

Building Housing Solutions Together

Annual Report









TABLE OF CONTENTS

| Message from the Chair | 4 |
|---|-----|
| Message from the President | 6 |
| 2021 Highlights | |
| Management Discussion and Analysis | 11 |
| Strategy and Culture | 12 |
| Our Community | |
| Business and Financial Highlights | 23 |
| Spotlight: Two-stage housing initiative helps build safer lives | 31 |
| Spotlight: Modular construction steps in to address | |
| Cree Nation's housing gap | 33 |
| Spotlight: Connecting people with programs | 51 |
| National Housing Strategy Update | 52 |
| Spotlight: Martha Place offers a new start and a safe home | |
| for seniors and persons with disabilities | 56 |
| Risk Management | 57 |
| Climate Change | 61 |
| Task Force on Climate-related Financial Disclosures | 63 |
| 2022 Look Ahead | 69 |
| Consolidated Financial Statements | 72 |
| Corporate Governance | 145 |
| Glossary | 151 |
| Performance Measures Overview | 154 |
| Historical Information | 155 |





MESSAGE FROM THE CHAIR

This year, CMHC celebrated 75 years of serving people living in Canada. That's 75 years of helping to meet one of our fundamental needs—a roof over our head and a place to call home. It is a proud history that the Board of Directors and I are honoured to be a part of.

I've had the opportunity to travel abroad for my work in the housing sector and have come to see how unique CMHC is as an organization. I have not seen an organization like ours, that is so profoundly involved in safeguarding our housing system through direct program delivery and financial services, research, and the gathering and provision of data to support the housing sectors.

CMHC has evolved and transformed in this 75-year journey—reimagining what our organization can be and what we can do.

We have embraced the mandate given to us by the Government of Canada and taken a leadership role in the housing system, acting boldly on behalf of all people living in Canada. People like:

- Canadian Forces veteran Bill Beaton, who went from being homeless to living in Veterans' House, a supportive-housing facility constructed with funding from the National Housing Co-Investment Fund;
- Lianne Leger, a recent university graduate able to make a home for herself in Whitehorse thanks to the First-Time Home Buyer Incentive;

- Briana, a woman who had faced down mental-health challenges only to then face precarious housing, until finding a place at Horizon View, a supportive-housing project financed by the Rental Construction Financing initiative; and
- Lawrence da Silva, an ex-prisoner now taking part in a Solutions Lab project to increase housing access for people exiting the federal prison system.

We fully support the Government of Canada's commitment to reconciliation and believe that we have a key role to play in implementing the recommendations of the Truth and Reconciliation Commission. For more than 40 years, we have helped to create social and affordable housing in First Nations, Métis and Inuit communities. That is why we are prioritizing work that improves housing outcomes for Indigenous Peoples. And we are now working with the guidance of an Indigenous Advisory Council recognizing the importance of working in new, Indigenous-led ways.

Housing affordability is more of a concern than ever, to keep people safe during the COVID-19 pandemic and to ensure an economic recovery that includes everyone. CMHC continues to respond with programs that directly address these and other issues that we all care about. These priorities come through clearly in our strategic plan. We have focused on the most critical housing challenges—areas where we can have the greatest impact on housing. It is a road map toward our aspiration: that by 2030, everyone in Canada has a home that they can afford and that meets their needs.

We know that's ambitious, just as we know that the only way to get there is to work deliberately and strategically. We do this in partnership with many partners in the financial and housing sectors. We cannot achieve our goals on our own and we understand the critical importance of collaboration among all sectors and all orders of government. On behalf of the Board of Directors, I thank all those that have partnered

with us—the private and non-profit developers, housing operators, foundations, lenders, governments, Indigenous communities, people with lived experience of housing need and financial institutions—for joining CMHC in its work to achieve housing affordability for all.

I thank the entire CMHC team for the commitment we see every day and the results we are achieving. I would also like to thank the Management Team and Romy Bowers for their leadership and commitment to our collective aspiration of a more equitable and prosperous Canada for all living here.

We only get there if we go together, and the Board and I are pleased to be part of the journey—75 years in and going strong.

Derek Ballantyne

Chair, Board of Directors



MESSAGE FROM THE PRESIDENT

In 2021, as the COVID-19 pandemic persisted, people in Canada continued to rely heavily on the sanctuary of their homes. Yet far too many families still struggled to find suitable housing they could afford, and thousands of households were displaced by serious climate events.

At CMHC, our commitment remains just as strong. We aim to ensure that people in core housing need have equitable and reliable access to secure, affordable housing; that Canada has the number of homes and the mix of housing options to serve diverse needs; and that our housing system supports sustainability and stability. But to better meet these goals, we have prioritized seven areas where we, as Canada's federal housing agency, can make the biggest difference starting in 2022 (see the Look Ahead section).

As a trusted partner, we will continue to collaborate meaningfully with other sectors, and all orders of government, to deliver for Canadians. For example:

— We exceeded our targets on all National Housing Strategy (NHS) programs more than \$19 billion was committed by the end of the year, helping to build and repair more than 174,500 units. We also launched the second round of the NHS's newest program, the Rapid Housing Initiative, to create urgently needed housing for those in precarious housing due to the ongoing impacts of COVID-19.

- Our strong ties with financial institutions led to billions of dollars in commitments of new funding to finance affordable housing projects over the next decade.
- We gained new ways to better meet the housing needs of people in core housing need. The National Housing Council, the Indigenous Advisory Council, and community engagement with equity-seeking groups are amplifying the voices of people with lived experience of housing need and homelessness and helping to shape a housing system that is more inclusive and equitable.

However, there is still much work to be done. Canada's housing problems are complex and call for a whole-of-society approach. Governments of all orders, non-profit, private and academic sectors all need to collaborate to make a difference. Working together, we can help everyone through the pandemic to an inclusive recovery, ensure the stability of our housing finance system, advance our country's commitments to anti-racism, equity, reconciliation, and mitigating and adapting to climate change.

We are taking great strides to be a convener, bringing partners together to tackle these huge challenges. We have a proven, 75-year history of responding to Canada's housing needs. We have a dedicated staff of more than 2,000 experts from across the country.

Last year, we were recognized with four major workplace awards. Our employee resource groups are engaged and generous with their insights and lived experience. And I want to thank all our employees for their renewed dedication, particularly through what was an extremely challenging year. We are building a culture based on the values of courage, community and impact.

I hope that this report will inspire you to join us in our aspiration. After all, housing affordability for all is bigger than one organization's ambition. It's the key to our country's future economic strength and social cohesion. Together we can create a better future for everyone in Canada.

Romy Bowers

President and Chief Executive Officer

Working together,
we can help everyone
through the pandemic
to an inclusive recovery,
ensure the stability of our
housing finance system,
advance our country's
commitments to anti-racism,
equity, reconciliation, and
mitigating and adapting to
climate change.

2021 Highlights

Over 19,100 new housing units committed and over 91,800 units repaired under the National Housing Co-Investment Fund*

Rapid Housing Initiative



3,300 units

for women and/or women and their children (32%) 4,200 units

for Indigenous Peoples (41%)

548 projects creating over 10,200 permanent housing units*

19,100 housing units supported by Phase 1 of the **Affordable Housing Innovation Fund** exceeding the target of 4,000 units*

^{*} Cumulative units since program launch.

Highlights

Over

housing units

committed under the

Rental Construction Financing initiative*

More than

housing units were purchased across Canada with the help of our homeowner insurance products (over 17% insured in rural areas)



in 2021

\$6 billion of Affordability-**Linked NHA MBS** were issued by Approved Issuers



Of the 168,000-plus rental units insured in 2021, over 18,500 were approved for Multi-Unit Flex units, which advances affordability

^{*} Cumulative units since program launch.

Highlights



We achieved all our diversity representation goals in 2021

CMHC employees achieved an overall 24.5 percentage points increase in awareness of the histories, cultures and traditions of First Nations, Inuit and Métis Peoples and the ongoing impact of colonialism, exceeding our target of 15 percentage points

In 2021, CMHC was recognized as one of:









2021 Annual Report 2021 HIGHLIGHTS **10**

MANAGEMENT AND ANALYSIS

The following management discussion and analysis of the financial condition and results of operations was prepared for the year ended 31 December 2021 and approved by the Board of Directors on 24 March 2022. This section should be read in conjunction with the audited consolidated financial statements. Unless otherwise indicated. all financial information in this report has been prepared in accordance with International Financial Reporting Standards (IFRS) and all amounts are expressed in Canadian dollars.

Forward-looking statements

Our annual report contains forward-looking statements that include, but are not limited to:

- the statements with respect to our outlook for the regulatory environment in which we operate
- the outlook and priorities for each activity
- the risk environment

By their nature, forward-looking statements require us to make assumptions. They are subject to inherent risks and uncertainties that may cause actual results to differ materially from expectations expressed in the forward-looking statements.

Non-IFRS measures

We use a number of financial measures to assess our performance. Some of these measures are not calculated in accordance with IFRS, are not defined by IFRS, and do not have standardized meanings that would ensure consistency and comparability with other institutions.

These non-IFRS measures are presented to supplement the information disclosed. They may be useful in analyzing performance and understanding the measures used by management in its financial and operational decision making. Where non-IFRS measures are used throughout the annual report, a definition of the term will be disclosed in the glossary for non-IFRS financial measures.



STRATEGY AND CULTURE

"Through our ongoing strategy work, I'm pleased to say that we have made some important new choices about where we should be focusing our efforts and why—and, by extension, where we should leave the field to others. We are positioning ourselves to accelerate the creation of housing that meets the needs of people across the country, to address systemic barriers to equity and inclusion, and to build a sustainable housing system."

- Lisa Williams, Senior Vice-President, Strategy

The following content reflects our strategy as outlined in our 2021–2025 Corporate Plan. The refinements made to our strategy in 2021 are outlined in the Look Ahead section. Our overall direction and aspiration remain the same.

Our aspiration

By 2030, everyone in Canada has a home that they can afford and that meets their needs.

Our outcomes



Canada has the number of homes and mix of housing options to serve our diverse needs.



People who are in core housing need have reliable access to secure and affordable housing.



Canada's housing system supports sustainability and house price stability.

These outcomes position us for success. They are interconnected and accelerate us toward our aspiration.

Strategic objectives¹

Strategic objectives drive our decision making. Now more than ever, we understand the power of data, and the need for new and strengthened partnerships and innovative solutions.

In 2021, we reviewed and revised some terminology from our 2021–2025 Corporate Plan to ensure that our language remains respectful, appropriate and inclusive, for all people living in Canada.



The following objectives bring greater focus to our work and enable us to measure progress:

Understand the needs of households in core housing need to offer differentiated solutions

Experiment with new ideas to improve and accelerate housing affordability

How?

- Understand the lived experiences of people living in Canada to inform our decisions.
- Influence current norms and attitudes on density, homeownership, rental, and inclusion.
- Develop solutions to meet specific housing needs of groups who are over-represented in core housing need and people who are underserved.

Progress toward our aspiration²:

Expected Results

- CMHC programs and services are designed around the lived experiences of people living in Canada.
- Clients value their experience with CMHC.
- Underserved segments have access to housing financing.

| Performance Measures | 2021 Target | 2021 Actual |
|--|--------------|--------------|
| New or improved program design informed by lived experience data | 70% | 71% |
| Client needs addressed within service standards | 67% | 93% |
| Net promoter score | 55 | 56 |
| Underserved insurance protection | 12,786 units | 20,158 units |

How?

- Lead and explore new ways of working with and convening traditional and non-traditional partners toward co-creating options for housing solutions.
- Prototype and experiment with new solutions to improve affordability and reduce barriers to creating and preserving housing supply.
- Scale funding mechanisms to address prioritized housing needs and exceed National Housing Strategy outcomes.

Progress toward our aspiration:

Expected Results

- Affordable housing is supplied above NHS targets.
- Resources are invested in effective housing affordability solutions.
- Government-backed funding programs/policies are created or modified to focus on targeted housing outcomes.

| Performance Measures | 2021 Target | 2021 Actual |
|---|---------------------|-------------------------------------|
| Incremental affordable housing funding (3-year delivery) | \$100M | \$140M |
| Affordable housing units created or preserved by incremental affordable housing funding | Establish target | Target not established ³ |
| Innovation index | 64% | 64% |
| Targeted guaranteed loans rate | 0.343% | 0.981% |

² Refer to the Performance measures overview for further details.

³ This measure is no longer applicable following the review of our strategy in 2021.

Publicize housing data and insights to promote long-term affordability and sustainability

How?

- Scale and expand the effectiveness of data and tools to influence decisions and better address housing needs, manage risks and improve financial stability.
- Form strong relationships to build applications that use and provide targeted housing data.

Progress toward our aspiration:

Expected Results

- Governments, industry and housing participants have localized data to make evidence-based decisions on housing affordability.
- Partners share clean and relevant data with CMHC and each other.

| Performance Measures | 2021 Target | 2021 Actual |
|---------------------------------------|-------------|-------------|
| Average usability satisfaction rating | 68 | 73 |
| Signed data partnerships | 5 | 6 |



Our Culture

If strategy is "what we do," culture is "how we do it." When combined with strategy, culture accelerates execution and creates strategic advantage. In 2021, we revised and streamlined our corporate values to articulate what we value, and how we want to think and act. To meet our strategic outcomes, we need to be a courageous community, building impactful solutions together. The following three values will give us the edge we need to get to our 2030 aspiration:



COURAGE

This is important because we have a bold aspiration, and we must lead difficult but necessary changes to the housing system.

COMMUNITY

Thinking and acting as one diverse team, mutually trusting and supporting each other, and creating partnerships in the best interest of the communities that we serve.

IMPACT

This value will keep us focusing our efforts on what will have the most impact on people in Canada.



OUR COMMUNITY

"As a community (inside and outside CMHC), we champion diversity and equity in our housing system and trust in one another. We are ensuring that we have a representative workforce and a strong culture that champions diversity, inclusion and reconciliation."

- Marie-Claude Tremblay, Chief of Staff

Anti-Racism and Equity

We're committed to doing our part to become an equitable and inclusive organization and to create an equitable housing system. Systemic racism in Canada continues to affect First Nations, Inuit and Métis Peoples, Black, and other racialized people. They often face discrimination and systemic barriers to opportunities that everyone living in Canada deserves—including access to affordable housing that meets their needs.

Our anti-racism activities are led by a set of intended outcomes:

- Our employees and senior management reflect the diversity and lived experience of people living in Canada.
- Equity is embedded both internally and externally through our policies, programs and practices.
- Racialized and marginalized communities are actively and meaningfully engaged in the process of meeting our commitments, and all choices are made through the lens of advancing fairness, justice and equity.

Indigenous Relations and Reconciliation

Reconciliation is about acknowledging the past, working to close gaps and build a stronger future. It starts with awareness and learning. The Truth and Reconciliation Commission's final report calls on organizations like CMHC to provide education to public servants on the history of First Nations, Inuit and Métis people, including the history and legacy of residential schools, the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), treaties and Aboriginal rights, Indigenous law and Aboriginal-Crown relations. Cultural education and awareness through skills-based training in intercultural competency, conflict resolution, human rights and anti-racism are the foundation of our emerging corporate Reconciliation Action Plan (RAP), a strategic framework to deliver purposeful actions to advance reconciliation across CMHC.

As a first step, we launched a mandatory online course called *The Path: Your Journey Through Indigenous Canada*TM. This course has ensured that all CMHC employees start with foundational knowledge of the histories, cultures and traditions of Indigenous Peoples and the ongoing impact of colonialism in Canada. Increasing awareness across our workforce and providing continued learning opportunities throughout the year empowers allyship in reconciliation and builds a strong foundation for the development of the RAP.

Indigenous Advisory Council

We work in partnership with the Indigenous Advisory Council (IAC), launched in 2021 to guide our efforts and commitment to advance reconciliation and deliver better housing outcomes for Indigenous Peoples. The IAC has provided advice to CMHC's Board of Directors, Executive Committee and Indigenous Relations Team to ensure that we consider the unique needs of Indigenous Peoples in developing the RAP. We will continue to seek their guidance to co-create CMHC's RAP. In addition, CMHC appointed its first Vice-President, Indigenous Relations to provide leadership in reconciliation and guidance in the development of the RAP.

Indigenous Employee Circle

The Indigenous Employee Circle (IEC) was established in 2020 and continues to advise and support the creation of the RAP that addresses commitments toward internal transformation. The IEC provided advice on various functions of CMHC, including Indigenous recruitment, retention and learning opportunities. They worked closely with the Indigenous Relations team in hosting several successful events, including observance of the National Day for Truth and Reconciliation, which honours the lost children and survivors of residential schools, their families and communities.

Best Practices in Reconciliation and Inclusion

We are enrolled in the Canadian Council for Aboriginal Business (CCAB) – Progressive Aboriginal Relations (PAR) program. PAR certification indicates that a company is a trusted business partner, a great place to work and committed to prosperity in Indigenous communities. We are now at the "PAR Committed" level, which indicates our commitment to continuous improvement in Indigenous relations and our intention to undergo verification of our performance in the future.

PAR will provide criteria to guide internal cultural change and will verify corporate initiatives and outcomes in four key performance areas: leadership actions; employment; business development; and community relations.

"The Path: Your Journey Through Indigenous Canada™" was very interesting and easy to follow. The course serves as a great first learning opportunity for CMHC to learn the true histories, cultures and traditions of Indigenous Peoples and the ongoing impact of colonialism in Canada. As an Indigenous person, I was able to learn some new things that I had not known before. This type of education is crucial yet has been left out of the Canadian history we learned growing up and in schools. This is why it is so important to take responsibility for our own learning and commit to doing better for ourselves, our workplace and generations to come."

- Kawiah Tunti

Officer, Event Planning and former Co-Lead (employee development), Indigenous Employee Circle



In 2021, we achieved several noteworthy milestones such as:

POLICY REVIEW

Developing New Tools to Guide Our Work:

— Our Anti-Racism and Equity Review tool will be used in tandem with our GBA+ tool to assess our existing programs and policies and influence the development of housing policy and advice to government.

Rolling out an engagement guide:

— This guide puts clients, partners and people with lived experience as well as equity-deserving communities at the centre of our activities.

Gathering the required data to effect change:

- We are developing an inventory of indicators from Australia. New Zealand and the United States:
- Initiating a systemic analysis of data from the 2011 National Household Survey and the 2016 Census to better understand where inequities in the housing system exist; and
- Informing our efforts to reduce systemic barriers for equitydeserving groups.

CONVERSATION

Conducting roundtables with Black community leaders:

— These sessions help us better understand the diverse housing needs of Black communities and identify the barriers to accessing housing.

Engaging with employees and listening to their stories:

- Senior leaders met with Employee Resource Groups (ERGs) throughout the year to continue the exchange on fairness, justice and an equitable recovery;
- Our nine ERGs are a driving force behind diversity, equity, inclusion and belonging.

MENTAL HEALTH

Providing additional mental health supports to Indigenous, Black and racialized colleagues:

— Through our Employee Assistance Program, we put additional counselling services in place.

TRAINING

Increasing our collective knowledge:

- Over 95% of employees completed The Path: Your Journey Through Indigenous Canada™.

Building an anti-racist culture virtual workshop:

— Participants to date self-report a 14.4% average knowledge gain.

