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Liability hedging assets								
Fixed income								
Short-term investments	26,642	31,889	-	58,531	97,178	-	-	97,178
Bonds and debentures								
Government of Canada	179,912	2,750	-	182,662	187,007	23,806	-	210,813
Provinces/municipalities	112,451	665,008	-	777,459	178,427	576,305	-	754,732
Corporate/other	-	52,786	-	52,786	-	46,354	-	46,354
Total bonds and debentures	292,363	720,544	-	1,012,907	365,434	646,465	-	1,011,899
Real return securities	213,333	28,212		241,545	208,338	28,825	-	237,163
	532,338	780,645	-	1,312,983	670,950	675,290	-	1,346,240
Growth assets								
Equity								
Canadian	393,107	-	-	393,107	453,691	-	-	453,691
U.S.	243,639	-	-	243,639	240,592	-	-	240,592
Other foreign <sup>1</sup>	235,344	(3,929)	-	231,415	258,110	712	-	258,822
Total equity	872,090	(3,929)	-	868,161	952,393	712	-	953,105
Real assets								
Real estate <sup>2</sup>	-	-	233,793	233,793	-	-	209,247	209,247
Infrastructure <sup>1</sup>	-	(2,339)	80,144	77,805	-	756	75,021	75,777
Total real assets	-	(2,339)	313,937	311,598	-	756	284,268	285,024
	872,090	(6,268)	313,937	1,179,759	952,393	1,468	284,268	1,238,129
Total	1,404,428	774,377	313,937	2,492,742	1,623,343	676,758	284,268	2,584,369

<sup>(1)</sup> Other foreign and infrastructure include foreign currency forward contracts with negative fair values of \$3.9 million and \$2.3 million, respectively (2017 – positive fair values of \$0.7 million and \$0.8 million, respectively).

<sup>(2)</sup> Real estate includes \$106.9 million held by the Fund's subsidiaries (2017 – \$99.1 million), which is reported net of the subsidiaries' mortgage liabilities of \$119.1 million (2017 – \$122.5 million) and negative net working capital of \$0.2 million (2017 – positive net working capital of \$0.5 million).

The following table presents the change in the fair value of level 3 investments:

(in thousands)	Real estate	Infrastructure	Total
2018			
Fair value as at 1 January 2018	209,247	75,021	284,268
Additions	24,051	4,310	28,361
Disposals	(4,976)	(4,203)	(9,179)
Unrealized fair value gains (losses)	5,471	5,016	10,487
Fair value as at 31 December 2018	233,793	80,144	313,937
2017			
Fair value as at 1 January 2017	299,080	69,763	368,843
Additions	40,671	4,500	45,171
Disposals	(23,386)	(218)	(23,604)
Reclassification of assets and liabilities on transfer of real estate to subsidiary	(108,308)	-	(108,308)
Unrealized fair value gains (losses)	1,190	976	2,166
Fair value as at 31 December 2017	209,247	75,021	284,268

#### Level 3 unobservable inputs and sensitivity analysis

The valuations for Level 3 investments in real estate and infrastructure, which are based on independent appraisals, include unobservable inputs that may significantly affect the measurement of fair value. The valuations were based on management's assessment of the prevailing conditions as at 31 December 2018, which may change materially in subsequent periods.

#### Real estate

The fair values of investments in real estate are determined primarily based on discounted cash flow methodologies. Significant increases (decreases) in inputs such as occupancy rates and capitalization rates could result in significantly higher (lower) fair values. Significant increases (decreases) in inputs such as discount rates could result in significantly lower (higher) fair values.

#### Infrastructure

The Fund invests in infrastructure through limited-partnership investment funds. The fair value of these investments is based on the net asset values reported by the investment fund managers. In determining net asset values, fund managers obtain independent appraisals of significant infrastructure assets.