Adding to our leadership programming for Indigenous, Black and other equity groups:

- Offerings are available in our new Leadership Academy;
- We are concurrently exploring a pilot for an external Black leadership program and other similar offerings for different equity-deserving groups.

HR PRACTICES

Conducting a deep dive into our HR practices:

- Our employment systems review included a focus on First Nations. Inuit. Métis. Black and racialized employees;
- A review of our workplace harassment and violence prevention practices applied an inclusive lens. The exercise identified that good practices are in place, yet opportunities for growth continue to exist and will be further explored in 2022.

Supporting our Anti-Racism and **Equity and Reconciliation efforts:**

- We continue to build capability and capacity to support these corporate initiatives;
- We created two new vicepresident (VP) roles for equity and Indigenous relations. Our VP of Indigenous Relations started in O2 2021. The result of the selection process for the VP of Equity is expected to be completed and announced in early 2022.

Meeting all our representation goals for 2021⁴:

Representation of Black individuals in leadership more than doubled from the original goal. More remains to be done for us to achieve our longer-term representation goals for Indigenous and racialized people in leadership. In 2022, we are expanding our diversity reporting to include greater representation for the racialized people segment.

| | 2021 | 2021 | 2022 | 2025 | 2021 | 2021 | 2022 | 2025 | | |
|------------------------------|--------|-------|-------|------------------------|--------|-------|-------|------------------------|--|--|
| Group | Actual | Goals | Goals | Goals | Actual | Goals | Goals | Goals | | |
| Women | 57.4% | 50.0% | 50.0% | 50.0% | 52.0% | 50.0% | 50.0% | 50.0% | | |
| | | | | | | | | | | |
| Racialized people | 36.1% | 28.4% | 28.8% | 29.8% | 24.1% | 20.0% | 22.5% | 29.8% | | |
| Black employee segment | 8.1% | 3.5% | 3.5% | 3.5% | 5.8% | 2.5% | 2.7% | 3.5% | | |
| Indigenous people | 3.1% | 2.6% | 2.7% | 3.3% | 2.1% | 1.3% | 1.8% | 3.3% | | |
| People with disabilities | 10.5% | 9.4% | 9.6% | 10.4% | 10.9% | 9.7% | 9.9% | 10.4% | | |
| LGBTQ2S+ | 4.0% | | | ensus data enchmark | 4.9% | i | | ensus data enchmark | | |
| | | | | | | | | | | |

Leaders*

CMHC Total

^{*}Employees with direct reports and individual contributors who are at Advisor level or higher.

These goals are the minimum representation and reflect Census data. CMHC's goal is to have an employee population representative of Canada's diverse population.

⁻ COVID-19 may impact future labour market availability; the goals will be revised based on 2021 Census data and reflected in future plans.

⁻ Establishing benchmarks for LGBTQ2S+ is difficult due to lack of data on Canadian representation. These numbers are based on voluntary self-identification; actuals may be higher.

Budget 2021 announced that Crown corporations will be required to implement gender and diversity reporting starting in 2022, however,
 CMHC has been reporting this through its Annual Report and Corporate Plan since the early 2010s.

Based on research, best practices and employee feedback, we updated some of our terminology since the release of the 2021–2025 Corporate Plan.

Well-being matters

With our aspiration, we like to think that nothing else is more important. For that reason, a range of well-being programs, benefits, leave options and resources continued to be made available to all throughout 2021. Among them was a non-medical COVID-19 leave for a period of three months or more where the first week was paid at 100%.

Response to COVID-19 and worksite reintegration

Guided by the importance we place on the health and safety of our employees and by our Results Only Work EnvironmentTM, we developed a three-phase, evidence-based approach to worksite reintegration. Appropriate measures were put in place to safely reintegrate employees to our offices while limiting any health risks. We remained agile and adapted our plan to reflect our steadfastness in the broader responsibility to support public health measures and be part of the solution.

Vaccination policy and strategy and implementation status

CMHC's Vaccination Policy took effect on 15 November 2021 and is fully aligned with the Government of Canada's vaccine requirements. It is in accordance with the *Privacy Act*, the *Canadian Human Rights Act*, and the *Canada Labour Code*. The Policy introduced mandatory vaccination measures as a condition of employment to support the health and safety of CMHC's workforce and the communities we serve.

"I am grateful and honoured that CMHC gave me the opportunity to do what was right for my family during the pandemic. I came back even more motivated and energized to work toward our 2030 aspiration. Proud to be on the CMHC team!"

- Soula Tsiakopoulos

Specialist, Financial Planning and Analysis



BUSINESS AND FINANCIAL HIGHLIGHTS

Economic and Housing Environment

Canadian economic growth resumed in 2021. High vaccination rates and the easing of restrictions reduced uncertainty and increased business and consumer confidence, allowing the economy to recover. Growth was further buoyed by highly accommodative fiscal and monetary policies and global economic recovery.

Overall, Canada's economy increased by 4.6% in 2021, partially offsetting the 5.2% decline in 2020. Canada's labour market recovery continued in 2021. Relative to pre-pandemic levels, the total number of Canadians employed was 1% higher in December 2021. December's unemployment rate also returned to 5.9%, close to the pre-pandemic level of 5.7%. Total hours worked was also back to pre-pandemic highs. Consistent with the strong labour market recovery and the ability of many higher-income households to work from home, household disposable income increased by 3.3% in 2021.

The recovering economic environment contributed to a strong housing market. Record low interest rates, negligible impact of the pandemic on high-income households, availability of savings accumulated since early in the pandemic and preference changes in the types of units sold have contributed to a robust rise in housing demand.

This led overall housing prices to increase strongly given limited supply responsiveness. Not only does this harm households directly because they spend an increasing share of their financial resources on housing, but it also creates significant vulnerabilities as they make households and housing markets less resilient to adverse economic and financial events.

In some places, strong house price increases have led to overvaluation, with prices not supported by long-term income and demographic conditions. Consequently, Canada's housing market showed a high degree of vulnerability by the end of 2021⁵. Household debt also rose further. Despite the increase in income, the average household debt-to-disposable income ratio reached a historical peak of 186% in the fourth guarter of 2021, compared to 177% a year earlier. Elevated household indebtedness makes them, and the economy more broadly, more vulnerable to adverse economic and financial events.

The Canadian resale market reached 667.015 MLS® sales in 2021, a 21% increase from 2020. Average MLS® prices increased 21% to a record high of \$687,862 in part due to a higher proportion of more expensive and single-family homes being sold. The level of new listings remained low, which contributed to higher prices and occasional bidding wars. There was a welcome boom in housing starts, reaching 276,587 units in 2021, a 27% increase from 2020. However, this increase will need to be boosted even further over the long term to address affordability challenges brought about by historical supply unresponsiveness, especially in Canada's largest centres.

This housing market activity and higher house prices contributed to lift household debt further. The severe impact of the pandemic on lower-income workers in industries such as accommodation, food services and other service industries that required physical contact was a reason for rental housing demand being held in check. Additionally, the fall in immigration, particularly non-permanent residents, and inter-provincial mobility also contributed to lower demand. Average two-bedroom rent growth across Canada's Census

Metropolitan Areas (CMAs) slowed to 2.9% compared to the 3.6% growth seen between 2019 and 2020. The overall vacancy rate for purpose-built rental apartments among Canada's CMAs was 3.2% in 2021, unchanged from the previous year.

Interest rates are likely to rise and temper some housing demand. At the same time, upside demand pressures include returning migration with higher immigration targets and continued employment recovery and income growth. Higher interest rates will also be a pressure on debt-burdened households. Any other negative shock, such as a global economic slowdown, may lead to households finding it hard to pay housing costs. There are continued affordability challenges in many of Canada's housing markets resulting from a structural long-term lack of housing supply. This will continue without significantly increased supply, which is currently made more challenging by rising construction cost and supply chain issues, and the growing impacts of climate change to our existing housing stock.

In early 2022, the escalating conflict between Ukraine and the Russian Federation has resulted in significant volatility and uncertainty in financial markets. The North Atlantic Treaty Organization (NATO), European Union (EU) and G7 member countries, including Canada, have imposed severe and coordinated sanctions against Russia. While we do not hold Ukraine or Russian Federation securities in our portfolio the escalating conflict has impacted market volatility in the short term. The longer-term impact to geopolitical norms, supply chains and investment valuations is uncertain. We will closely monitor the situation and resulting impact on our future financial results.

⁵ Source: CMHC Housing Market Assessment Canada, September 2021.

Consolidated Financial Highlights

Condensed Consolidated Balance Sheet

| | Assist Housing A | | Mortg Insurance | | Mort Funding | | Elimin | ations | Tot | tal |
|---|------------------|--------|--------------------|--------|-----------------|---------|--------|--------|---------|---------|
| (in millions) | 2021 | 2020 | 2021 | 2020 | 2021 | 2020 | 2021 | 2020 | 2021 | 2020 |
| Cash, cash equivalents, and investment securities | 4,489 | 2,936 | 17,415 | 19,878 | 3,619 | 4,830 | (910) | (423) | 24,613 | 27,221 |
| Loans | 8,377 | 6,879 | 83 | 104 | 264,821 | 264,210 | - | - | 273,281 | 271,193 |
| All other assets | 883 | 1,099 | 911 | 882 | 671 | 576 | (2) | (1) | 2,463 | 2,556 |
| Total assets | 13,749 | 10,914 | 18,409 | 20,864 | 269,111 | 269,616 | (912) | (424) | 300,357 | 300,970 |
| Provision for claims | - | - | 310 | 735 | - | - | - | - | 310 | 735 |
| Borrowings | 12,396 | 9,685 | - | - | 264,821 | 264,210 | (873) | (370) | 276,344 | 273,525 |
| Unearned premiums and fees | - | - | 6,500 | 6,129 | 2,184 | 1,892 | - | - | 8,684 | 8,021 |
| All other liabilities | 784 | 897 | 447 | 630 | 591 | 603 | (13) | (16) | 1,809 | 2,114 |
| Total liabilities | 13,180 | 10,582 | 7,257 | 7,494 | 267,596 | 266,705 | (886) | (386) | 287,147 | 284,395 |
| Total equity of Canada | 569 | 332 | 11,152 | 13,370 | 1,515 | 2,911 | (26) | (38) | 13,210 | 16,575 |

Financial Position

In 2021, we declared dividends to the government of \$5,080 million, funded from our retained earnings from prior years and our 2021 net income of \$1,924 million. We declare dividends after regulatory and other capitalization requirements are met, ensuring that our Mortgage Insurance and Mortgage Funding activities are appropriately capitalized.

Condensed Consolidated Statement of Income and Comprehensive Income

| | Assis Housing | | | tgage e Activity | | e Funding ivity | Elimin | ations | Tot | al |
|---|------------------|-------|-------|---------------------|-------|--------------------|--------|--------|-------|-------|
| (in millions) | 2021 | 2020 | 2021 | 2020 | 2021 | 2020 | 2021 | 2020 | 2021 | 2020 |
| Government funding for housing programs | 3,668 | 4,892 | - | - | - | - | - | - | 3,668 | 4,892 |
| Premiums and fees earned | - | - | 1,399 | 1,372 | 716 | 667 | - | - | 2,115 | 2,039 |
| All other income ¹ | 107 | 75 | 322 | 835 | 80 | 107 | 4 | 3 | 513 | 1,020 |
| Total revenues and government funding | 3,775 | 4,967 | 1,721 | 2,207 | 796 | 774 | 4 | 3 | 6,296 | 7,951 |
| Housing programs | 3,359 | 4,496 | - | - | - | - | - | - | 3,359 | 4,496 |
| Insurance claims | - | - | (317) | 472 | - | - | - | - | (317) | 472 |
| Operating expenses | 299 | 389 | 324 | 311 | 70 | 67 | - | - | 693 | 767 |
| Total expenses | 3,658 | 4,885 | 7 | 783 | 70 | 67 | - | - | 3,735 | 5,735 |
| Income taxes | 26 | 14 | 429 | 362 | 181 | 177 | 1 | 1 | 637 | 554 |
| Net income | 91 | 68 | 1,285 | 1,062 | 545 | 530 | 3 | 2 | 1,924 | 1,662 |
| Other comprehensive income (loss) | 146 | (38) | (253) | 245 | (111) | 96 | 9 | (3) | (209) | 300 |
| Comprehensive income | 237 | 30 | 1,032 | 1,307 | 434 | 626 | 12 | (1) | 1,715 | 1,962 |

¹ Includes net interest income, investment income, net gains (losses) on financial instruments and other income.

Revenues and Expenses

In 2021, our total revenues and government funding decreased by \$1,655 million (21%) mainly due to the following:

- A decrease of \$1,224 million (25%) in government funding for housing programs driven mainly by the Canada Emergency Commercial Rent Assistance (CECRA) program of \$1,549 million ending in December 2020.
- Premiums and fees earned increased by \$76 million (4%), led by an increase of \$49M (7%) in Mortgage Funding guarantee fees earned primarily due to price increases in recent years and the implementation of a revised tiered pricing structure in 2015. Earned insurance premiums increased by \$27 million (2%) mainly due to higher multi-unit volumes from prior years passing through the earnings curve. This is partially offset by lower premiums received and recognized due to a decrease in insurance volumes as explained in the Mortgage Insurance section below.
- All other income decreased by \$507 million (50%) due to a decrease in net gains on financial instruments of \$440 million (78%) as we rebalanced our insurance investment portfolio in 2020 as part of the implementation of a new strategic asset allocation, which resulted in significant realized gains. In addition, we realized lower investment income of \$65M (16%) as a result of a decrease in the average portfolio size due to dividend payments to the government combined with lower average yield rates on our bonds.

Total expenses decreased by \$2,000 million (35%) mainly due to the following:

- The decrease in government funding for housing programs as described above, resulting in a decrease in housing programs expenses and operating expenses.
- A decrease of \$789 million (167%) in insurance claims expenses as a result of a release of the provision because of a lower unemployment rate, higher gross domestic product and housing price index. In addition, arrears did not materialize as expected with the mortgage deferral programs ending.

Other Comprehensive Income

Other comprehensive income decreased by \$509 million (170%) mainly due to the following:

- A decrease of \$897 million (163%) in net unrealized gains from debt instruments held at fair value through other comprehensive income due to an increase in bond yields in 2021 compared to a decrease in 2020.
- An increase of \$327 million (545%) in remeasurement gains on the defined benefit plans due to the net effect of an increase to the discount rate throughout 2021 and a higher return on plan assets resulting in a decrease in the pension plan liability. In 2020, there was a remeasurement loss due to the decrease in the discount rate.

Financial Performance Against 2021 Plan

| | 2021 | | | | |
|--|---------|---------|--|--|--|
| (in millions unless otherwise indicated) | Actual | Plan | | | |
| Total assets | 300,357 | 319,580 | | | |
| Total liabilities | 287,147 | 304,248 | | | |
| Total equity of Canada | 13,210 | 15,332 | | | |
| Total revenues and government funding | 6,296 | 6,182 | | | |
| Total expenses | 3,735 | 4,354 | | | |
| Income taxes | 637 | 451 | | | |
| Net income | 1,924 | 1,377 | | | |
| Operating budget ratio (%) | 9.6 | 11.6 | | | |

Total equity was \$2,122 million lower than planned. This is mainly due to the resumption of dividend payments in 2021, which were \$3,500 million higher than planned.

Total expenses were \$619 million lower than planned due to lower insurance claims as a large portion of forecasted claims were not realized. Our plan forecasted higher insurance claims expenses supported by a higher unemployment rate and lower gross domestic product forecast than actual. This is also the driver for the higher net income. This is partially offset by lower housing programs expenses due to the changes in the timing of when government funding is required for the National Housing Strategy, particularly for the National Housing Co-Investment Fund, Federal Lands Initiative, and the Federal, Provincial and Territorial Partnership.

Capital Management

Our capital management frameworks meet regulatory and industry best practices to allow our operations to deliver their mandates and support the risks we have taken.

Capital Management Frameworks

For our Assisted Housing activity, we maintain a reserve fund pursuant to Section 29 of the *CMHC Act*. Our Lending programs operate on a break-even basis over the long term; however, a portion of their earnings are retained in this reserve fund in order to account for potential future interest rate and credit risk exposure on our loans. Unrealized fair value market fluctuations and remeasurement losses on defined benefit plan liabilities are absorbed in retained earnings. Aside from the reserve fund, we do not hold capital for our Assisted Housing activities, as they do not present material financial risks to CMHC that we do not already otherwise mitigate.

For our Mortgage Insurance activity, our capital management framework follows the Office of the Superintendent of Financial Institutions (OSFI) guidelines and requirements. We calculate both regulatory capital following the Mortgage Insurer Capital Adequacy Test (MICAT) guideline and economic capital. We manage our capital to the higher of the two. To date, capital required under MICAT is higher than our economic capital estimate and is used for capital management purposes.

For our Mortgage Funding activity, our capital management framework follows industry best practices and incorporates regulatory principles from OSFI, including those set out in OSFI's Guideline E-19: Own Risk and Solvency Assessment, and those of the Basel Committee on Banking Supervision. Our capital adequacy assessment uses an integrated approach to evaluate our capital needs from both a regulatory and economic capital basis to establish capital targets that take into consideration our strategy and risk appetite.

We validate and calibrate annually, if necessary, both our internal capitalization target and the operating capital holding target for our Mortgage Insurance and Mortgage Funding activities. In August 2021, our Board of Directors approved maintaining the internal targets for minimum capital required and operating levels at 155% and 165% respectively for Mortgage Insurance and 105% and 110% for Mortgage Funding. For Mortgage Funding, the Board approved a reduction of the economic capital required from \$3 billion to \$2.7 billion, effective 1 January 2022.

Ratios

The table below presents our capital management ratios as at 31 December.

| (in percentages) | 2021 | 2020 |
|---|------|------|
| Mortgage Insurance: capital available to minimum capital required (MICAT) | 213% | 234% |
| Mortgage Funding: capital available to capital required 1,2 | 279% | 349% |

¹ The capital available to capital required as at 31 December 2021 from an economic viewpoint is 136% (31 December 2021 – 176%).

Our MICAT ratio decreased by 21 percentage points mainly due to the decrease in available equity, driven by the recommencement of the dividend in 2021, which was temporarily suspended in the previous year. This decrease is partially offset by the decrease in capital required as the insurance risk decreased due to lower insurance-inforce in 2021. We remain adequately capitalized as at 31 December 2021.

Our Mortgage Funding capital available to capital required is 70 percentage points lower than in 2020 due to dividend declarations of \$1.83 billion during the year.

Refer to the Consolidated Financial Statements note 10 – Capital Management for further disclosure on capital management.

Dividend Breakdown

The table below presents our dividend paid over the last 5 years.

| (in millions) | 2017 | 2018 | 2019 | 2020 | 2021 |
|--------------------|-------|-------|-------|------|-------|
| Dividends paid | 2,675 | 5,500 | 2,695 | - | 5,080 |
| Dividends declared | 4,675 | 4,175 | 2,020 | - | 5,080 |

² Represents the capital available to capital required from an accounting viewpoint that excludes unearned premiums and fees from capital required.



"We help people living in Canada access housing that meets their needs and that they can afford. We achieve this through a range of programs and initiatives to support the construction of new affordable housing supply, and the preservation and revitalization of existing affordable and community housing."

- Paul Mason, Senior Vice-President, Client Solutions

We deliver our mandate and pursue our strategy through three business activities—Assisted Housing, Mortgage Insurance and Mortgage Funding—all of which are supported by housing policy, housing analysis and research, and housing innovation.

2021 Annual Report Assisted Housing 28

Assisted Housing

How we do it

We offer support through the provision of contributions and low-cost loans for the creation and preservation of housing as well as funding for affordability supports to housing proponents. We receive parliamentary appropriations to fund assisted housing programs, including programs in response to circumstances of critical national importance.

We deliver housing programs that help Canadians acquire affordable housing, prioritizing target populations and those who have been made vulnerable and are facing housing challenges. We do this through our program delivery and partnerships with:

- provinces;
- territories:
- municipalities;
- Indigenous governments and organizations;
- non-profit and co-operative housing organizations; and
- private sector companies.

In 2021, two of Canada's largest financial institutions, Scotiabank and BMO, announced their commitment to invest more than \$20 billion to finance and transform housing affordability over the next 10 years.



2021 Annual Report ASSISTED HOUSING 29

Delivering on the National Housing Strategy (NHS) and other programs⁶

Partnerships are the cornerstone of the National Housing Strategy and contribute to its success by helping remove barriers and increase access to housing through innovation and collaboration. This comprehensive strategy covers the entire housing continuum, from shelters and transitional housing to community and affordable housing, to market rental and homeownership. We were encouraged by the following additional investments announced in Budget 2021:

An additional \$1.5 billion was provided for the **Rapid Housing Initiative (RHI)** to help address the urgent housing needs of Canadians in core housing need, especially in the context of COVID-19. It will add at least 4,500 new units to Canada's affordable housing supply.

We also expanded the support funding for community housing to ensure that affordability is maintained for those who need rental support the most. This was done through an additional \$118.2 million over seven years, starting in 2021–22, for the Federal Community Housing Initiative (FCHI).

In addition to Budget 2021 funding, on 1 February 2021 we announced **Temporary Rental Assistance** funding of up to \$15 million, until 31 March 2022, to assist former federally administered social housing projects whose operating agreements expired prior to April 1, 2016. The funding will support these housing organizations and provide affordable accommodation to persons and families with low income.

We advanced \$750 million under the **National Housing Co-Investment Fund (NHCF)** to 2021–22 and 2022–23 to accelerate the creation of 3,400 new units and the repair of 13,700 units, and reallocated \$250 million—\$200 million of which is being advanced to 2021–22 and 2022–23—for the construction, repair and operating costs of an estimated 560 units of transitional housing and shelter spaces for women and children fleeing violence.

Building on the Canada Greener Homes Grant offered through Natural Resources Canada (NRCan), Budget 2021 proposed to provide \$4.4 billion to CMHC over five years, starting in 2022, to help up to 175,000 homeowners complete major home retrofits through interest-free loans of up to \$40,000, repayable over 10 years. The **Canada Greener Homes Loans** will be available to homeowners, as well as Indigenous governments and organizations applying on behalf of Indigenous Peoples who are eligible for the grant and intend to undertake retrofits identified through an authorized EnerGuide energy assessment.

Working with government and Indigenous organizations

Shelter initiative for Indigenous women and children

Along with Indigenous Services Canada (ISC) and Indigenous partners, in Q2 2021 we introduced the recipients for the construction of 12 new shelters across Canada for Indigenous women, children, and 2SLGBTQQIA+ people escaping family violence. The initiative provides over \$85 million to build and support the operation of 12 new emergency shelters across Canada over five years, and an additional \$10.2 million annually thereafter.

In late 2020, as part of the Fall Economic Statement, the government announced funding of \$724.1 million starting in 2021 (\$420 million from CMHC and \$304.1 million from ISC) to expand culturally relevant supports for Indigenous Peoples facing gender-based violence and to support new emergency shelters and transitional (second stage) housing, including in the North and in urban centres. These shelters will be Indigenous-led and will provide vital refuge and culturally appropriate supports and services to help survivors of family violence recover from the trauma of their experiences, access programming and create a stable environment where they can begin to regain their lives.

2021 Annual Report Assisted Housing 30

⁶ Refer to the Look ahead section for additional funding announced in Budget 2021 pending approval; and to the National Housing Strategy update for additional information.

SPOTLIGHT

Two-stage housing initiative helps build safer lives

Program supports Canada's commitment to end violence against Indigenous women, children, and 2SLGBTQQIA+ people

This new program being delivered in partnership by CMHC and Indigenous Services Canada (ISC) will help Indigenous women, children and 2SLGBTQQIA+ people find refuge from violence and rebuild safer lives.

The <u>Indigenous Shelter and Transitional</u>
<u>Housing Initiative</u> is a violence-prevention program that expands supports for Indigenous women, children and 2SLGBTQQIA+ people escaping gender-based violence.

The program will back the construction and operation of at least 38 shelters and 50 transitional homes for First Nations, Inuit and Métis people across the country.

Shelters provide a safe space and vital refuge for people escaping violence. A shelter is often a first step in rebuilding their lives and protecting them from further violence.

Transitional—or second-stage housing—provides longer-term housing, safety and security. Clients usually have access to a range of supports and services in transitional housing. These are key to helping them get their lives back on track, secure and maintain permanent housing, and thrive.

Indigenous women's experiences of violence are closely linked to poverty, discrimination and exclusion within their wider communities. These factors mean that they may not benefit to the same extent as non-Indigenous women from services to protect them from violence. Often, shelters and transitional housing serving the larger community do not provide the culturally sensitive environment and support services that are essential to healing.

The Initiative is a step toward the Government of Canada's Federal Pathway to Address
Missing and Murdered Indigenous Women,
Girls and 2SLGBTQQIA+ People. CMHC and ISC will work with Indigenous Peoples and organizations, provincial and territorial governments and other partners to develop effective and culturally appropriate solutions.

The Indigenous Shelter and Transitional Housing Initiative, with its \$724.1-million budget, builds on the work that started with the 2020 **Shelter Initiative for Indigenous Women and Children**. Coupled with this earlier program, these investments will yield 100 new housing projects—projects that will improve the safety and life outcomes of Indigenous women, children and 2SLGBTQQIA+ people.



2021 Annual Report SPOTLIGHT **31**

Indigenous organizations and communities

Our dedicated team of housing specialists continued to work with First Nations, Inuit and Métis communities and organizations to ensure they had access to our programs and were able to make the most of them to address their housing needs and goals. Our outreach efforts resulted in new and enhanced relationships with Indigenous urban housing organizations, First Nations communities and Northern housing providers and a significant increase in the number of housing projects funded under NHS programs. In 2021, we supported over 3,500 units in Indigenous and Northern communities.

Many First Nations, Inuit and Métis organizations and communities faced unique and unprecedented challenges as a result of the pandemic, and we acted swiftly by offering a series of relief measures including payment deferrals of CMHC loans, off-site inspections, reduced reporting requirements and payment arrangements.

We recognize that First Nations, Inuit and Métis Peoples, wherever they reside, should have access to adequate, safe and affordable housing. Under the NHS, \$225 million (\$25M through the National Housing Co-Investment Fund (NHCF) targeting 560 urban, rural and northern units repaired; and \$200M through the Canada Community Housing Initiative to maintain at least 7,000 urban, rural and northern units) is dedicated to helping ensure community housing providers can protect affordability and undertake necessary repairs for Indigenous Peoples living in urban, rural and northern communities.

The **RHI** received considerable interest from Indigenous governing bodies and organizations, and CMHC prioritized those applications.

The NHS **Federal Lands Initiative (FLI)** supports the transfer of surplus federal lands and buildings, at discounted to no cost, to be developed or renovated for use as affordable housing. In 2021, the FLI introduced strategies to address barriers to participation and enhance engagement with Indigenous organizations.

Housing Internship for Indigenous Youth program

We are committed to helping Indigenous youth prepare for long-term employment in the housing industry. The Housing Internship for Indigenous Youth (HIIY) program provides financial assistance to help businesses and organizations create housing-related internships for Indigenous youth. These internships can provide youth with much-needed work experience and on-the-job training. Internship opportunities include positions in housing administration, maintenance, construction, tenant relations, and more. In 2021, this initiative assisted 511 interns, surpassing the target of 485.

41%

of all units created under RHI are targeted to First Nations, Inuit and Métis Peoples

NHS Federal Lands Initiative



of properties currently under negotiation include Indigenous proponents

2021 Annual Report Assisted Housing 32

SPOTLIGHT

Modular construction steps in to address Cree Nation's housing gap

Innovative, energy-efficient building solution can create affordable homes quickly

The need for more housing is urgent, particularly in Indigenous communities. Already, 12% of Canadians are unable to find housing that they can afford or that meets their needs, but for Indigenous households, that number is 18%. And urgent needs require innovative solutions.

Solutions like modular housing.

The Cree Nation received \$17.4 million in funding through the Projects Stream of the Rapid Housing Initiative to deploy modular housing projects across Quebec. The result will be 55 new homes built quickly in nine Cree Nation communities, to be inhabited by elders and residents with disabilities.

The communities of Eastmain, Nemaska, Ouje-Bougoumou, Waskaganish, Waswanipi, Wemindji and Whapmagoostui will each have five new homes once construction is complete, while the larger communities in the region, Chisasibi and Mistissini, will receive 10 new homes each.

Modular housing is an innovative, energy-efficient solution to building affordable homes quickly. This type of housing is manufactured in factory-controlled conditions and then brought to the building site, either in sections or as a whole, for installation and finishing. The indoor manufacturing process offers multiple cost-saving advantages and is particularly suitable for Indigenous and Northern housing and remote communities.

Like other regions in Canada, the Cree Nation is dealing with the impacts of increasing homelessness and housing need. These challenges have been deepened by the COVID-19 pandemic, which has made it clear that affordable housing is key to recovery in regions across the country.

The Rapid Housing Initiative was developed in part to alleviate the pressures of the pandemic on Canadians. It is centred on a human rights-based approach to housing that includes the principles of non-discrimination, inclusion, participation and accountability.

This new funding through the Initiative complements the Cree Nation's existing efforts to meet urgent housing needs by building more than 2,000 new homes.



2021 Annual Report SPOTLIGHT 33

Government funding and housing programs expenses

The following table reconciles the amounts of government funding for housing programs authorized by Parliament as available to us during the government's fiscal year (31 March) with the total amount we recognized in our calendar year.

| 2021 | 2020 |
|---------|---|
| | |
| | |
| 2,920 | 2,657 |
| 3,039 | 9 |
| 873 | 78 |
| (812) | - |
| (4,064) | (1,282) |
| (238) | (64) |
| (252) | (463) |
| 1,466 | 935 |
| | |
| 3,259 | 2,920 |
| 1,800 | 3,039 |
| 44 | 873 |
| - | (812) |
| 5,103 | 6,020 |
| (2,683) | (1,466) |
| (53) | (252) |
| n/a | (238) |
| 2,367 | 4,064 |
| 3,833 | 4,999 |
| | 2,920 3,039 873 (812) (4,064) (238) (252) 1,466 3,259 1,800 44 - 5,103 (2,683) (53) n/a 2,367 |

¹ Supplementary estimates are additional government funding voted on by Parliament during the government's fiscal year.

2021 Annual Report ASSISTED HOUSING 34

² Approved 2021/22 supplementary estimates A for RHI, NHCF, Canada Greener Homes, Granville Island Emergency Relief Fund, CECRA, CHB and funding to support Youth (2020/21 for CECRA, Housing Supply Challenge and funding to respond to the National Inquiry into Missing and Murdered Indigenous Women and Girls' Final Report: Reclaiming Power and Place Assistance), (2019/20 for Housing Research and Data Initiative, First-Time Home Buyer Incentive, Human-rights based approach to housing and other initiatives).

³ Approved 2021/22 supplementary estimates B for RCFi (2020/21 for RHI, Affordable Housing Innovation Fund, Federal, Provincial and Territorial initiatives and other NHS initiatives), (2019/20 for NHCF, Innovation Fund, First-Time Home Buyer Incentive and other initiatives).

⁴ Approved 2020/21 supplementary estimates C increase of \$19 million for COVID-19 programs including CECRA, Rapid Housing Initiative, Housing Internship for Indigenous Youth, and Granville Island Emergency Relief Fund, and a reduction of \$831 million as part of the Fall Economic Statement for CECRA.

⁵ We exclude funding received for the Granville Island Emergency Relief Fund from our consolidated financial statements as we do not control the activities of Granville Island.



2021 Annual Report



"We offer competitive mortgage insurance products to support homeownership financing and facilitate the construction, purchase and refinance of multi-unit residential properties. We also support the stability of the Canadian financial system. Furthermore, we operate these programs on a commercial basis without the need for government funding."

 Michel Tremblay, Chief Financial Officer and Senior Vice-President, Corporate Services

Mortgage Insurance

How we do it

We work with approved lenders to offer transactional homeowner and portfolio mortgage insurance products in all parts of Canada.

We also offer Multi-Unit Mortgage Loan Insurance, which provides access to preferred interest rates for the construction, purchase and refinancing of multi-unit residential properties, including affordable rental housing.

Our products

Transactional Homeowner Insurance

Protects lenders against borrower default, enabling qualified borrowers, typically with down payments between 5% and 20%, to access mortgage financing at competitive rates.

Portfolio Insurance

Allows lenders to pool low-ratio residential mortgages (down payments of 20% or more for 1–4-unit residential properties) and insure these against borrower default, making them eligible for our securitization programs.

Multi-Unit Residential Insurance

Protects lenders against borrower default on loans for the construction, purchase and refinancing of multi-unit (5+ units) residential properties.

Homeowner Business Transformation

Our Homeowner Business
Transformation project is modernizing
our homeowner mortgage loan
insurance business by launching
future-ready technologies, processes and
services that allow for faster decision
making, increased transparency and
improved ease of access. Through this
longer-term project and investment,
we are providing an improved client
experience for lenders, which will
ultimately better serve people living in
Canada and build a strong foundation
for the future. In 2021, we:

- Launched a new default management submission platform as part of a new suite of Insurance Servicing Tools, which introduced capabilities that support faster decision making on lender default management requests, real-time default status information and improved communication.
- Concluded foundational work on a new homeowner claims and arrears platform, which will introduce improved processes in 2022.

 Turned our focus to future phases of the Homeowner Business Transformation that will include changes to transactional homeowner and portfolio insurance systems and processes.

Homeowner products

Last year, in response to economic uncertainty driven by the COVID-19 pandemic, we implemented temporary changes to our underwriting practices for mortgage loan insurance. Our aim was to protect homebuyers, reduce government and taxpayer risk, and support the stability of housing markets while curtailing excessive demand and unsustainable price growth. The changes we made in 2020 were not as effective as we had anticipated therefore, effective 5 July 2021, we returned to our pre-July 2020 underwriting practices for homeowner mortgage loan insurance. Specifically:

- we will consider a Gross Debt Service (GDS) ratio up to 39% and Total Debt Service (TDS) ratio up to 44% for borrowers who have a strong history of managing their payment obligations;
- at least one borrower (or guarantor) must have a credit score that is greater than or equal to 600 at the time of the request for insurance;

 as always, we will consider the overall strength of the mortgage loan insurance application, including alternative methods of establishing creditworthiness for borrowers without a credit history.

Our homeowner insurance products helped homebuyers purchase over 73,000 housing units across Canada, with just over 17% insured in rural areas of Canada.

In November, we were proud to work with Canada Guaranty and SagenTM to provide increased flexibility for borrowers with Homeowner and Portfolio insured mortgage loans in British Columbia who have been impacted by the floods and who may require special arrangements to meet their mortgage payment obligations. As such, we permitted lenders to allow payment deferral of up to six months.

Energy-efficient housing is being made more affordable with Mortgage Loan Insurance. **CMHC Green Home** offers a partial refund on the cost of mortgage Ioan insurance for those buying, building or renovating for energy efficiency. Eligible applicants may receive a refund of up to 25% of their premium.

Multi-Unit Products

Multi-Unit Flex product

CMHC mortgage loan insurance offers flexibilities to encourage the construction, preservation and improvement of affordable rental properties, helping people in Canada meet their rental housing needs. Flexibilities include higher loan-to-value ratios, lower debt coverage ratios and reduced premiums. In 2021, flexibilities were approved for 18,529 Multi-Unit Flex units. Multi-Unit Flex is being replaced by MLI Select in the spring of 2022.

Multi-Unit Mortgage Loan Insurance (MLI) Select

In November 2021, following an extensive consultation process, we were pleased to announce MLI Select, which will replace Multi-Unit Flex in the spring of 2022. MLI Select is designed to preserve existing rental units as well as increase overall supply with a specific focus on deeper affordability, accessibility and climate compatibility. As MLI Select offers reduced premiums as well as other incentives for energy efficiency commitments, CMHC will no longer offer energy efficiency rebates for multi-unit mortgage loan insurance. This will be a key product to help us achieve our 2030 aspiration.

Within CMHC's
Multi-Unit Mortgage
Loan Insurance program,
approximately

17,000

units qualified for the Premium Reduction/ Refund for Energy Efficient Properties in 2021

CMHC Green Home benefitted the purchasers of approximately

480 Units across the country

Financial Metrics and Ratios

Mortgage Insurance

| (in percentages) | 2021 | 2020 |
|----------------------------|--------|------|
| Loss ratio ^{1, 2} | (22.7) | 34.4 |
| Operating expense ratio | 23.2 | 22.7 |
| Combined ratio | 0.5 | 57.1 |
| Severity ratio | 31.7 | 30.5 |
| Return on equity | 10.3 | 8.4 |
| Return on required equity | 14.8 | 10.5 |

¹ Loss ratio on transactional homeowner and portfolio products excluding multi-unit was -27.2% for the twelve months ended 31 December 2021 (45.6% for the twelve months ended 31 December 2020).

The loss and combined ratios decreased mainly due to lower insurance claims expense as explained above.

The severity ratio increased, mainly driven by one large multi-unit claim in early 2021.

Higher net income as a result of lower insurance claims expenses as explained above has resulted in increases in both return on equity and return on required equity ratios. In addition, return on equity increased due to recommencement of dividend declarations, and return on required equity increased as our required equity decreased with lower insurance-in-force in 2021.

| (in millions, unless | Insurar Force | | Insured '(un | | Insu Volum | ıred es¹ (\$) | Premiu Fees Re | | Claims | Paid ² |
|-------------------------|------------------|------|--------------|---------|---------------|------------------|-------------------|-------|--------|-------------------|
| otherwise indicated) | 2021 | 2020 | 2021 | 2020 | 2021 | 2020 | 2021 | 2020 | 2021 | 2020 |
| Transactional homeowner | 193 | 216 | 73,104 | 94,127 | 21,795 | 26,523 | 773 | 945 | 117 | 128 |
| Portfolio | 94 | 114 | 22,717 | 79,800 | 6,559 | 19,850 | 25 | 125 | 8 | 10 |
| Multi-Unit residential | 114 | 101 | 168,344 | 173,647 | 28,171 | 25,097 | 1,004 | 939 | 14 | 2 |
| Total | 401 | 431 | 264,165 | 347,574 | 56,525 | 71,470 | 1,802 | 2,009 | 139 | 140 |

¹ Portfolio volumes exclude lender substitutions. Portfolio substitutions were 0 units in 2021 (27,270 units and \$5,375 million in 2020).