#### Transfers between fair value hierarchy levels

For assets and liabilities measured at fair value in the financial statements, the Fund determines whether transfers have occurred between levels in the hierarchy by reassessing categorization at the end of each reporting period.

Transfers may occur between levels of the fair value hierarchy as a result of changes in the availability of quoted market prices or observable market inputs. During the year, the Fund reclassified \$18 million of securities from Level 2 to Level 1 (2017 - nil) and \$91 million of securities from Level 1 to Level 2 (2017 – \$37 million).

#### 4. INVESTMENT EARNINGS

The following is a summary of investment earnings (losses) for the Fund by asset class:

		2018			2017	
	Change in	Investment		Change in	Investment	
(in thousands)	fair value <sup>1</sup>	income	Total	fair value <sup>1</sup>	income	Total
Liability hedging assets						
Fixed income						
Short-term investments	39	1,207	1,246	24	476	500
Bonds and debentures	(22,584)	29,090	6,506	20,946	14,501	35,447
Real return securities	(5,262)	1,734	(3,528)	(343)	1,453	1,110
	(27,807)	32,031	4,224	20,627	16,430	37,057
Interest expense on repurchase agreements	-	(7,725)	(7,725)	-	-	-
	(27,807)	24,306	(3,501)	20,627	16,430	37,057
Growth assets						
Equity						
Canadian	(51,825)	13,609	(38,216)	29,861	13,112	42,973
U.S.	12,856	5,307	18,163	22,076	5,384	27,460
Other foreign	(25,062)	7,827	(17,235)	36,403	7,542	43,945
Total equity	(64,031)	26,743	(37,288)	88,340	26,038	114,378
Real assets						
Real estate	7,745	6,083	13,828	7,217	3,464	10,681
Infrastructure	3,098	6,129	9,227	1,506	4,086	5,592
Total real assets	10,843	12,212	23,055	8,723	7,550	16,273
	(53,188)	38,955	(14,233)	97,063	33,588	130,651
Total	(80,995)	63,261	(17,734)	117,690	50,018	167,708

<sup>(1)</sup> Change in fair value includes a realized net gain of \$31 million (2017 – \$51 million) and an unrealized net loss of \$112 million (2017 – net gain of \$67 million).

#### 5. RISK EXPOSURE AND MANAGEMENT

The key financial risks related to the Fund's assets are market risk, credit risk and liquidity risk. These are mitigated by policies that define the Fund's overall objective and circumscribe investments in terms of what is permitted, how investments may be made, and minimum standards for diversification, quality, and liquidity. Policies also describe the management structure and monitoring procedures adopted for the ongoing operation of the Fund.

#### a) Market risk

Market risk is the risk of adverse financial impact arising from changes in underlying market factors, including interest rates, foreign exchange rates and equity prices. The Fund is able to partially mitigate this risk by incorporating diversification requirements in its investment policies and guidelines. Diversification reduces the risk of market value decreases and helps protect the Fund from potential negative impacts within one asset class or sector.

#### Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. Pension obligations are also subject to interest rate risk. The Fund's interest rate exposure arises from mismatches in the timing and amount of cash flows of its assets and liabilities.

The Fund's interest rate risk is managed through its asset allocation policy, which takes into account the liability profile of the Fund and diversifies its assets, and other policies that limit the price sensitivity of fixed income assets to interest rate changes relative to established benchmark indices.

The impact of a 100 bps increase or decrease in interest rates on the fair value of fixed income securities, real return securities and securities sold under repurchase agreements would be:

	201	8	201	7
(in thousands)	Increase	Decrease	Increase	Decrease
Short-term investments	(47)	47	(224)	224
Bonds and debentures	(113,389)	137,399	(122,859)	149,989
Real return securities	(48,027)	62,995	(48,546)	64,256
Securities sold under repurchase agreements	(251)	252	359	(359)
	(161,714)	200,693	(171,270)	214,110

#### Foreign currency risk

Foreign currency risk is the risk that the fair value or future cash flows of an investment will fluctuate as a result of changes in foreign exchange rates and is associated with the Fund's foreign investments. Currency exposure arising from investments in Europe, Australasia and Far East (EAFE) equities and infrastructure investments are hedged through foreign currency forward contracts. The current policy is to hedge 50% of the currency exposure arising from EAFE equity holdings and 100% of the currency exposure arising from real estate and infrastructure investments, with a tolerance band of ±10 percentage points of the approved total percentage of assets to be hedged.