Insurance-in-force decreased by \$30 billion (7%) due to run-off of existing policies-in-force insured exceeding the new loans. New loans insured were \$56 billion, while estimated loan amortization and pay-downs were \$86 billion.

² The loss ratio is calculated based on the insurance claims expense incurred over the period, which is estimated based on actuarial modelling of projected economic variables.

² Claims paid refers to the net cash amounts paid out on insurance claims. This amount does not include social housing mortgage and index-linked mortgage claims.

Transactional homeowner volumes in units decreased as a result of changes to our underwriting criteria that we implemented in July 2020. Effective 5 July 2021, we returned to the majority of our pre-July 2020 underwriting practices for transactional homeowner and portfolio, although these volumes did not immediately revert to normal levels. Portfolio unit volumes decreased in comparison to last year, when portfolio eligibility criteria were temporarily expanded and demand for funding by lenders was higher with the launch of the Insured Mortgage Purchase Program (IMPP) at the onset of the COVID-19 pandemic. Multi-Unit residential volumes also decreased, driven by a decline in refinancing units as eligibility was discontinued effective 1 July 2020, except when funds are used for repairs or re-investment in housing. This decrease is slightly offset by increases in new construction, particularly related to RCFi, and purchases of existing properties as a result of the progressive recovery of the economy in 2021.

Total insured dollars decreased, driven primarily by the decreases in portfolio and transactional homeowner volumes in units slightly offset by the Multi-Unit increases in new construction and purchases of existing properties and higher average unit price for all insured products.

Transactional homeowner and portfolio account for the entire \$207 million (10%) decrease in total premiums and fees received, partially offset by higher multi-unit, as explained above.

Lower claims paid is mainly due to a decrease in transactional homeowner claims as lenders are recovering sufficient funds from the sale of the properties to cover losses as a result of higher house prices.

| | 201 | 21 | 2020 | | |
|-------------------------|-------------------------------|-----------------|-------------------------------|-----------------|--|
| | No. of Delinquent Loans | Arrears Rate | No. of Delinquent Loans | Arrears Rate | |
| Transactional homeowner | 3,573 | 0.38% | 4,967 | 0.47% | |
| Portfolio | 956 | 0.14% | 1,471 | 0.18% | |
| Multi-Unit residential | 126 | 0.48% | 64 | 0.25% | |
| Total | 4,655 | 0.28% | 6,502 | 0.34% | |

The arrears rate includes all loans more than 90 days past due as a percentage of outstanding insured loans. There were lower reported delinquencies in all regions, which is consistent with employment and house price trends in Canada.

Stabilization Fund

CMHC has managed assets transferred from the Federal Co-operative Housing Stabilization Fund (the Fund) since the termination of its Indenture of Trust in April 2010. The assets transferred from the Fund are available to assist co-ops that have an index-linked mortgage (ILM) and are in financial difficulty. Transferred mortgage receivables under administration during the year remained constant at \$36 million at 31 December 2021. Other assets transferred from the Fund to CMHC that are available to assist ILM co-ops in financial difficulty were \$48.4 million at year end, which included \$0.6 million in restricted funds for loan commitments approved but not yet advanced.





"We promote stability in the Canadian financial system by providing access to funding for mortgages in all economic conditions. We do this by enabling approved financial institutions to pool eligible insured mortgages into marketable securities to be sold to investors. The sale of these securities generates funds for residential mortgage financing."

 Caroline Sanfaçon, Senior Vice-President, Client Operations

Mortgage Funding

How we do it

We guarantee the timely payment of principal and interest of *National Housing Act* Mortgage-Backed Securities (NHA MBS) issued by approved financial institutions. We also provide the timely payment guarantee for Canada Mortgage Bonds (CMB) issued through the Canada Housing Trust.

We are responsible for the administration of the covered bond legal framework, another source of mortgage funding that we administer on a cost-recovery basis.

Our products

National Housing Act Mortgage-Backed Securities Program

Provides approved financial institutions with efficient access to mortgage financing in the form of amortizing securities.

Canada Mortgage Bonds Program

Provides approved financial institutions with efficient and stable access to mortgage funding through the issuance of marketable bullet bonds (principal paid at maturity). Canada Mortgage Bonds are issued through the Canada Housing Trust, with proceeds used to purchase *National Housing Act* Mortgage-Backed Securities.

Canadian Registered Covered Bond Program

Enables registered issuers to issue debt instruments backed by pools of uninsured Canadian residential mortgages to investors.

We guarantee the timely payment of principal and interest payments to investors, which represents the full faith and credit of the Government of Canada.

We operate this program on a cost-recovery basis. Issuance of Covered Bonds under the framework are not guaranteed by CMHC or the Government of Canada.

The following table shows the share of outstanding mortgage credit by funding source and demonstrates the importance of our Mortgage Funding programs.

| | All Mortgage Lenders | | Large | Banks | Other Mortgage Lenders | |
|-----------------------|-------------------------|------|-------|-------|---------------------------|------|
| | 2021 | 2020 | 2021 | 2020 | 2021 | 2020 |
| CMHC Securitization | 24% | 28% | 14% | 19% | 55% | 54% |
| Covered Bonds | 10% | 15% | 13% | 19% | 3% | 3% |
| Other funding sources | 66% | 57% | 73% | 62% | 42% | 42% |

National Housing Act Mortgage-Backed Securities

In 2021, we introduced preferential guarantee fees for NHA MBS containing social housing loans or multi-family loans insured under the CMHC MLI Multi-Unit Flex product or the future MLI Select product with the affordability commitment ("Affordability-Linked Pools"). This targeted program enhancement helped support the NHS by incentivizing lenders to provide cost-effective financing choices helping increase the availability of affordable housing to people in Canada.

In September 2021, we announced our intention (effective 1 May, 2022) to enhance the NHA MBS program by introducing four new pool types of which the coupon will be based on Canadian Overnight Repo Rate Average (CORRA). Previously, the Canadian Dollar Offered Rate (CDOR) has been the interest rate benchmark for floating-rate NHA MBS. CMHC's program enhancement is to support the Canadian Alternative Reference Rate (CARR) committee's reform efforts and meet our mandate on promoting financial stability and facilitating market adoption of CORRA as a key financial benchmark.

CDOR has been the main interest rate benchmark in Canada for the last several decades. CARR has recommended the adoption of CORRA as the risk-free interest rate benchmark to transition from CDOR to ensure that Canada's benchmark regime is consistent with evolving global best practices and becomes more robust and resilient in the future.

Canada Mortgage Bonds

In 2021, we implemented an enhanced allocation methodology for 10-year CMB issuances to provide priority access for Affordability-Linked NHA MBS Pools. \$5.2B of Affordability-Linked Pools received priority access to CMB funding representing almost one third of available 10-year CMB funding in 2021.

In September 2021, we also announced that starting in 2022, the CMB Program will introduce CORRA as the reference rate for new floating rate CMB offerings through Canada Housing Trust. Previously, floating-rate CMBs issued by Canada Housing Trust were referenced off three-month CDOR.

Covered Bonds

In 2021, we approved the registration of two new covered bond issuers helping provide these financial institutions with reliable, cost-effective funding for their uninsured mortgage portfolios. This represented the first new covered bond issuer registrations since 2018.

Financial Metrics and Ratios

Mortgage Funding

| (in percentages) | 2021 | 2020 |
|---------------------------|-------|-------|
| Operating expense ratio | 8.2% | 8.3% |
| Return on equity | 24.6% | 20.4% |
| Return on required equity | 76.3% | 42.5% |

Return on equity was higher due to the increase in net income driven by higher guarantee and application fees earned as explained above under Revenues and Expenses, as well as the decrease to average equity as a result of the resumption of dividend payments in 2021.

Our Mortgage Funding return on required equity increased due to the combined effect of an increase in net income as explained above, and a decrease in required equity compared to the prior year as a result of a revision to our required capital methodology in 2020.

| (in millions, unless | Total Guarantees-in- Force (\$B) | | New Securities Guaranteed (\$B) | | Guarantee and Application Fees Received ¹ | |
|---|--|------|---------------------------------------|------|--|------|
| otherwise indicated) | 2021 | 2020 | 2021 | 2020 | 2021 | 2020 |
| National Housing Act Mortgage-Backed Securities (NHA MBS) | 202 | 232 | 144 | 172 | 841 | 708 |
| Canada Mortgage Bonds (CMB) | 259 | 257 | 40 | 53 | 167 | 196 |
| Total | 461 | 489 | 184 | 225 | 1,008 | 904 |

¹ Guarantee and application fees received for *National Housing Act Mortgage-Backed Securities*; guarantee fees received for Canada Mortgage Bonds.

Total guarantees-in-force represents the maximum principal obligation related to our timely payment guarantee. Guarantees-in-force were \$461 billion as at 31 December 2021, a decrease of \$28 billion (6%) as NHA MBS prepayments have been higher than normal. This trend is consistent with the current low interest rate environment in which more homeowners may be refinancing their mortgages to lock in a lower interest rate.

Guarantee and application fees received increased by \$104 million (12%) while volumes have decreased as the pricing increases effective 1 January 2021 have led to higher fees received.

New securities guaranteed decreased as a result of the termination of our programs instituted in 2020 at the onset of the pandemic.

The government reset our annual limit on NHA MBS to \$150 billion and on CMB to \$40 billion in 2021 after raising them to \$295 billion and \$60 billion, respectively, in 2020 to assist with overall market liquidity in response to the COVID-19 pandemic.



"In 2021, we continued to focus our policy development on measures that will create more affordable housing and maintain housing affordability, especially for people in greatest need."

- Nadine Leblanc, Senior Vice-President, Policy

Housing Policy

We work with provinces and territories, primary partners in housing, through the Federal/Provincial/Territorial Forum on Housing where we discuss joint policy priorities. Through the Forum, we collaborate and share information on three priorities: urban, rural and northern Indigenous housing; housing supply for vulnerable populations; and NHS progress and reporting.

In summer 2021, the Canada-British Columbia Expert Panel on the Future of Housing Supply and Affordability (the Panel) released its final report Opening doors: unlocking housing supply for affordability. As secretariat to the Panel, we supported its development of solutions to market housing supply and affordability challenges in B.C., with potential applications to other urban regions of Canada.

In December 2021, on behalf of the federal government, we launched a Call for Ideas to gather input from municipalities; Provinces and Territories; Indigenous governments, organizations and communities; private and non-profit housing sectors; and people in Canada to inform two proposed programs: a new Housing Accelerator Fund, which would remove barriers and help municipalities build housing more quickly in an ambitious and innovative manner; and a Rent-to-Own program that would help make it easier for renters to work toward homeownership. Submissions, which are due in winter 2022, will inform the development of policy proposals for the government's consideration.

Housing analysis and research

A strong understanding of the root causes behind financial, social and environmental vulnerabilities of households and their effect on the housing system is critical to our strategy and our role in supporting housing system participants to make informed decisions to improve housing affordability. To understand and help address these issues, we collect data and conduct research to understand current and future challenges of the housing system, barriers to housing supply and affordability and those experiencing core housing need.

We develop and deliver housing data, research and insights on:

- Canadian households, their housing needs, and the extent of social inclusion, racism and other systemic barriers of households, especially those in core housing need:
- the current and future state of housing markets, and drivers of supply and demand that impact affordability within and across markets;
- climate change mitigation and resiliency of housing and communities;
- the housing finance system, along with conditions and trends that impact the stability of households, markets and systems.

Our data, research and insights also inform our policy advice and product development.

We expand partnerships and improve coordination and knowledge exchange with federal, provincial and territorial governments; interdisciplinary teams within CMHC; industry; community-based organizations; academia.

Data, Research and Insights

To mobilize our data and research and to empower clients and partners, we have released new data tables, visualization tools, publications and dashboards, as well as provided a variety of presentations to industry, providing much sought-after commentary and analysis on data and trends. These tools have empowered us to put additional information in the hands of decision makers and influence the direction of policy and programs in communities across the country.

BELOW ARE SOME OF THE HIGHLIGHTS OF THESE EFFORTS:

| What? | Why? |
|---|---|
| We entered six new data partnership | To support the analysis of land use and infrastructure investment related to housing. |
| agreements, exceeding our plan | To improve our housing surveys programs related to market and social rental-tenure housing. |
| Expanded coverage and release of the second cycle of the Social and Affordable Housing Survey – Rental Structures (SAHS-RS) | To enhance our understanding of the entire housing continuum. |
| Our expert housing market forecasts and assessments of market vulnerabilities | To provide key insights for decisions during periods of high volatility. |
| Analysis of our Rental Market | To shed light on higher rental availability challenges faced by the lowest household |
| Survey results | income groups and the dependencies markets have on secondary rental options. |
| Research on barriers to the supply of, | To demonstrate how inequalities against racialized communities arise in the |
| and access to, affordable housing | housing finance system, changing trends in evictions, and the relationships |
| | between rent controls and rents in Toronto. |
| Insights on our housing finance system | To demonstrate how the dynamics for specific markets and the financial |
| | system were challenged by the COVID-19 pandemic. |
| Insights on our housing finance system: | To deliver an interactive report that provides users with unique insights |
| release of the Residential Mortgage | into Canada's uninsured and insured mortgage markets. |
| Industry Data Dashboard on CMHC.ca | |
| Analysis and model development | To estimate current and future supply gaps and the magnitude of our housing supply and demand challenges. |
| Examination of alternative financing | To help recognize that traditional programs are not always appropriate or effective |
| options for Indigenous housing | and thereby limit accessibility to the funding needed to build and renovate. |
| | |

2021 Annual Report DATA, RESEARCH AND INSIGHTS 48

Housing Innovation

We convene, support and collaborate with a broad range of housing sector participants to conceive, prototype and experiment with solutions to complex housing issues. To improve housing system outcomes, we look to mobilize knowledge and scale impactful ideas. We pursue new partnerships and evolve existing ones to foster innovation in the housing sector.

HERE ARE SOME PROJECTS THAT WE ARE INVESTING IN:

SparrowShare/ Home Match

Aligning people in need of housing and people with available space. We are financially supporting this project that launched in 2021.

Highlights

By repurposing just 1% of the approximately 12 million empty bedrooms in Canada, this solution could provide much-needed housing for more than 100,000 people in Canada.

Capital Connect

An external, digitally enabled marketplace that will provide developers and investors in affordable housing the tools, information and capacity-building supports. Currently developing pilot projects in select geographies to test the feasibility of this idea.

Highlights

Stakeholder consultations have validated that there is a potential \$20 billion of private sector capital that could be used for affordable housing.

The Housing Supply Challenge

Invites citizens, housing experts and housing organizations from across Canada to propose innovative solutions to the barriers that limit the housing supply. The Data Driven round announced 14 finalists in 2021. These teams are now working to implement their solutions.

The Getting Started round invited groups to propose locally relevant solutions that improve the pre-development process for housing that is affordable. 29 shortlisted applicants move to stage 2 in 2022.

Highlights

The Northern Access round of the challenge will open for applications in January 2022, but many activities to help increase the capacity of lived experience applicants have already taken place in 2021.

2021 Annual Report HOUSING INNOVATION 49

Housing Innovation

The NHS Demonstrations Initiative

Demonstrates forward-looking technologies, practices and strategies that explore the future of housing in Canada. Launched an open call for proposals on the targeted theme of Community Land Trusts (CLTs) and Alternative Land Tenures. CLTs are non-profit corporations created to acquire and hold land for the benefit of a community and provide secure affordable access to land and housing for community residents.

16 proposals were selected, and the funding will be used to support the creation of new land trusts, showcase success stories and support larger organizations with their goals of building capacity in their regions.

Highlights

Providing this multi-angled support to CLTs across the country is intentional and hopes to kick-start a more widespread uptake of this innovative solution to housing affordability.

Solutions Labs Program

Experts and housing stakeholders incubate and scale potential solutions to solve complex housing problems. More than 15 completed projects since launched in 2018 and many others ongoing.

These labs have produced roadmaps that pave the way for innovative solutions to be implemented. Many of the earlier projects are now having impacts.

Highlights

"The NHS Solutions Labs Program provided us with a unique opportunity to engage youth with lived experience and the flexibility to experiment to design transitional housing that meets their needs. We are now moving to acquire property to build a new 10-unit transitional house based on the Lab solutions."

Solutions Lab – Modelling Transitional
 Housing for At-Risk Youth

We continue to assess our ability to prototype and experiment with new ideas through our innovation index.

Including the following new affordable housing ideas:

In 2021, we established an additional large-scale partnership with the Capital Social d'Investissement Immobilier and secured additional investments from Vancity Community Investment Bank to deliver an additional \$140 million in incremental affordable housing funding over three years.

2021 Annual Report HOUSING INNOVATION 50

SPOTLIGHT

Connecting people with programs

With CMHC support, a housing advocate who had experienced homelessness herself made an app that helps others.

Alina Turner felt like her life was falling apart. She was 16 years old and had arrived in Canada as a refugee. Her parents had divorced, her brother was in the criminal justice system and she was now experiencing homelessness. She knew she needed help, but she did not know where to look or whom to ask.

With the support of her partner, Travis, Alina was able to secure the help she needed to find a place to call home and turn her life around. She was able to finish high school and university, receiving a Ph.D. in anthropology. Inspired by her lived experience and desire to make a difference, she ended up working in the homelessness sector.

Alina and Travis, now married for 20 years, resolved to help Canadians who are experiencing similar struggles.

In 2018, in collaboration with the City of Medicine Hat, they launched <u>HelpSeeker</u>, a digital application that matches Canadians in need with essential social services and supports in their local community. For example, it allows someone at risk of homelessness to search their local area for supportive housing, just by using their phone.

"I was used to being someone who came up with ideas to solve homelessness," Alina says. "For HelpSeeker, Travis and I decided to take it a step further and invest in a solution. We built it ourselves from our family savings."

The application proved to be a huge success and was adopted by more than 200 municipalities across Western Canada.

HelpSeeker received funding through CMHC's **Solutions Lab**. The funding helped Alina and Travis bring together innovative thinkers from across Medicine Hat's social service system. The consultations done through the Solutions Lab allowed them to identify ways to enhance the app.

For Jaime Rogers, manager of homelessness and housing development for the Medicine Hat Community Housing Society, the benefit of HelpSeeker was immense. It is helping the community build toward a more accessible and equitable social safety net. The Lab also helped the team realize that HelpSeeker had the potential to make a wider impact and help other communities across Canada.



2021 Annual Report SPOTLIGHT 51



NATIONAL HOUSING STRATEGY UPDATE

We continue to deliver Canada's National Housing Strategy, a plan to create a new generation of housing to provide more people in Canada a safe and affordable place to call home. The NHS is creating a new generation of housing that is mixed-income, mixed-use, accessible, diverse and sustainable.

The year 2021 marked a milestone for the National Housing Strategy, as the Minister responsible for CMHC tabled the first NHS progress report in the spring, Building the Future Together. The report demonstrates the foundation that has been laid for the National Housing Strategy and highlights the progress on programs and partnerships, including the steps we have taken toward the progressive realization of the right to adequate housing.