Fluctuation in foreign exchange rates will have a negative or positive impact on the value of the unhedged portion of investments in foreign denominations. The following table demonstrates the impact of a 100 bps increase or decrease in foreign exchange rates on the fair value of the investments net of foreign currency contracts:

	2018		2017	
(in thousands)	Increase	Decrease	Increase	Decrease
U.S.	2,436	(2,436)	2,406	(2,406)
Other foreign <sup>1</sup>	1,115	(1,115)	1,309	(1,309)
Total	3,551	(3,551)	3,715	(3,715)

<sup>(1)</sup> Represents EAFE investments.

#### Equity price risk

Equity price risk is the risk that the fair value of an investment will fluctuate because of changes in market prices, whether those changes are caused by factors specific to the individual investment or its issuer, or factors affecting all securities traded in the market. The Fund's exposure to equity price risk arises primarily from investments in equities and, to a lesser extent, investments in real estate and infrastructure. Policies set minimum standards for diversification of assets at the total Fund level and within individual portfolios.

A concentration of equity price risk exists when a significant portion of an equity portfolio is invested in entities that operate in the same industry or engage in similar activities and are affected similarly by changes in economic or other conditions. The following table outlines the sectors the equity portfolios are invested in:

	2018		2017	
(in thousands, unless otherwise indicated)	\$	%	\$	%
Financials	203,711	23.5	239,860	25.2
Industrials	104,949	12.1	117,751	12.4
Energy	94,596	10.9	112,953	11.9
Information Technology	80,947	9.3	91,385	9.6
Consumer Staples	73,080	8.4	79,330	8.3
Consumer Discretionary	71,655	8.3	83,878	8.8
Materials	65,164	7.5	71,919	7.5
Health Care	58,944	6.8	61,138	6.4
Telecommunication Services	56,485	6.5	43,204	4.5
Utilities	31,680	3.6	29,666	3.1
Real Estate	19,745	2.3	19,258	2.0
Other	7,205	0.8	2,763	0.3
Total	868,161	100.0	953,105	100.0

As at 31 December 2018, 34.8% (2017 - 36.9%) of the Fund's investments were in equities. The impact of an increase or decrease of 10% in equity prices, with all other factors held constant, would be an increase or decrease, respectively, in net assets available for benefits of \$87 million (2017 – \$95 million).

#### b) Credit risk

Credit risk is the risk of loss arising from a counterparty's inability to fulfill its contractual obligations. Credit risk includes the risk of default and encompasses both the probability of loss and the probable size of the loss, net of recoveries and collateral, over time.

The Fund's credit risk associated with investments is managed through policies that include minimum credit rating requirements and limits by sector, counterparty, and credit rating. In the event that a credit change renders an approved investment holding ineligible, the Fund will take the necessary actions to restructure holdings while minimizing losses. The credit quality of issuers of debt securities is assessed by reference to published credit ratings and investment management analysis.

Credit risk exposure on fixed income and real return securities is divided into short-term (less than one year) and long-term (greater than one year). All short-term exposure must be rated R-1 high or equivalent unless issued or fully guaranteed by the Government of Canada or a Canadian province. The maximum exposure to credit risk for fixed income and real return securities is the carrying amount of these investments.

A concentration of credit risk exists when a significant portion of a credit portfolio is invested in entities that operate in the same industry or engage in similar activities and are affected similarly by changes in economic or other conditions.