On the following page are NHS programs and initiatives that we delivered, and achievements as of 2021. Ongoing reporting for the NHS is presented through the Place to Call Home website and includes achievements for all NHS initiatives: www.placetocallhome.ca.

National Housing Co-Investment Fund

Launch: May 2018

End: 2027/28 Funding: \$13.2B

Outcome: 60.000 new housing units 240,000 repaired units

Status: On track

Supports the construction, repair and renewal of community and affordable housing. Provides long-term, low-interest loans and/or forgivable loans. Prioritizes housing for populations that are vulnerable and sets minimum requirements for energy efficiency and accessibility.

Achievements (\$)

- Over \$1.7 billion committed in forgivable loans/contributions
- Over \$3.1 billion in repayable loans
- Over \$3.8 billion financially committed

Achievements (Units)

- Over 19.100 new units
- Over 91,800 repair/ renewal units

Rental Construction Financing initiative

Launch: April 2017

End: 2027/28 Funding: \$25.8B

Outcome: 71,000 new housing units

Status: On track

Provides low-cost insured loans to increase the supply of rental housing.

Achievements (\$)

- Over \$11.1 billion committed
- Over \$7.9 billion financially committed

Achievements (Units)

- Over 32,600 units

Affordable Housing Innovation Fund

Launch: September 2016

End: 2020/21

Funding: \$208.3M

Outcome: 4.000 new housing units

Status: This phase is completed

This fund encourages new funding models and innovative building techniques to support the next generation of housing in Canada.

Achievements (\$)

- \$208.3 million financially committed

Achievements (Units)

- Over 19,100 units, of which over 16.500 will be affordable

Rapid Housing Initiative

Launch: October 2020

End: 2021/22 Funding: \$2.5B

Outcome: 7,500 new housing units

Status: On track

This initiative supports the construction of permanent, new affordable housing units to address urgent housing needs for people who are made vulnerable.

Achievements (\$)

- \$2.5 billion committed
- Over \$2.1 billion financially committed

Achievements (Units)

- Over 10.200 units

Federal Lands Initiative This initiative helps transfer surplus federal lands and buildings to be developed or renovated to affordable Launch: February 2019 housing. Eligible applicants receive properties at a

End: 2027/28 discount or at no cost.

Funding: \$202M

Outcome: 4.000 new housing units

Status: On track

Achievements (\$)

- Over \$23 million committed
- Over \$8 million financially committed

Achievements (Units)

- Over 1,600 units through eleven properties

Federal Community Housing Initiative

Phases 1 and 2

Launch: April 2018 (Phase 1); September 2020 (Phase 2)

Funding: \$38M from 2017/18 to 2019/20;

\$462M from 2020/21 to 2027/28

Outcome: Maintained affordability for over 26,700 households (Phase 1)

Maintain affordability for 11,000 low-income community housing units (Phase 2)

Status: On track

This initiative keeps housing affordable for low-income tenants. Phase 2, launched on 1 September 2020, comprises two funding streams. The first provides rent supplement assistance to community housing providers to ensure that low-income households continue to receive rental support. The second stream provides temporary transitional funding to help at-risk providers transition to the new program.

Achievements

Over \$37 million rental assistance provided for Phase 2 to over 6,300 low-income units, supporting over 29,800 community housing units.

Community Housing Transformation Centre (CHTC)

Community-Based Tenant Initiative (CBTI)

Sector Transformation Fund (STF)

Launch: April 2019 (CHTC)
Funding: \$74.2M over 9 years

Status: On track

The Centre and the Community-Based Tenant Initiative provide support and capacity building within the community. They also contribute to various local organizations that provide information on housing options and housing-related financial literacy to vulnerable populations. STF provides funding and tools for housing providers to support efficient and effective business models.

Achievements

- As of 31 December 2021, over \$24 million was provided to the Centre.
- A total of 226 applications have been awarded.

Shared Equity Mortgage Provider Fund

Launch: July 2019

Funding: \$100M in loans

End: 2023/24

Outcome: Assist
1.500 first-time homebuyers

Assist in the creation of 1,500 projected new homeownership units

Status: On track

This fund supports existing shared equity mortgage providers. Repayable loans are offered to eligible proponents to commence new housing projects where shared equity mortgages will be provided (Stream 1) or to fund lending directly through shared equity mortgage providers to first-time homebuyers (Stream 2).

Achievements

 As of 31 December 2021, five agreements were signed for \$17 million assisting in the creation of over 700 new homeownership units.

First-Time Home Buyer Incentive

Launch: September 2019

Funding: \$1.3B in loans

End: 2021/22

Outcome: Assist 100,000 first-time homebuyers

Status: Target is based on available funding. The number of first-time homebuyers assisted is expected to be lower, reflecting actual take-up for this program This initiative helps qualified first-time homebuyers reduce their monthly mortgage payments without increasing their down payment. The First-Time Home Buyer Incentive shared-equity mortgage is one where the government has a shared investment in the home. As a result, the government shares in both the upside and downside of the property value.

Achievements

 As of 31 December 2021, we approved over 15,000 applications, representing \$270 million in shared equity mortgages.

Federal/Provincial/ Territorial Housing Agreements

Funding: \$15.1 billion from 2018-19 to 2027-28 (federal and provincial, territorial (PT) funding)

Outcome: Maintain 330,000 housing units in social housing

Increase rent-assisted housing units by approximately 50.000 units

Maintain and repair Urban Native Social Housing units available to low-income households

Repair at least 60,000 existing social housing units

Support at least 300,000 households through a Canada Housing Benefit

Status: On track

The Federal/Provincial/Territorial Housing Partnership Framework asserts a shared vision for housing and sets the foundation for bilateral agreements on the delivery of key National Housing Strategy initiatives. Provinces and territories deliver and cost-match federal funds from the strategy through bilateral agreements with CMHC.

Includes: Province and Territory Priority Funding, Canada Community Housing Initiative, Targeted Support for Northern Housing and Canada Housing Benefit.

Achievements^{7,8}

- As of 31 December 2021, the territories committed \$90 million in Northern funding to support over 1,300 units.
- Provinces and territories committed over \$477 million to support over 103,600 units under the Canada Community Housing Initiative.
- Provinces and territories committed over \$868 million to support over 143,700 units under PT Priority Funding.
- We signed Canada Housing Benefit addenda with 13 provinces and territories, which committed over \$154 million to support over 43,800 units.

2021 Annual Report NATIONAL HOUSING STRATEGY UPDATE 54

⁷ Not including provincial/territorial cost-matching (cost matching is not required for Northern funding).

⁸ Provinces and Territories make commitments to projects and recipients under the agreements for both federal and cost-matched funding.

Research and Data Initiative

Funding: \$241 million from 2018/19 to 2026/27

Status: On track

We are enhancing housing research and data to identify issues and innovative solutions. We are also assessing the impact of housing policies and shaping the National Housing Strategy.

Achievements

- We presented 14 awards through CMHC's Housing Research Award Program to recognize and advance world-class housing research being done in Canada.
- We supported 47 Solutions Labs, 40 Demonstration Initiatives, 24 recipients of the Housing Research Scholarship Program, as well as 6 research teams through to Stage 2 to establish the Collaborative Housing Research Network. The Research and Planning Fund awarded 7 new projects and had 21 projects underway of which 6 were completed.
- We continued to increase membership of our Expert Community on Housing, with numbers surpassing 1,600 members in this virtual community of practice.
- We released the full Canadian Housing Survey cycle 1 data which included the social inclusion index, income mixing index and proximity measures, all linked to the CHS microdata.

Committed and financial commitment definitions are provided in the Glossary. Achievements are cumulative since the start of program launch.



2021 Annual Report NATIONAL HOUSING STRATEGY UPDATE 55



SPOTLIGHT

Martha Place offers a new start and a safe home for seniors and persons with disabilities

Smaller communities face unique housing needs and homelessness challenges. There may be fewer resources and housing options available than in larger cities, and vacancy rates can be very low.

Kings Square Affordable Housing Corporation was formed in 2007 to address these challenges in the historic city of Charlottetown. It provides housing for local seniors, families and persons with disabilities. And its latest project, **Martha Place**, is making a big dent in the community's housing needs.

Martha Place opened in 2020, and with 60 units, it is Kings Square's largest project to date. Fifty of those units are maintained as affordable housing. "This is a small step to help solve the demand for affordable units in Charlottetown; however, it is a big step for Kings Square Affordable Housing Corporation," says Kings Square Affordable Housing Corporation President Bill Campbell.

Martha Place received funding through CMHC's <u>National Housing</u>
<u>Co-Investment Fund</u>, and Kings Square worked with a multitude of other partners, including the Sisters of St. Martha of PEI and all levels of government, to make the project a reality.

Kings Square leases 50 units to the Prince Edward Island Housing Corporation to offer as affordable apartments to people on its waiting list, on a rent-geared-to-income basis. The remaining 10 units are rented out to the general community at market rates, helping to offset some of the building's operating costs.

Martha's Place received a significant contribution—as well as its name—from Sisters of St. Martha of PEI, who have been helping those in need in their community for over 100 years. In exchange, the Sisters use the building's common room to provide part-time support services to residents through their **Living Well initiative**. The programs offered are determined through community consultations.

2021 Annual Report SPOTLIGHT 56



RISK MANAGEMENT

"CMHC's effective risk management allows us to support Canada's stability and sustainability in the housing system. We ensure that risk identification and assessment is an integral part of strategy and day-to-day business decision making so we can better help our clients and achieve our strategic results and outcomes, while protecting the public resources entrusted to us."

- Kathleen Devenny, Chief Risk Officer

Our Risk Culture

Our robust risk culture, guided by four dimensions, helps us effectively manage and reassess our risks, while remaining agile in a fast-changing environment:

1) Risk governance

We govern our risks through frameworks and policies and our three lines risk governance model. Our Enterprise Risk Management Framework (ERMF) supports the achievement of our strategic results and outcomes and reinforces an effective risk culture. Our seven ERM risk categories capture key risk drivers to support the alignment of our Risk Appetite Framework with our strategy (see our risk profile below for more details).



Organizational resilience

In times of crisis, it is important for us to continue to deliver programs in support of housing affordability, while remaining prepared to develop or implement actions on behalf of the Government of Canada and maintaining resiliency in our ability to deliver on our mandate. In 2021, we developed and implemented an Organizational Resilience Framework (ORF), which establishes an integrated approach to business continuity and crisis management, both foundational capabilities to our resilience. Our ORF is supported by our Crisis and Business Continuity Management policies and playbooks.

Since the start of the pandemic, we have responded to a rapidly changing environment, while delivering updated products and programs to support the housing system. Having a strong risk governance helps us support financial stability, oversee and manage systemic risk, and preserve our influence across housing policy in Canada, both in normal times and in times of crisis.

2) Risk appetite defines the level and types of risk we are willing to accept in pursuit of our strategy and business objectives

Our Risk Appetite Framework (RAF) is aligned with our strategic, capital and financial objectives as well as our performance targets. The RAF provides a common approach to manage risk across all levels of the organization, including to help Senior Management and the Board of Directors assess the level of risk we are willing to accept and those risks that should be avoided to support financial stability, during normal times and in times of crisis. We continue to monitor and review all components of our RAF, including risk capacity, appetite, tolerance and targets, to ensure it remains current and relevant.

3) Risk management programs help to drive better performance and outcomes

Our risk management programs and our ongoing work on our organizational resilience ensures that we are able to operate and continue to deliver on our mandate as the external environment continues to evolve, both in normal times and in times of crisis.

Our risk profile

Our risk profile has improved given the continuous recovery in our economy with the nationwide vaccine rollout. The following is our risk profile view from Q4 2021:

| Risk Category | Q4 2021 Rating | Q4 2020 Rating | Description |
|----------------------|-------------------|-------------------|--|
| Strategic Risk | • | • | Our external environment is more challenging as the pandemic exacerbated income inequality, labour shortages, supply-chain disruptions, higher construction costs, inflation, and ultimately housing affordability gap, contributing to the affordability gap and our high strategic risk . |
| Reputational Risk | A | A | Reputational risk is moderate and stable due to sustained positive client experience and no major issues in the media. However, operational risks with potential reputational impact and expectations around the strategy delivery remain a concern. |
| Operational Risk | | _ | Our operational risk remains moderate but elevated due to risks around cyber security, privacy, data management and governance and people. |
| | | | Cyber security and privacy risks increased in 2021. We are continuously strengthening our cyber security, data governance and data management capabilities to support security and privacy activities. |
| Insurance Risk | | _ | Insurance risk rating is low due to: |
| | | | - low borrower credit risk with stable arrears (homeowner insurance risk) |
| | | | - low arrears and claims levels (multi-unit insurance risk) |
| Credit Risk | | A | Improvements in investment counterparty credit rating coupled with well-diversified exposure in our aggregated investment portfolios contribute to the improvement in our credit risk. |
| Market Risk | | | Reduced interest rate volatility and management of currency exposures resulted in a low market risk. |
| Liquidity Risk | | | Liquidity position continues to be adequate and stable. |

The risk ratings take into consideration both the likelihood and the impact of each risk category on CMHC.

Emerging Risks

It is essential that we monitor emerging risks from a changing environment and the impact they may have on our business activities, decision making and ultimately our strategy. This will ensure that we remain agile to support the stability of Canada's housing finance system. The top three emerging risks as at Q4 2021 are:

| Emerging Risk | Summary Description | Monitoring Measures |
|---|---|---|
| 1. Supply Chain Disruptions | Supply chain disruptions due to pandemic-induced labour shortages may persist given the ongoing emergence of new variants as well as more severe and frequent extreme weather events. Higher construction material cost and shortages may impact housing affordability. | We monitor relevant economic indexes and variables including Industrial Product and Raw Materials Price Indexes and key warning indicators. In addition, we periodically perform sensitivity analysis on key macroeconomic variables (including unemployment rate, inflation and interest rates). |
| 2. Housing Demand/ Supply Mismatch | The persistent imbalance in housing markets is exacerbated by pandemic-related issues; anticipated high immigration levels and extreme weather events. In addition, lack of granular data limits the understanding of the shifting dynamics of housing supply drivers. | CMHC produces reports that highlight housing market imbalances and rental market conditions across Canada. There is a project underway to quantify housing supply shortages by census metropolitan area. In addition, housing starts and completion surveys provide valuable information on new housing supply. |
| 3. Climate Change – Extreme Weather Events | Increasing frequency and intensity of heat waves, floods, wildfires and major hurricanes is creating more housing supply challenges, including for populations that are made vulnerable. Physical damages to residential buildings are putting additional strains on the existing housing stock/supply. | In addition to a climate-sensitive stress testing scenario, CMHC performed a Canada-wide risk assessment of flood exposure for multi-unit rental. See Climate Change section for more details. |

Stress testing

Our stress testing program provides a corporate-wide and forward-looking view of plausible events.

We adopted an iterative approach of stress testing scenarios and analysis since the start of the pandemic to provide relevant information to stakeholders. The 2021 stress testing program focused on pandemic recovery as well as key risks to CMHC such as liquidity, climate risk⁹ and cyber-attacks. The program included economic factors, an assessment of our liquidity and solvency position and our operational readiness in the event of a crisis. The results suggested that even under these severe scenarios we would have the financial capacity to continue our mandate of ensuring a stable housing finance system.

4) Risk behaviour: risk management is everyone's responsibility

We continue to drive risk behaviour through training and education activities that support risk management responsibilities as part of employees' roles. Our goal is that every employee individually takes ownership of risks.

Overall, our risk culture supports effective risk management responsibilities while enabling us to continue to deliver on our objectives and support people in Canada. both in normal times and in times of crisis.

⁹ Refer to Climate Change section and the Task Force on Climate-Related Financial Disclosures.



CLIMATE CHANGE

"Climate change is transforming our economy and has implications for housing affordability, the stability of the financial system and all ecosystems. To cope with the risks and challenges of climate change, we are developing solutions that meet changes in housing needs and help housing and communities become low-carbon and resilient."

- Steven Mennill, Chief Climate Officer

Following the appointment of Steve Mennill as Chief Climate Officer in 2020, we have continued to strive toward our climate goals. In 2021, our Board of Directors (the Board) approved our Climate Strategy, which includes four priority missions, and established a centralized Climate Change Office to lead the development and implementation of our climate strategy.

It is our vision that, by 2050, Canadian homes and communities are climate compatible and resilient.

2021 Annual Report CLIMATE CHANGE 61

The following are the four long-term climate missions that we established to affect our policies, programs and key corporate capabilities:

- 1. Housing & Climate Change Data Integration: To address the pressing need for better climate compatibility information on Canadian housing, this mission seeks to create an information architecture that enables climate aligned decision making in the housing system. This drives the development of our climate analytics and information infrastructure capabilities to support the company, and the housing sector, in decision making; assessing and mitigating climate risks; and seizing climate opportunities.
- 2. Multi-Unit Housing Climate Compatibility:
 Multi-Unit housing provides the bulk of Canada's affordable housing; however, much of this housing is older and in need of major repair. Incentivizing and supporting climate action through retrofitting programs and expanding climate compatibility requirements of existing NHS programs is key to achieving our climate goals and housing affordability. This will advance mitigation and adaptation in the multi-unit housing stock where some of Canada's populations made most vulnerable live.
- 3. Climate Partnerships/Community
 Development: Responding to climate change means re-thinking the way we design and develop our communities. This mission promotes system level changes through building partnerships and demonstrating leadership. We will work with new and existing partners and convene on solutions that overcome barriers to the design and redevelopment of communities that are compact, mixed use, transit-oriented and resilient.

4. Climate Resilient Housing Finance Solutions:
Reforms are required to ensure the housing finance system can address the risks of climate change. This mission seeks to implement housing finance solutions, enabled through direct lending, mortgage insurance and mortgage funding, that support a smoother transition to a future state where homes and communities are low-carbon and adapted to climate change.

In addition, we are committed to managing risks and seizing opportunities associated with climate change. We are looking at transition and physical climate risks and opportunities from both an outward sustainability perspective and an internal financial risk perspective. CMHC's outward sustainability perspective ensures our climate-related activities and influences (via the housing system and related public policies), promote and support housing affordability, climate compatibility and climate resiliency. In turn, housing and communities that are affordable, safe, and climate compatible/resilient produce direct social, economic and environmental benefits. In addition, we are evaluating the potential positive or negative impacts of climate change on our organization's financial performance by looking at financial risks. Although this work continues to evolve, we have not identified any resulting material impacts to our financial statements to date.

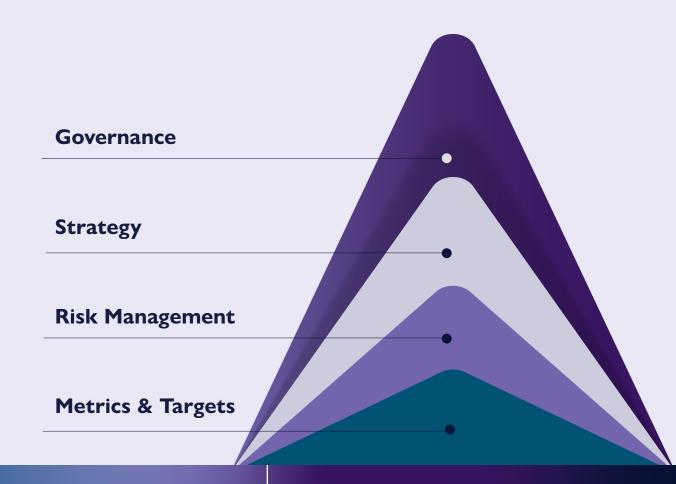


2021 Annual Report CLIMATE CHANGE 62

TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

The Financial Stability Board created the Task Force on Climate-related Financial Disclosures (TCFD) in 2015. In 2017, the TCFD published a climate-related risk management and disclosure framework including four main themes: Governance, Strategy, Risk Management, and Metrics and Targets.