The following table indicates the credit risk exposure and concentration of credit risk of fixed income and real return securities:

	2018		2017	
(in thousands, unless otherwise indicated)	\$	%	\$	%
Securities issued or guaranteed by:				_
Government of Canada	447,315	34.1	541,565	40.2
Provinces/municipalities	780,993	59.5	748,770	55.6
Corporate/other	84,675	6.4	55,905	4.2
	1,312,983	100.0	1,346,240	100.0
Credit rating:				
AAA	458,742	34.9	594,274	44.1
A- to AA+	838,427	63.9	737,754	54.8
BBB	15,814	1.2	14,212	1.1
	1,312,983	100.0	1,346,240	100.0

Credit risk arising from foreign currency forward contracts is managed by entering into contracts with creditworthy counterparties subject to minimum credit rating requirements and by setting limits on the allowable amount of exposure to each of these counterparties.

#### c) Liquidity risk

Liquidity risk is the risk that the Plan would have insufficient cash flows to meet its pension obligations, investment-related obligations, and operating expenses as they come due. Liquidity risk is managed through holdings of highly liquid short-term investments, forecasting of cash flow requirements, and daily monitoring. Cash sources include investment income, proceeds from the sale of investments, and employee and employer contributions.

The Plan's financial liabilities consist of securities sold under repurchase agreements, mortgages payable, accounts payable and accrued liabilities and certain foreign currency forward contracts. The maturity analysis for mortgages payable is provided in Note 6. All securities sold under repurchase agreements have remaining terms that do not exceed 60 days. The term to maturity of accounts payable and accrued liabilities is within one year and the net amount payable is \$15.4 million (2017 – \$24.0 million). Those foreign currency forward contracts in liability positions have terms that do not exceed 30 days.

#### 6. MORTGAGES PAYABLE

Mortgages mature in November 2022 and November 2025. Mortgages are secured by land and specific rental properties and bear interest at fixed rates of 3.45% and 3.81%. The estimated payments of principal and interest are as follows:

	2018	
(in thousands)	Principal	Interest
2019	287	338
2020	297	327
2021	308	316
2022	3,708	295
2023	192	179
2024-2025	4,636	323
Total	9,428	1,778

2040

During 2018, interest paid on these mortgages amounted to \$0.3 million (2017 – \$0.7 million).

#### 7. PENSION OBLIGATIONS

As at 31 December 2018, an actuarial valuation of the Plan was conducted by Mercer (Canada) Limited. A copy of this valuation will be filed with OSFI and CRA.

The valuation was prepared using the projected unit credit method and reflects management's best estimate of future economic events, involving both demographic and economic assumptions. The demographic assumptions include considerations such as mortality, withdrawals and retirement rates. The significant economic assumptions are as follows:

	2018	2017
Real discount rate	3.20%	3.20%
Inflation rate	2.00%	2.00%
Rate of compensation increase	3.25%	3.25%
	+ age based promotional scale	+ age based promotional scale
Mortality table (issued by the Canadian	CPM2014 (CPM-B scale)	CPM2014 (CPM-B scale)
Institute of Actuaries)		

Variances between such estimates and actual experience, which may be material, will emerge as gains and losses in future valuations. Based on the 31 December 2018 valuation, the actuarial present value of accrued pension benefits is \$1.7 billion (2017 - \$1.7 billion).

As is standard for actuarial valuations, it is reasonably possible, based on existing knowledge, that changes in future conditions in the near term could require a material change in the recognized amounts. It is not possible to determine the magnitude of any such changes.

CMHC bears the risk of experience loss against the long-term assumptions and credit risk associated with the Plan asset portfolio and is responsible for the liability associated with the ongoing operations of the Plan.

In accordance with the PBSA, the next required actuarial valuation will be as at 31 December 2019.