The Government of Canada announced, through Budget 2021, that large Crown Corporations (entities with over \$1 billion in assets) must adopt TCFD recommendations and begin to report on climate-related financial risks for their financial years starting in calendar year 2022 at the latest.



Governance

The Board provides direction and oversight on climate-related risks and opportunities through its risk management committee. The Chief Risk Office reports on climate-related risks and opportunities quarterly to the Risk Management Committee of the Board and to the Executive and One-View of Risk committees. Refer to the Risk Management section below for key themes discussed at these meetings.

Climate-related considerations have become central to our day-to-day activities and are part of our decision making processes.

The Chief Climate Officer (CCO) is a member of the Executive Committee and reports directly to the President and Chief Executive Officer. The Office of the CCO provides climate-related guidance across the corporation on policies, programs and products. The Office of the CCO centralizes climate change expertise and advancement of our four priority missions and coordinates climate change initiatives across the company. The company also has climate expertise in key areas including research, policy, risk, products and programs, and corporate services. This approach provides the necessary foundation to execute our climate strategy to holistically minimize climate impacts, improve housing sector climate resilience and leverage opportunities arising from the transition to a low carbon economy.

Client Solutions **Climate CFO & Corporate Services** Change (IT, Legal, Finance & HR) Office Risk Management **Chief Climate Officer** Office of the President & CEO Climate **Corporate Strategy** Supporting Resources **Client Operations** Mission **Policy** _eaders **Audit & Evaluation** Resources may play both roles

Look ahead

The development of a sustainability and climate risk framework and corresponding work plans are underway to manage climate change risks more effectively.

CMHC adopted the CIO Strategy Council Sustainable IT Pledge (CIO sustainability pledge), a commitment by Canadian organizations to cut rapidly rising emissions from digital technologies.

Strategy

We made progress in identifying and assessing our physical risks, transition risks and climate-related opportunities to support our corporate strategy and climate change activities.

Identification of opportunities

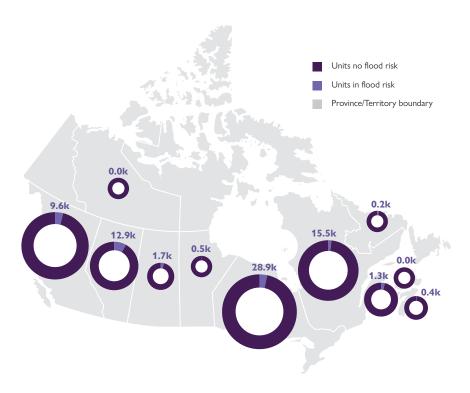
The following are some examples of our products that promote climate change mitigation:

- Mortgage loan insurance rebates for energy efficiency for homeowner transactional and multi-unit mortgage loan insurance.
- Rebates for multi-unit mortgage loan insurance will no longer be offered following the launch of MLI Select in the spring of 2022, as MLI Select will offer reduced premiums and other incentives for energy efficiency commitments.
- The Canada Greener Homes Loan program, building on the Canada Greener Homes Grant offered through Natural Resources Canada, will launch in 2022.
- Several **NHS programs** require that projects achieve specific reductions in energy consumption and greenhouse gas (GHG) emissions. As an example, the Rental Construction Financing initiative requires that projects achieve a minimum 15% decrease in energy consumption and GHG emissions relative to the 2015 National Energy Code of Canada for Buildings (NECB) or 2015 National Building Code (NBC).

Identification of physical risks

We extended our assessment of Canada-wide property exposure to riverine flooding by conducting a flood risk exposure analysis of multi-unit (MU) rental properties. We compiled a database of close to 105,000 MU rental properties containing approximately 2.3 million units and representing almost 90% of all purpose-built rental units in Canada. In our analysis we had access to property assessment market values for 89% of those properties, totalling \$272 billion.

Our analysis indicates that 71,000 units in 2,900 MU properties are exposed to a 1-in-a-100 year¹⁰ riverine flood, with 94% of these units concentrated in four provinces: Ontario, Quebec, Alberta and British Columbia (see figure below). The total market value of the properties exposed to riverine flood risk and for which market values were available is \$7.6 billion. Ontario shows the largest concentration of value at risk of flood with MU properties accounting for almost half.



We also monitor the impact of any catastrophic events on the entire housing stock (rental and homeowner) and residential properties that we insure. For example, based on areas identified by Natural Resources Canada's Emergency Geomatics Services as inundated, we estimated the number of all homeowner properties directly impacted by the British Columbia flooding that occurred in November 2021 to be at least 1.300.

¹⁰ A 1:100 period of return is equivalent to a 1% probability of flooding in any given year or 26% probability of flooding in 30 cumulative years.

Task Force on Flood Insurance and Relocation

In January, the federal government launched an interdisciplinary Task Force on Flood Insurance and Relocation. We co-chair this task force with Public Safety Canada, and provide subject matter expertise on the development of a national flood insurance program and relocation plan for those at highest risk of repeat flooding. These measures aim to help people in Canada reduce their financial and physical vulnerability to flooding. The task force is expected to submit its final report in 2022.

Resilience under a Climate Transition Risk Stress **Testing Scenario**

As part of our corporate-wide stress testing program, we assessed the resilience of our strategy under a climate transition risk scenario. This climate risk scenario was developed following consultations with OSFI and the Bank of Canada on their pilot project to build a climate risk scenario to better understand the risks to the financial system related to transitioning to a low-carbon economy. This scenario assumes immediate action and implementation of global policies to successfully reduce emissions and limit global warming to below 2 degrees Celsius by the end of the century. The scenario assesses impacts of climate risk on multiple economic variables including inflation, household income and consumption, GDP, employment, interest rates, equity prices and house prices over a ten-year simulation horizon. We considered both physical risks, such as flood and wildfire risks, and transition risks as they have a direct impact on our strategy.

The results of the stress-testing scenario confirm we are adequately capitalized and hold sufficient liquidity to withstand the simulated financial impact of transitioning to a low carbon economy. We expect a slightly lower net income (\$250 million less compared to the 2022–2026 approved corporate plan) and lower dividends paid (\$600 million less compared to the 2022–2026 approved corporate plan) over the ten-year simulation horizon. Our analysis also suggests that our investment portfolio could suffer simulated losses of approximately 4.5% over a span of five years. These losses would primarily arise from indirect effects of climate change on key economic factors like interest rates and credit risk.

Look ahead

We will continue to expand these assessments including impacts on our business and strategy. To support our climate change strategy, we plan to fill gaps in climaterelated data and information. This will assist in identifying, assessing and quantifying physical and transition risks and opportunities stemming from climate change. Such data and information will help manage the climate risks and opportunities of our commercial businesses and our affordable housing programs.

Risk Management

Our Chief Risk Office is responsible for identifying and assessing climate-related risks and has started to integrate climate change into its Enterprise Risk Management Framework (ERMF) and processes.

Climate-related risks and mitigation plans reported quarterly to Senior Management and the Board highlighted the following main themes:

- Climate change transition and physical risks can significantly affect housing affordability by impacting household income, a household's ability to earn livelihood and overall risk appetite of the housing finance system. Climate change risk can affect overall credit availability and insurability of properties and exacerbate supply and demand imbalances.
- The current global warming pathway will exacerbate climate physical risks as the intensity of those risks is proportionally related to increases in global temperatures. However, the impact of future climate change scenarios on housing has not been fully assessed. In contrast, while climate transition risks might become less evident in a Hothouse Earth, 11 they will continue to have significant impacts on our economy.

¹¹ Hothouse Earth is a term used to describe a scenario in which human activity causes a higher global temperature than at any time during the past 1.2 million years, due to a breakdown in the cycles that regulate the planet's temperature.

The table below describes climate transition and physical risks.

Type of Climate Risks

availability of housing finance.

| | Type of Climate Risks | | | | | |
|--|---|---|--|--|--|--|
| Related risks | Transition | Physical | | | | |
| Climate change | The transition to a low-carbon economy will impact many carbon-intensive industries and geographies. For example, carbon pricing policies may cause difficulties for carbon-intensive companies. This could reduce economic growth and increase unemployment in some regions. | Due to the increasing frequency and severity of climate-related weather events and the effects of long-term chronic changes in climate patterns, housing costs might increase due to the need to fix damaged homes and/or make them more resilient to the manifestations of physical risks. | | | | |
| Environmental and Social (Sustainability) | The transition to a low-carbon economy might exacerbate financial, environmental and social vulnerabilities. For example, structural changes and transition in more exposed regional economies may reduce housing stability and long-term affordability. | The most disadvantaged in our society can be more exposed to, or be affected by (for example, location on a flood plain), and/or live in homes which are less resilient to extreme and chronic climate-related physical events (for example, unavailability of air conditioning). | | | | |
| Insurance/ Credit | Shifts from carbon-intensive sectors may reduce availability of employment, challenge affordability and therefore increase probabilities of default and loss given default in certain geographic areas. | Extreme hazards or chronic changes may incite migration away from certain geographies, reducing local economic growth and creating knock-on effects to probabilities of default and loss given default. | | | | |
| Market | Transition risk drivers may generate abrupt changes in investor expectations about housing finance system participants' exposure to climate-sensitive sectors, which may lead to market disruptions, such as ratings downgrades and changes in asset valuations. | Under persistent physical impacts of climate change, the financial system might be eroded because of housing price instability and mortgage lending collateral uncertainty. Affected sectors or geographies may experience an insurance protection gap reduction in | | | | |

Look ahead

We will assess climate change risk from a financial perspective, evaluating its potential negative impact on credit, market and insurance risks. The latter will require the integration of climate risk in our financial risk models including, but not limited to, probability of default, loss estimates and economic capital. We will continue to further integrate climate change risks in our stress testing exercises.

In the future, we will continue to expand our sustainability and climate risk framework to further align with the TCFD framework and our enterprise risk management tools and practices, such as the ERMF and Risk Appetite Framework.

Consultation on climate-related risks in the financial sector

On 11 January 2021, OSFI launched an industry consultation with a discussion paper, Navigating Uncertainty in Climate Change: Promoting Preparedness and Resilience to Climate-Related Risks. We responded to the discussion paper, which focuses on risks arising from climate change that can affect the safety and soundness of federally regulated financial institutions and federally regulated pension plans.

— On 12 October 2021, OSFI issued a brief summary of the responses to the consultation. For federally regulated financial institutions, OSFI will communicate next steps on their climate-related policy work early next year. For federally regulated pension plans, OSFI will assess the need for further guidance at a later date.

Metrics and Targets

Our climate change strategy is supported by results and measures. We have prioritized two results that serve as indicators to inform our climate missions, products and programs, housing finance solutions and partnerships:

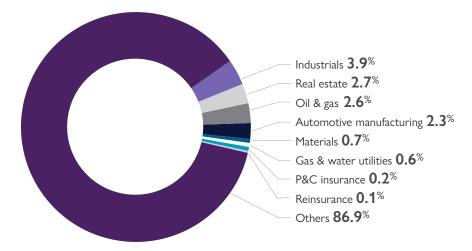
- 1. Perceived understanding and ability to address climate compatibility by people and stakeholders in Canada; and
- 2. Level of investment in carbon-neutral and climate-adapted housing and communities.

We initiated measurement of the first result through our Perception and Awareness Research. This helps us better understand the awareness that stakeholders and people in Canada have of our mandate and programs as well as their perceptions of key housing issues, such as their ability to understand and address climate compatible housing. Initial results indicate that about half of Canadians surveyed agree that they have a personal understanding of the behaviours needed to ensure their home is climate compatible. Most Canadians seek information on funding available to support making their home more climate compatible, and access to programs is desired.

Investment Portfolio

We are deepening our understanding of our exposure to climate-related physical and transition risks and opportunities. As an example, the chart below illustrates the exposure of our mortgage insurance investment portfolio to sectors, some of which may be more vulnerable to climate transition risks; the "Others" category represents sectors that are less vulnerable to such risks, including government bonds.

Mortgage Insurance Investment Portfolio by Sector



Investment in our workspace and technology

We are well advanced with renovations to our Ottawa office to create a technologypowered, highly adaptable space to engage, collaborate, and drive a diverse and inclusive workforce. We are pursuing Leadership in Energy and Environmental Design (LEED) building standard certifications to create a best-in-class example in Canada that demonstrates environmentally responsible building practices and to support and advance employee health and wellness. Due to a slight delay caused by the pandemic, our new space is expected to be ready in the summer of 2022.

Our operations have direct climate-related and environmental impacts. We are committed to decarbonizing our operations and continue to measure, manage and reduce our footprint through the setting and tracking of operational goals. In addition, our efforts to reduce water use and waste help reduce our environmental impacts on natural resources.

Environmental metrics¹²:

37.9% Reduction in CO₂ emissions (compared with 2005 baseline)

35.3% Reduction in electricity consumption (compared with 2005 baseline)

65.4% Reduction in natural gas consumption (compared with 2005 baseline)

Reduction in H₂O consumption (compared with 2005 baseline)

We have also made dramatic reductions to the carbon footprint of our IT operations. We have undertaken a major transformation of those operations, including transition to the cloud. As a result, we reduced our IT-related CO2 emissions by over 80%, unchanged from 2020.

Look ahead

We continue to monitor climate-related risks and opportunities and expect to develop more tools and metrics in the future to facilitate risk monitoring and mitigation.

¹² The savings in 2021 have been normalized as they were not representative due to the pandemic and renovations to our Ottawa office.

2022 LOOK AHEAD

The impacts of the COVID-19 pandemic have created an even greater awareness of the home as a sanctuary and, by extension, the value and importance of the work we do to support housing affordability. Affordability in housing is linked to well-being and building better futures for individuals, businesses and communities.

We continue our work toward achieving these goals; we have refined our strategy; we are securing funding announced through Budget 2021 and are looking forward to working with our Minister in delivering on his mandate, which aligns with our objectives.

Corporate strategy adjustments

We are committed to strengthening the execution of our strategy and continuously monitoring our performance to inform our decision making and drive progress toward our outcomes. We are adapting our strategy to respond to the dynamism of the housing market and changing needs of people living in Canada. We are on the right path with existing NHS initiatives, and we're positioning ourselves to do more to accelerate the creation of supply that meets the needs of those living in Canada, to address systemic barriers to equity and inclusion, and to build a sustainable housing system.

Our Strategy continues to be centred on the achievement of three outcomes:

- People in core housing need have equitable and reliable access to housing that is secure and affordable.
- Canada has the number of homes and mix of housing options to serve diverse needs.
- Canada's housing system supports sustainability and stability.

In 2021, we established seven Strategic Results that reflect the issues that we at CMHC are uniquely positioned to influence and that will deliver the greatest impact for people living in Canada. These results will make it possible to reach our outcomes and are where we will prioritize our efforts:

- Needs of households in core housing need are met through public policy measures.
- Systemic racism, inequities and other barriers to access are removed.
- Current and future housing needs and supply gaps are understood by system participants.
- Barriers to building or renovating housing are removed.
- Current and future financial, environmental and social vulnerabilities, including racism and discrimination, to the housing system are understood and tempered.
- The housing system advances climate compatibility.
- Housing is in the spirit of Reconciliation.

Budget 2021

The new investments in housing and the reprofiling of funding under existing housing programs announced in Budget 2021 pending required approvals in 2022 are as follows:

- \$600 million over seven years to renew and expand the Affordable Housing Innovation Fund, encouraging new funding models and innovative building techniques in the affordable housing sector.
- —\$315.4 million over seven years through the Canada Housing Benefit (CHB) to increase direct financial assistance for low-income women and children fleeing violence to help with their rent payments.
- Between 2021–22 and 2022–23, \$300 million from the Rental Construction Financing initiative (RCFi) will be allocated to support the conversion of vacant commercial property into housing.

Mandate Letter – Ministry of Housing and Diversity and Inclusion

We will work in collaboration with Minister Ahmed Hussen to carry out the goals of the mandate letter issued on 16 December, 2021. The overarching goal is to help ensure Canadians can get a home of their own, through work to improve housing affordability and end chronic homelessness, and to champion the breadth of our country's diversity through greater inclusion. For more information on the mandate letter, please visit: Minister of Housing and Diversity and Inclusion Mandate Letter.

Office of the Superintendent of Financial Institutions (OSFI) guidelines

Draft MICAT 2023 guideline

On 21 June 2021, OSFI launched an industry consultation with the publication of a revised draft MICAT 2023 guideline, reporting forms and instructions for consultation. Key revisions to the guideline aim to:

- adapt the MICAT for IFRS 17 Insurance Contracts;
- better reflect changes in the level of insurance risk during periods when mortgage insurers are under stress; and
- specify credit risk requirements in a manner consistent with IFRS 9 Financial Instruments terminology.

In parallel with this public consultation, OSFI has conducted a quantitative impact study with mortgage insurers.

We have reviewed the updates made to the draft MICAT 2023 guideline to date and assessed them as having minimal impact on our business. However, we continue to perform quantitative analysis and will provide additional information to OSFI leading up to implementation.

Basel III Reforms

On 31 January 2022, OSFI announced revised capital, leverage, liquidity and disclosure rules that incorporate the final Basel III banking reforms with additional adjustments to make them suitable for federally regulated deposit-taking institutions (DTI). The revised capital adequacy requirements include provisions that align capital requirements for privately insured mortgages with the structure of the *Protection of Residential Mortgage or Hypothecary Insurance Act* government guarantee. The revised capital requirements do not have a direct impact on us, but may have an impact on the amount of capital that a federally regulated DTI may need to hold for a privately insured mortgage.

IFRS 17 Insurance Contracts – effective date of 1 January 2023

In May 2017, the IASB issued International Financial Reporting Standard (IFRS) 17 Insurance Contracts (IFRS 17), which will replace IFRS 4 Insurance Contracts. The effective date of IFRS 17 has been established as 1 January 2023 following a two-year deferral. We have a multi disciplinary team dedicated to this new accounting standard and continue to progress toward implementing it. In 2022, we plan to begin to determine the impacts on our reporting. We have included additional information in Note 3 of our consolidated financial statements.

On 28 May 2021, the Department of Finance launched an industry consultation on tax implications resulting from the implementation of IFRS 17. In its news release announcing the consultation, the Department of Finance indicated that it would not consider the contractual service margin to be a deductible reserve for tax purposes; its conclusion would therefore create a current tax liability for insurance providers. We have responded to the consultation request and the Department of Finance has not yet issued a subsequent communication on the status or direction of their consultation.