#### 8. CONTRIBUTIONS

Contributions comprise the following:

(in thousands)	2018	2017
Defined benefit		
Employer		
Current service	22,416	16,107
Special payments	23,888	78,467
Total employer	46,304	94,574
Employees		
Current service	15,528	10,901
Past service	254	161
Total employees	15,782	11,062
Total contributions	62,086	105,636

As a result of the solvency deficit reported in the 31 December 2017 actuarial valuation report, \$22.4 million (2017 – \$76.0 million) in solvency special payments were made.

Special payments also included \$1.5 million (2017 – \$2.4 million) to fund transfer deficiencies for members electing to transfer out of the Plan in 2017.

#### 9. BENEFITS PAID

(in thousands)	2018	2017
Retirement	76,565	71,065
Death	7,123	7,244
Disability	109	105
Transfer restriction annuity	678	913
Total	84,475	79,327

#### **10. OPERATING EXPENSES**

Operating expenses include the administrative costs related to the management of the Plan. The following table outlines the operating expenses for the year:

(in thousands)	2018	2017
Investment personnel and support services	2,774	3,052
Pension benefits administration	2,257	2,404
Investment management fees	2,321	2,393
Audit and actuarial fees	230	224
Other administration costs	777	1,071
Total	8,359	9,144

#### 11. RELATED PARTY TRANSACTIONS

The Fund's related parties include key management personnel and CMHC and its related parties. CMHC, the Plan Sponsor, is related in terms of common ownership to all Government of Canada departments, agencies and Crown corporations.

The following table summarizes the amount invested in instruments issued by CMHC or its related parties and amounts owed by related parties:

(in thousands)	2018	2017
Short-term investments <sup>1</sup>	26,643	97,178
Bonds and debentures <sup>2</sup>	182,662	211,110
Real return securities <sup>1</sup>	238,011	233,573
Total	447,316	541,861

- (1) This is invested in related parties other than the Plan Sponsor.
- (2) \$50.6 million (2017 \$38.9 million) in CMHC and \$132.0 million (2017 \$172.1 million) in related parties other than the Plan Sponsor.

Transactions with CMHC were conducted in the normal course of operations and measured at the amount of consideration established and agreed to by both parties. Included in operating expenses is 4.2 million (2017 – 4.1 million) for administrative services provided by the Plan Sponsor. Included in accounts payable and accrued liabilities is 1.1 million (2017 – 1.3 million) due to the Plan Sponsor for administrative services provided to the Plan and 1.3 million (2017 – 2.6 million) for payments made by the Plan Sponsor on behalf of the Plan. Included in accounts receivable and other assets is 0.4 million (2017 – 0.3 million) due from the Plan Sponsor for current service contributions.

The Plan defines its key management personnel as the Plan's Trustees, CMHC's Board of Directors and those senior executives responsible for planning, directing and controlling the Plan's activities. The remuneration of those senior executives is paid by the Plan and, as they are also employees of CMHC, a portion of their remuneration is reimbursed by CMHC. The Plan does not pay the remuneration of CMHC's Board of Directors.

#### 12. CAPITAL MANAGEMENT

The Plan defines its capital as the funded status. An independent actuary periodically determines the funding surpluses or deficits of the Plan. The Plan's primary objective with respect to capital management is to ensure that plan assets are adequate to provide for the pension benefits in accordance with the provisions of the CMHC Pension Plan Rules.

The Plan Rules, as well as the Plan's funding and operations, are subject to the PBSA and its regulations and the Income Tax Act. Management has adopted a Statement of Investment Policies and Procedures (SIP&P) for the Plan, which sets investment objectives, guidelines and benchmarks used in investing the Plan's assets, permitted categories of investments, asset mix diversification and rate of return expectations. The Plan's SIP&P was last updated on 19 September 2018. The Plan Trustees are responsible for ensuring that the Plan assets are managed in accordance with the SIP&P.

The Fund's long-term asset allocation policy is as follows:

Asset Class	Long-term policy weights
Liability hedging assets	
Cash	5%
Fixed income	24%
Real return securities	12%
Growth assets	
Equity	40%
Real assets	19%

Through leveraged long government bonds, the SIP&P allows for the use of a modest level of leverage of 25% of net asset value to purchase fixed income assets to reduce the interest rate risk of the portfolio.

CMHC has managed the Plan's capital in accordance with the legal and regulatory requirements. There have been no changes in what is considered to be capital or the objectives of managing capital during the year.

#### 13. COMMITMENTS AND CONTINGENT LIABILITIES

- i) The Plan makes commitments to fund infrastructure investments. The funding is ordinarily expected to occur over several years in accordance with the agreed upon terms and conditions. As at 31 December 2018, \$21.3 million (2017 - nil) had been committed by wholly owned subsidiaries of the Fund.
- ii) The Plan is committed to fund real estate investments. The funding is expected to occur over the next several years in accordance with the agreed upon terms and conditions. As at 31 December 2018, the commitments amounted to \$17.9 million (2017 - \$37.0 million). At the end of the year, \$54.6 million had been committed by wholly owned subsidiaries of the Fund.
- iii) The Plan is committed to fund other real asset investments. The funding is expected to occur over the next several years in accordance with the agreed upon terms and conditions. At the end of the year, \$20.2 million (2017 - nil) had been committed by wholly owned subsidiaries of the Fund.

#### 14. COMPARATIVE FIGURES

Comparative figures have been reclassified, where necessary, to conform to the current year's presentation.

# Committee Membership and Plan Administration

(as at 31 December 2018)

# Pension Council

Chair	
Stéphane Poulin	Director, Total Rewards
<b>Employee Representatives</b>	
Guylaine Boudreau	Atlantic Region
Etienne Pinel	Quebec Region
David Muriella	Ontario Region
Paul Greene	Prairie and Territories Region
Vacant	B.C. Region
Matt Xu	National Office and Ottawa Point of Service
Matt Xu Kathryn Laflamme	National Office and Ottawa Point of Service  National Office and Ottawa Point of Service
Kathryn Laflamme	
Kathryn Laflamme  Pensioner Representatives	National Office and Ottawa Point of Service

# Pension Fund Investment Committee

Members	
Mark Chamie	Chair, Vice-President, Capital Markets
Nadine Leblanc	Deputy-Chief Risk Officer
Louise Stevens	Treasurer
Caroline Bourassa	Senior Manager, Financial Reporting
David Muriella	Pension Council Member, Specialist First Nation Housing
Clive Morgan	External Advisor
Graham Pugh	External Advisor
Advisors	
	Assistant General Counsel
	Manager, Audit (observer)
	Transactional Audit Analyst (observer)

# Plan and Fund Administration

Human Resources		
Stéphane Poulin	Director, Total Rewards	
Investments and Pension		
Mark Chamie	Vice-President, Capital Markets	

Legal Advisors

Sharon Rosentzveig Assistant General Counsel

Alain J. Genier Senior Advisor, Legal Services (Capital Markets)

**Pension Consultant** 

Mercer (Canada) Limited Ottawa, Ontario

**Actuary** 

Mercer (Canada) Limited

Ottawa, Ontario

**Auditors** 

Ernst & Young LLP

Chartered Professional Accountants

Licensed Public Accountants

Ottawa, Ontario

**Benefits Administrator** 

Aon Hewitt

# For Answers to your Pension Questions

For information regarding your pension, please contact the CMHC Pay and Benefits Centre at 1-800-465-9932 or visit the CMHC Pay and Benefits Centre Web Portal by typing the following address into your browser's address bar: www.cmhc.ca/employees

# To Provide Feedback on this Report

The CMHC Pension Plan Annual Report provides all members with financial and operational information on the Plan and Fund. Your feedback on this Report would be welcomed. Please address your comments or suggestions to:

Senior Manager, Financial reporting Canada Mortgage and Housing Corporation 700 Montreal Road Ottawa, ON K1A 0P7