FINANCIAL STATEMENTS

| Management's Responsibility for Financial Reporting | 73 |
|---|--------------|
| Independent Auditors' Report | 7 4 |
| Consolidated Balance Sheet | 76 |
| Consolidated Statement of Income and Comprehensive Income | |
| Consolidated Statement of Equity of Canada | 78 |
| Consolidated Statement of Cash Flows | |
| Notes to Consolidated Financial Statements | |
| 1. Corporate Information | |
| 2. Basis of Preparation and Signifi ant Accounting Policies | |
| 3. Current and Future Accounting Changes | |
| 4. Critical Judgments in Applying Accounting Policies and Making Estimate | es 93 |
| 5. Segmented Information | 95 |
| 6. Government Funding and Housing Programs Expenses | |
| 7. Mortgage Insurance | |
| 8. Mortgage Funding | |
| 9. Structured Entities | |
| 10. Capital Management | 105 |
| 11. Fair Value Measurement | 107 |
| 12. Cash and Cash Equivalents | 113 |
| | |

| 13. Investment Securities | 114 |
|--|-----|
| 14. Loans | |
| 15. Borrowings | 120 |
| 16. Derivatives | 122 |
| 17. Financial Instruments Income and Expenses | 124 |
| 18. Market Risk | 125 |
| 19. Credit Risk | |
| 20. Liquidity Risk | 131 |
| 21. Accounts Receivable and Other Assets | 133 |
| 22. Investment Property | 133 |
| 23. Accounts Payable and Other Liabilities | 133 |
| 24. Pension and Other Post-Employment Benefi s | 133 |
| 25. Income Taxes | |
| 26. Related Party Transactions | 141 |
| 27. Commitments and Contingent Liabilities | 142 |
| 28. Operating Expenses | |
| 29. Current and Non-Current Assets and Liabilities | 143 |
| 30. Comparative Figures | 144 |
| 31. Subsequent Event | |

Management's Responsibility for Financial Reporting

Year ended 31 December 2021

Management is responsible for the integrity and objectivity of the consolidated financial statements and related financial information presented in this annual report. The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) and, consequently, include amounts which are based on the best estimates and judgment of Management. The financial information contained elsewhere in this Annual Report is consistent with that in the consolidated financial statements.

In carrying out its responsibilities, Management maintains appropriate financial systems and related internal controls to provide reasonable assurance that financial information is reliable; assets are safeguarded; transactions are properly authorized and are in accordance with the relevant legislation, by-laws of the Corporation and government directives; resources are managed efficiently and economically; and operations are carried out effectively. The system of internal controls is assessed by internal audit, which conducts periodic audits of different aspects of the operations.

The Board of Directors, acting through the Audit Committee, whose members are neither officers nor employees of the Corporation, oversees Management's responsibilities for financial reporting and internal control systems. The Board of Directors, upon the recommendation of the Audit Committee, has approved the consolidated financial statements.

Ernst & Young LLP and the Auditor General of Canada have audited the consolidated financial statements. The auditors have full access to, and meet periodically with, the Audit Committee to discuss their audit and related matters.

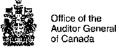
Romy Bowers

President and Chief Executive Officer

24 March 2022

Michel Tremblay, CPA, CA

Chief Financial Officer and Senior Vice President, Corporate Services



Bureau du vérificateur général du Canada



INDEPENDENT AUDITORS' REPORT

To the Minister of Housing and Diversity and Inclusion

Report on the Audit of the Consolidated Financial Statements

Opinion

We have audited the consolidated financial statements of Canada Mortgage and Housing Corporation and its subsidiary (the Group), which comprise the consolidated balance sheet as at 31 December 2021, and the consolidated statement of income and comprehensive income, consolidated statement of equity of Canada and consolidated statement of cash flows 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 present fairly, in all material respects, the consolidated financial position of the Group as at 31 December 2021, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRSs).

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 Auditors' Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Group 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.

Other Information

Management is responsible for the other information.

The other information comprises the information included in the annual report, but does not include the consolidated financial statements and our auditors' report

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

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

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with IFRSs, 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

In preparing the consolidated financial statements, management is responsible for assessing the Group'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 Group or to cease operations, or has no realistic alternative but to do

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

Auditors' 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 auditors' 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 Group'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 Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' 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 auditors' report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the Canada Housing Trust or business activities within the Group 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.

Report on Compliance with Specified Authorities

Opinion

In conjunction with the audit of the consolidated financial statements, we have audited transactions of Canada Mortgage and Housing Corporation coming to our notice for compliance with specified authorities. The specified authorities against which compliance was audited are Part X of the Financial Administration Act and regulations, the Canada Mortgage and Housing Corporation Act, the National Housing Act, the by-laws of Canada Mortgage and Housing Corporation, and the directives issued pursuant to section 89 of the Financial Administration Act.

In our opinion, the transactions of Canada Mortgage and Housing Corporation that came to our notice during the audit of the consolidated financial statements have complied, in all material respects, with the specified authorities referred to above. Further, as required by the

Financial Administration Act, we report that, in our opinion, the accounting principles in IFRSs have been applied on a basis consistent with that of the preceding year.

Responsibilities of Management for Compliance with Specified Authorities

Management is responsible for Canada Mortgage and Housing Corporation's compliance with the specified authorities named above, and for such internal control as management determines is necessary to enable Canada Mortgage and Housing Corporation to comply with the specified authorities.

Auditors' Responsibilities for the Audit of Compliance with Specified Authorities

Our audit responsibilities include planning and performing procedures to provide an audit opinion and reporting on whether the transactions coming to our notice during the audit of the consolidated financial statements are in compliance with the specified authorities referred to above.

Riowen Yves Abgrall, CPA, CA Principal

for the Auditor General of Canada

Kionen algrall

Crost & young LLP

Chartered Professional Accountants Licensed Public Accountants

Ottawa, Canada 24 March 2022

Consolidated Balance Sheet

As at 31 December

| (in millions of Canadian dollars) | Notes | 2021 | 2020 |
|--|-------|---------|---------|
| Assets | | | |
| Cash and cash equivalents | 12 | 1,525 | 2,301 |
| Securities purchased under resale agreements | | - | 174 |
| Accrued interest receivable | | 720 | 714 |
| Investment securities: | 13 | | |
| Fair value through profit or loss | | 289 | 399 |
| Fair value through other comprehensive income | | 19,982 | 23,094 |
| Amortized cost | | 2,817 | 1,427 |
| Derivatives | 16 | 31 | 117 |
| Due from the Government of Canada | 6 | 363 | 339 |
| Loans: | 14 | | |
| Fair value through profit or loss | | 500 | 743 |
| Amortized cost | | 272,781 | 270,450 |
| Accounts receivable and other assets | 21 | 1,035 | 931 |
| Investment property | 22 | 314 | 281 |
| | | 300,357 | 300,970 |
| Liabilities | | | |
| Accounts payable and other liabilities | 23 | 650 | 752 |
| Accrued interest payable | | 612 | 573 |
| Derivatives | 16 | 50 | 8 |
| Provision for claims | 7 | 310 | 735 |
| Borrowings: | 15 | | |
| Fair value through profit or loss | | 475 | 1,156 |
| Amortized cost | | 275,869 | 272,369 |
| Defined benefit plans liability | 24 | 250 | 549 |
| Unearned premiums and fees | 7, 8 | 8,684 | 8,021 |
| Deferred income tax liabilities | 25 | 247 | 232 |
| | | 287,147 | 284,395 |
| Commitments and contingent liabilities | 27 | | |
| Equity of Canada | 10 | | |
| Contributed capital | | 25 | 25 |
| Accumulated other comprehensive income or loss | | 131 | 607 |
| Retained earnings | | 13,054 | 15,943 |
| - | | 13,210 | 16,575 |
| | | 300,357 | 300,970 |

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

Derek Ballantyne

Chairperson

Romy Bowers

President and Chief Executive Officer

Consolidated Statement of Income and Comprehensive Income

Year ended 31 December

| (in millions of Canadian dollars) | Notes | 2021 | 2020 |
|--|--------|-------|-------|
| Interest income | 17 | 4,472 | 4,954 |
| Interest expense | 17 | 4,469 | 4,937 |
| Net interest income | | 3 | 17 |
| Government funding for housing programs | 6 | 3,668 | 4,892 |
| Premiums and fees earned | 7, 8 | 2,115 | 2,039 |
| Investment income | 17 | 343 | 408 |
| Net gains (losses) on financial instruments | 17 | 123 | 563 |
| Other income | | 44 | 32 |
| Total revenues and government funding | | 6,296 | 7,951 |
| Non-interest expenses | | | |
| Housing programs | 6 | 3,359 | 4,496 |
| Insurance claims | | (317) | 472 |
| Operating expenses | 28 | 693 | 767 |
| Total expenses | | 3,735 | 5,735 |
| Income before income taxes | | 2,561 | 2,216 |
| Income taxes | 25 | 637 | 554 |
| Net income | | 1,924 | 1,662 |
| Other comprehensive income (loss), net of tax | | | |
| Items that will be subsequently reclassified to net income | | | |
| Net unrealized gains (losses) from debt instruments held at fair value through other comprehensive income | | (347) | 550 |
| Reclassification of losses (gains) on debt instruments held at fair value through other comprehensive income on disposal in the year | | (129) | (190) |
| Total items that will be subsequently reclassified to net income | | (476) | 360 |
| Items that will not be subsequently reclassified to net income | | | |
| Remeasurement gains (losses) on defined benefit plans | 24, 25 | 267 | (60) |
| Total other comprehensive income (loss), net of tax | | (209) | 300 |
| Comprehensive income | | 1,715 | 1,962 |

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

Consolidated Statement of Equity of Canada

Year ended 31 December

| (in millions of Canadian dollars) | Notes | 2021 | 2020 |
|---|-------|---------|--------|
| Contributed capital | | 25 | 25 |
| Accumulated other comprehensive income (loss) | | | |
| Balance at beginning of year | | 607 | 247 |
| Other comprehensive income (loss) | | (476) | 360 |
| Balance at end of year | | 131 | 607 |
| Retained earnings | | | |
| Balance at beginning of year | | 15,943 | 14,341 |
| Net income | | 1,924 | 1,662 |
| Other comprehensive income (loss) | | 267 | (60) |
| Dividends | 10 | (5,080) | - |
| Balance at end of year | | 13,054 | 15,943 |
| Equity of Canada | 10 | 13,210 | 16,575 |

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

Consolidated Statement of Cash Flows

Year ended 31 December

| (in millions of Canadian dollars) | Note | 2021 | 2020 |
|--|------|----------|----------|
| Cash flows from operating activities | | | |
| Net income | | 1,924 | 1,662 |
| Adjustments to determine net cash flows from operating activities | | | |
| Amortization of premiums and discounts on financial instruments | | 135 | 126 |
| Net losses (gains) on financial instruments | | (289) | (558) |
| Deferred income taxes | | 27 | 58 |
| Depreciation, amortization and impairment of fixed and intangible assets | | 54 | 53 |
| Net unrealized gains on investment property | 2 | 2 (31) | (18) |
| Changes in operating assets and liabilities | | | |
| Derivatives | | 128 | (49) |
| Accrued interest receivable | | (6) | 23 |
| Due from the Government of Canada | | (55) | (51) |
| Accounts receivable and other assets | | 46 | (93) |
| Accounts payable and other liabilities | | (66) | (73) |
| Accrued interest payable | | 39 | (18) |
| Provision for claims | | (425) | 328 |
| Defined benefit plans liability | | 5 | 32 |
| Unearned premiums and fees | | 663 | 870 |
| Other | | (12) | 2 |
| Loans | 1- | 1 | |
| Repayments | | 40,259 | 41,836 |
| Disbursements | | (42,240) | (62,180) |
| Borrowings | 1. | 5 | |
| Repayments | | (47,613) | (50,144) |
| Issuances | | 51,108 | 71,396 |
| | | 3,651 | 3,202 |

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

Consolidated Statement of Cash Flows (Continued)

Year ended 31 December

| (in millions of Canadian dollars) | Notes | 2021 | 2020 |
|--|-------|----------|----------|
| Cash flows from investing activities | | | |
| Investment securities | | | |
| Sales and maturities | | 14,006 | 14,705 |
| Purchases | | (13,539) | (16,393) |
| Foreign currency forward contract maturities | | | |
| Receipts | | 559 | 490 |
| Disbursements | | (443) | (376) |
| Investment property | 22 | | |
| Additions | | (2) | - |
| Disposals | | - | 13 |
| Securities purchased under resale agreements | | 174 | (174) |
| Property and equipment and intangible asset acquisitions | | (102) | (88) |
| | | 653 | (1,823) |
| Cash flows from financing activities | | | |
| Dividends paid | 10 | (5,080) | - |
| Change in cash and cash equivalents | | (776) | 1,379 |
| Cash and cash equivalents | | | |
| Beginning of year | | 2,301 | 922 |
| End of year | | 1,525 | 2,301 |
| Represented by | | | |
| Cash | | 98 | 140 |
| Cash equivalents | | 1,427 | 2,161 |
| | | 1,525 | 2,301 |
| Supplementary disclosure of cash flows from operating activities | | | |
| Amount of interest received during the year | | 5,474 | 5,981 |
| Amount of interest paid during the year | | 4,999 | 5,437 |
| Amount of dividends received during the year | | 13 | 2 |
| Amount of income taxes paid during the year | | 556 | 710 |

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

Notes to Consolidated Financial Statements

Year ended 31 December 2021

1. Corporate Information

Canada Mortgage and Housing Corporation (CMHC, we, or us) was established in Canada as a Crown corporation in 1946 by the Canada Mortgage and Housing Corporation Act (CMHC Act) to carry out the provisions of the National Housing Act (NHA). We are also subject to Part X of the Financial Administration Act (FAA) by virtue of being listed in Part 1 of Schedule III, wholly owned by the Government of Canada (Government), and an agent Crown corporation. Our National Office is located at 700 Montreal Road, Ottawa, Ontario, Canada, K1A 0P7.

Our mandate, as set out in the NHA, is to promote the construction of new houses, the repair and modernization of existing houses, and the improvement of housing and living conditions. In relation to financing for housing, the NHA's purpose is to promote housing affordability and choice; to facilitate access to, and competition and efficiency in the provision of, housing finance; to protect the availability of adequate funding for housing; and generally to contribute to the well-being of the housing sector. In addition, we have the following objectives in carrying out any activities related to mortgage insurance and guarantee programs and in administering the Canadian covered bond legal framework: (a) to promote the efficient functioning and competitiveness of the housing finance market; (b) to promote and contribute to the stability of the financial system, including the housing market; and (c) to have due regard to our exposure to loss. We deliver on our mandate through our reportable segments: Assisted Housing (AH), Mortgage Insurance (MI) and Mortgage Funding (MF).

Within the Public Accounts of Canada, our annual consolidated net income reduces the Government's annual deficit; our consolidated retained earnings and accumulated other comprehensive income (AOCI) reduce the Government's accumulated deficit.

As a Crown corporation, we have been issued the following directives pursuant to Section 89 of the FAA for which we are compliant:

- P.C. 2008-1598, requiring due consideration to the personal integrity of those to whom we lend or provide benefits;
- P.C. 2014-1380, to provide a 50:50 current service cost-sharing ratio between employees and employer for pension contributions for all members by 31 December 2017; and

- P.C. 2015-1106, to align our travel, hospitality, conference and event expenditure policies, guidelines and practices with those of Treasury Board of Canada Secretariat (TBS) in a manner consistent with our legal obligations and to report on the implementation of this directive in our next corporate plan.

2. Basis of Preparation and Significant **Accounting Policies**

Basis of preparation

Our consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB). We have applied the same accounting policies consistently to all periods presented.

Our consolidated financial statements were approved by the Board of Directors on 24 March 2022.

Measurement basis

Our consolidated financial statements have been prepared on a going concern basis using a historical cost basis except for the following items in the consolidated balance sheet:

- Financial assets at fair value through profit or loss (FVTPL) or fair value through other comprehensive income (FVOCI), as well as liabilities at FVTPL, are measured at fair value;
- Investment property is measured at fair value;
- Defined benefit liabilities for post-employment benefit plans are recognized at the present value of the defined benefit obligations, net of the fair value of plan assets; and
- Provision for claims is recognized on an actuarial present value basis.

Functional currency

Our consolidated financial statements are stated in millions of Canadian dollars, unless otherwise indicated, which is our functional currency.

Significant accounting policies

The following summarizes the significant accounting policies we use in the preparation of our consolidated financial statements.

Basis of consolidation

As required by IFRS 10 Consolidated Financial Statements, we consolidate our accounts with those of Canada Housing Trust (CHT), as we control its activities.

We control an investee if, and only if, we have power over the investee (i.e., existing rights that give us the current ability to direct the relevant activities of the investee); exposure, or rights, to variable returns from our involvement; and the ability to use our power over the investee to affect our returns.

Inter-segment balances and transactions have been eliminated.

Foreign currency translation

Monetary assets and liabilities denominated in foreign currencies are translated into Canadian dollars at exchange rates prevailing at the balance sheet date. Exchange gains and losses resulting from the translation of foreign denominated balances are included in net gains (losses) on financial instruments. Purchases and sales of foreign securities and the related income are translated into Canadian dollars at the exchange rates prevailing on the respective dates of the transactions.

Government funding and housing programs expenses

Government funding for housing programs

Government funding is recognized when there is a reasonable assurance that it will be received and all attached conditions will be complied with. This is generally achieved when the recipient meets specific program criteria, which permits us to make the related claim to the government.

Government funding earned, but not yet received, is included in due from the Government of Canada.

Housing programs expenses

Housing programs expenses are recorded on an accrual basis and those incurred, but not yet paid, are included in accounts payable and other liabilities.

Housing programs expenses that are operating in nature are included in operating expense.

Mortgage insurance

Product classification

We classify our mortgage insurance as an insurance contract as the lender faces uncertainty with regard to potential borrower default on a mortgage and therefore pays a premium to transfer the risk to us. If the borrower defaults, the claim is significantly larger than the actual premium. Such contracts remain insurance contracts until all rights and obligations are extinguished or expire.

Premium revenue earned and unearned premiums

Mortgage insurance premiums are due at the inception of the mortgage being insured, at which time they are deferred and included in unearned premiums and fees. Our mortgage insurance contracts are issued with amortization periods up to 50 years for multi-unit residential and 25 years or less for transactional homeowner and portfolio. Unearned premiums are recognized as revenue over the period covered by the insurance contract using earning factors which reflect historical claim occurrence patterns. The earning patterns are selected based on the principle that premiums are earned at the same rate as claims are expected to be incurred. Earning patterns are determined by product type and by amortization period. Approximately 75% of the premiums written for transactional homeowner and portfolio are recognized as premiums earned within the first five years of the insurance contract while for multi-unit residential, within the first ten years.

Unearned premiums represent the unamortized portion of the policy premiums for insured loans outstanding at the balance sheet date and therefore relate to claims that may occur from the balance sheet date to the termination of the insurance contract.

Fees

We offer approved lenders a service for low loan-to-value applications for transactional homeowners whereby we assess an application using our loan assessment platform, which provides approved lenders with a risk assessment decision. There is no mortgage insurance coverage associated with this assessment. These fees are recognized immediately as revenue once the decision is rendered.

Application fees are designed to recover part of or all acquisition costs associated with issuing mortgage insurance policies for multi-unit residential loans. We defer and amortize these on the same basis as the related premiums.

Provision for claims

The provision for claims represents an estimate for expected claims net of the related expected property sale proceeds, for defaults on insurance contracts that have occurred on or before the balance sheet date. This provision includes claims that are incurred but not reported (IBNR), claims that are incurred but not enough reported (IBNER), claims in process (CIP), and claims on loans made under social housing (SH) programs as well as loans financed by index-linked mortgages (ILM) under the Federal Co-operative Housing Program (SH and ILM). The provision takes into consideration the time value of money and includes an explicit provision for adverse deviation.

We have self-insured loans within Rental Construction Financing initiative (RCFi) and SH and ILM. We account for this provision in accordance with IAS 37 Provisions, Contingent Liabilities and Contingent Assets and present it in accounts payable and other liabilities.

Provisions are reviewed and evaluated at each reporting period in light of emerging claim experience and changing circumstances. The resulting changes in the estimated provision for claims are recorded in insurance claims expense in the year in which they occur. For further details on the estimates and assumptions used to calculate the provision, see Note 4.

Insurance policy liability adequacy

Liability adequacy tests are performed at each balance sheet date as part of the actuarial valuation to ensure the adequacy of insurance policy liabilities, net of deferred acquisition costs (DAC) assets with respect to unearned premiums. Current best estimates of future contractual cash flows, claims handling and administration costs, and investment returns from the assets backing the liabilities are taken into account. There is a premium deficiency if the outcome of the liability adequacy test exceeds the unearned premiums balance. In such a case, DAC assets are written off first, and insurance liabilities are increased for any difference with a premium deficiency immediately recognized in insurance claims expense.

Deferred acquisition costs

DAC generally consist of policy issuance costs relating to the underwriting of insurance contracts. A portion of the acquisition costs relating to the unearned premiums is deferred and amortized over the estimated lives of the relevant contracts using the same earning factors as the unearned premiums. DAC assets are included in accounts receivable and other assets and amortization is recorded in operating expenses.

Government of Canada fees for risk exposure

We pay fees to the Department of Finance to compensate for mortgage insurance risks. These fees are deferred in accounts receivable and other assets and recognized in operating expenses over the period covered by the insurance contract using the same earning factors as the unearned premiums. The fees are payable at the rate of 3.25% of premiums written during the year and an additional 0.1% on new portfolio insurance written.

Net estimated borrower recoveries

We estimate the net borrower recoveries related to claims paid based on historical data in accordance with Canadian accepted actuarial practice on an annual basis. Changes to the estimated borrower recoveries balance are recorded in insurance claims expense in the year in which they are determined. Net estimated borrower recoveries are included in accounts receivable and other assets.

Timely payment guarantees (TPG)

Classification

Financial guarantee contracts are defined as contracts that require the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payment when due. We classify the TPG for National Housing Act Mortgage-Backed Securities (NHA MBS) and Canada Mortgage Bonds (CMB) as financial guarantee contracts. Such contracts remain financial guarantee contracts until all rights and obligations are extinguished or expire.

Recognition and measurement

TPG and application fees are initially recognized in unearned premiums and fees at fair value (the premium received). Subsequently, they are measured at the higher of i) the amount initially recognized less the amortization of guarantee and application fee revenue; and ii) the amount of the allowance for expected credit losses (ECL). The fees are recognized into premiums and fees earned on a straight-line basis over the expected life (typically the contractual life) of the related NHA MBS or CMB. All fees are received within five business days after the invoice date.

Government of Canada guarantee fees for risk exposure

We pay guarantee fees to the Department of Finance to compensate for TPG risks. These fees are deferred in accounts receivable and other assets and recognized in operating expenses on a straight-line basis over the period covered by the guarantee. These fees are payable at a rate of 0.075% of CMB issuances.

Financial instruments

Classification and measurement of debt instruments

The classification and measurement of debt instruments are based on the business model for managing the assets and whether contractual cash flows are solely payments of principal and interest (SPPI).

Business model assessment

The business model reflects how we manage assets in order to generate cash flows, that is, whether the objective is solely to collect contractual cash flows, or to collect both contractual cash flows and cash flows arising from the sale of assets.

We assess our business models at a level that reflects how our financial instruments are managed to achieve our business objectives. This assessment begins at the operating segment level, and where applicable, by sub-portfolios of instruments that are managed together within a particular activity to achieve common business objectives. We perform our business model assessment based on the following main criteria:

- Strategic objectives of the business model and how these objectives are carried out in practice;
- How performance of the business model is evaluated and reported to key management personnel;
- The risks that affect the performance of the business model and how we manage those risks. Key risks include market, credit and liquidity risks as described in detail in Notes 18, 19 and 20, respectively;
- How managers of the business model are compensated;
- The frequency, value and timing of historical sales activity and expectations for future sales activities.

SPPI Assessment

We assess whether the cash flows of our debt instruments meet the SPPI criteria based on the asset's contractual terms. For this assessment, we define principal as the fair value of the asset upon initial recognition and interest as consideration for the time value of money, the credit risk of the transaction and for other lending risks and costs as well as a profit margin.

Contractual terms that introduce exposure to risk or volatility to the contractual cash flows that are inconsistent with a basic lending agreement do not satisfy the SPPI requirement.

Classification and measurement of financial instruments

We use settlement date accounting for purchases and sales of financial assets and financial liabilities, and we recognize realized gains and losses on sales on a weighted average cost basis. The following table presents a description of our financial instruments along with their classification under IFRS 9 and the criteria for classifying them as such:

| Classification | Financial Instruments (Activity) ¹ | Description | Criteria and accounting treatment | | |
|--|---|--|---|--|--|
| Financial assets at amortized cost | Cash and cash equivalents (AH, MI, MF) Securities purchased under resale agreements (Reverse Repurchase Agreements) (AH, MI) Investment securities (AH) Loans – CMB Program and Insured Mortgage Purchase Program (IMPP) (MF) Loans – Lending Programs (AH) | Highly liquid investments with a term to maturity of 98 days or less from the date of acquisition that are readily convertible to known amounts of cash and which are subject to an insignificant risk of change in value. Purchase of securities, typically Government treasury bills or bonds, with the commitment to resell the securities to the original seller at a specified price and future date in the near term. Corporate, Federal, Provincial and Sovereign debt instruments. Amounts due from Canadian financial institutions as a result of the sale of their beneficial interest in NHA MBS to CHT (for the CMB Program) or CMHC (for the IMPP). Loans not economically hedged within our AH Activity. Mortgages or loans (workouts) that benefit from the MI-supported | We classify financial assets at amortized cost if we hold them with the objective to collect contractual cash flows and are SPPI. Initially measured at fair value plus transaction costs and subsequently measured at amortized cost using the effective interest rate method (EIRM), net of an allowance for ECL. Interest income is recognized using the EIRM in interest income in AH and investment income in MI and MF. ECL are recognized in net gains (losses) on financial instruments in AH and insurance claims in MI. Gains and losses arising on derecognition are recognized directly in net gains (losses) on financial instruments, together with foreign exchange gains and losses. For certain lending program loans originated from 1946 to 1984 through provisions of the NHA, interest rate losses from the | | |
| Loans (MI) | | default management activities that enable borrowers to work through their financial difficulties. | loans having lower interest rates than the related borrowings are reimbursed through government funding. In assessing the fair value of these loans at initial recognition, the continued receipt of the government funding in the future is assumed. | | |
| Debt instruments at FVOCI | Cash equivalents (MI, MF) Investment Securities – debt instruments (MI, MF) | Highly liquid investments with a term to maturity of 98 days or less from the date of acquisition that are readily convertible to known amounts of cash and which are subject to an insignificant risk of change in value. Corporate, Federal, Provincial and Sovereign debt instruments. | We classify financial assets at FVOCI if we hold them with the objective to collect contractual cash flows and are SPPI or to sell the assets. Initially recognized at fair value plus transaction costs and subsequently measured at fair value. Unrealized gains and losses arising from changes in fair value are recorded in OCI until the financial asset is derecognized, at which point cumulative gains or losses previously recognized in OCI are reclassified from AOCI to net gains (losses) on financial instruments. Unrealized foreign exchange gains (losses) are recognized in net gains (losses) on financial instruments. Interest income is recognized using the EIRM in investment income. The cumulative ECL allowance on financial assets held at FVOCI is recorded in OCI and does not reduce the carrying amount of the financial asset. The change in the ECL allowance is recognized in net gains (losses) on financial instruments. | | |

¹ Denotes in which Activity we hold the instruments: Assisted Housing (AH), Mortgage Insurance (MI) or Mortgage Funding (MF).

| Classification | Financial Instruments (Activity) ¹ | Description | Criteria and accounting treatment |
|---|---|---|---|
| Financial assets at FVTPL | Cash equivalents, loans, investment securities designated at FVTPL (AH) Derivatives – Interest rate swaps (AH), Foreign Exchange (FX) contracts (MI) and First-Time Home Buyer Incentive (FTHBI) loan derivative (AH) Investment Securities – Limited partnership units (MI) Investment Securities – debt instruments (MI) Loans – (AH, MI) | For certain portfolios of loans and associated borrowings originated prior to August 2016, the AH Activity uses derivatives to manage refinancing and reinvestment risks, as well as mismatches between the timing of receipts from assets and payments of liabilities. These assets form part of the lending economic hedging structure and are designated at FVTPL. Interest rate swaps and foreign exchange contracts used to economically hedge foreign exchange risks on U.S. dollar-denominated debt instruments. The FTHBI loan derivative is used to recognize the payable or receivable to the Government of Canada when there are underlying loan gains or losses. Canadian real estate investment trust equity investments all mandatorily classified at FVTPL. Subordinated debt securities and certain asset-backed securities whose contractual cash flows do not give rise to cash flows that are SPPI. Loans including those with interest adjustment clauses, those for which we only expect to recover the value of the underlying collateral and those that are economically hedged. | We classify financial assets at FVTPL if they do not meet the criteria for classification as financial assets at amortized cost, or financial assets at FVOCI. Includes derivatives or instruments that have been irrevocably designated upon initial recognition as at FVTPL in order to eliminate or significantly reduce an accounting mismatch that would otherwise arise from classifying them in those categories. Initially recognized and subsequently measured at fair value. Unrealized gains and losses arising from changes in fair value and gains and losses realized on disposition are recorded in net gains (losses) on financial instruments. Transaction costs are recognized in net gains (losses) on financial instruments as incurred. Interest income and dividend income are recognized in investment income. ECL are not recognized on financial instruments measured at FVTPL. |
| Financial liabilities at FVTPL | Borrowings from the Government of Canada – Lending programs (AH) | Borrowings that are economically hedged as part of our lending hedging structure. | We may irrevocably designate a financial liability as at FVTPL upon initial recognition if doing so eliminates or reduces significantly an accounting mismatch, or its performance is evaluated on a fair value basis in accordance with risk management policies. Unrealized gains and losses arising from changes in fair value are recognized in net gains (losses) on financial instruments except for changes in fair value attributable to our own credit risk for financial liabilities designated at FVTPL. These changes are recognized in OCI unless doing so would create an accounting mismatch, in which case the entire fair value change is presented in net gains (losses) on financial instruments. |
| Financial liabilities at amortized cost | Borrowings – CMB (MF) Borrowings from the Government of Canada – Lending Programs (AH) Borrowings from the Government of Canada – IMPP (MF) Securities sold under repurchase agreements (MI) | Interest-bearing bullet bonds issued by CHT that we guarantee. See below this table for further details about CMB. Borrowings incurred to fund loans in the AH Activity that are not part of the lending hedging structure. Amortizing borrowings incurred to fund loans under the IMPP. 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. Proceeds received from these agreements may be used for liquidity purposes or invested in Reverse Repurchase Agreements or cash equivalents for the purpose of generating additional income. | Financial liabilities are classified at amortized cost, unless they have been classified at FVTPL. Initially recognized at fair value plus transaction costs and subsequently measured at amortized cost using the EIRM, with interest expense recorded in interest expense in AH and MF and investment income in MI. |

Initial measurement of financial instruments

When a financial instrument's fair value at initial recognition differs from its transaction price, we recognize the resulting gain or loss as follows:

When the instrument's fair value is determined using significant observable inputs, we immediately recognize the gain or loss in net gains (losses) on financial instruments and subsequently amortize it into interest income, for loans, or interest expense, for borrowings, using the EIRM. This is the case for all funds we borrow from the Government for Lending programs under the Crown Borrowing Program (CBP), as well as certain Lending program loans. See Note 17 for information on the amounts of these gains or losses.

When the instrument's fair value is determined using significant unobservable inputs, we defer and amortize the gain or loss into net gains (losses) on financial instruments and interest income using the effective interest rate method. This is the case for certain Lending program loans.

Measurement of expected credit losses

Credit losses are defined as the difference between all contractual cash flows due in accordance with the contract, and the cash flows that we expect to receive (cash shortfalls), discounted at the original effective interest rate (or credit-adjusted effective interest rate for purchased or originated credit-impaired assets). ECL are the weighted average of credit losses determined by evaluating a range of possible outcomes using reasonable, supportable information about past events and current and forecasted future economic conditions.

We have an impairment model to determine the allowance for ECL on our debt securities classified as amortized cost or FVOCI and our financial guarantee contracts. We determine an allowance for ECL at initial recognition of the financial instrument (or the date we become party to a financial guarantee) that is updated at each balance sheet date throughout the life of the instrument.

The ECL allowance is based on the ECL over the life of the financial instrument (lifetime ECL), unless there has been no significant increase in credit risk (SICR) since initial recognition, in which case the ECL allowance is measured at an amount equal to the portion of lifetime ECL that result from default events possible within the next 12 months (12-month ECL). ECL are determined based on three main drivers: probability of default, loss given default and exposure at default.

- Probability of default (PD): A point-in-time estimate of the likelihood of default either over the next 12 months (12-month ECL) or over the remaining life of the instrument (lifetime ECL). Our PDs are determined by mapping internal credit ratings to point-in-time PD tables based on statistical models derived from a large data set of publicly traded entities.
- Loss given default (LGD): The percentage of the gross carrying amount of the instrument that will be lost on default at a given point in time. It is determined by taking the difference between contractual cash flows due and those expected to be received, including the realization of collateral, and comparing this value to the gross carrying amount.
- Exposure at default (EAD): The gross carrying amount of the instrument at a given point in time, which is calculated as the present value of the outstanding contractual cash flows using the EIRM.

The ECL is calculated using a scenario-based approach where, for each scenario, the PD, LGD and EAD are projected for each individual exposure at each cash flow date over the next 12 months (12-month ECL) or remaining life of the instrument (lifetime ECL). The components are multiplied together at each future date and discounted back using the original effective interest rate to the reporting date and summed. A probability-weighted average ECL is then determined across the multiple scenarios. We model all ECL at the individual instrument level.

Significant increase in credit risk

We have established a policy to perform an assessment at each balance sheet date of whether the instrument's credit risk has increased significantly since initial recognition (or the date we become party to a financial guarantee). Based on this assessment, we group the instruments into the following categories:

- Stage 1: Instruments that have not experienced a SICR since initial recognition. ECL are recognized based on 12-month ECL and interest revenue is calculated on the gross carrying amount of the asset;
- Stage 2: Instruments that have experienced a SICR since initial recognition, but are not considered credit impaired. In subsequent periods, if the credit risk of an instrument has improved such that there is no longer a SICR since initial recognition, the ECL allowance will revert to stage 1. ECL are recognized based on lifetime ECL and interest revenue is calculated on the gross carrying amount of the asset;

- Stage 3: Instruments that are considered credit-impaired as one or more events that have a detrimental impact on estimated future cash flows have occurred. ECL are recognized based on lifetime ECL;
- Purchased or originated credit-impaired (POCI) instruments that are credit impaired on initial recognition. ECL are recognized based on lifetime ECL

Interest revenue on stage 3 or POCI financial instruments is calculated based on the net carrying amount of the asset, which is the gross carrying amount, net of the loss allowance.

For instruments that we assess as having low credit risk at the reporting date, we applied the low credit risk exemption (stage 1) and have presumed that credit risk has not increased significantly since initial recognition. We use internal credit ratings based on internal assessments of counterparty creditworthiness at the reporting date to assess whether the instrument has low credit risk. For externally managed investment portfolios, a credit rating for each instrument is based on ratings available from credit rating agencies. We consider an instrument to have low credit risk when our internal rating is BBB- or higher.

We apply a backstop to all financial instruments for which the counterparty is more than 30 days past due on its contractual payments, whereby we consider the instrument to have experienced a SICR.

We consider an instrument in default, which is fully aligned with the definition of credit-impaired, when it meets the following criteria:

- Observable data exists that has a detrimental impact on the estimated future cash flows such as:
 - significant financial difficulty of the issuer;
 - the granting of a new loan to assist the borrower work through financial difficulties:
 - it becomes probable that the issuer will enter bankruptcy or other financial reorganization; and
 - the disappearance of an active market due to financial difficulties.
- Borrower becomes 90 days past due on its contractual payments.

An instrument is no longer considered impaired when all past due amounts, including interest, have been recovered and it is determined that the principal and interest are fully collectable in accordance with the original contractual terms of the instrument. We write off instruments, either partially or in full, against the related ECL allowance when we judge that there is no realistic prospect of future recovery.

In addition to the 30-day backstop discussed above, we apply the following policies in determining whether there has been a SICR on our financial instruments subject to ECL:

Debt instruments at amortized cost / FVOCI

Our credit risk policies restrict the amount of investments in debt instruments that have an internal rating lower than BBB-. All other instruments are presumed to have low credit risk and we have applied the low credit risk exemption (stage 1) on those instruments.

Loans under the CMB program and the IMPP

Loans under the CMB program and under the IMPP represent amounts due from Canadian financial institutions as a result of the sale of their beneficial interest in NHA MBS securities to us. The loans are collateralized by the NHA MBS, as well as associated reinvestment securities in the case of the CMB program only, acquired in the transactions. The NHA MBS, reinvestment assets and swaps represent the sole source of repayment on the loans, and thus directly affect the probability of a default occurring. Therefore, our assessment of SICR is based on the credit risk of these supporting assets.

The supporting assets are limited to NHA MBS and reinvestment assets rated R-1 (high) or AAA and swap counterparties with a minimum rating of BBB+ (under the CMB program) or A- (under the IMPP). As such, all loans under the CMB program and the IMPP are presumed to have low credit risk and we have applied the low credit risk exemption (stage 1). We also do not recognize a separate ECL for these loans because the credit risk arising from loans under the CMB program and the IMPP is already reflected in the credit risk of the NHA MBS and CMB TPGs as discussed under the Financial guarantees section below.

Assisted Housing Activity loans/Mortgage Insurance Activity loans

Loans with an internal rating of BBB- or higher are presumed to have low credit risk and the low credit risk exemption has been applied (stage 1). These loans consist of those issued to municipalities under the Municipal Infrastructure Lending Program and loans indemnified by provinces and territories through provisions under Social Housing Agreements (SHA) where the credit rating of the province or territory is considered in the SICR assessment. This credit enhancement is relevant to assessing changes in credit risk since it directly impacts the probability of default. The province or territory is responsible for collecting loan payments from the borrower and, in turn, makes all payments to us directly in accordance with the contractual terms of the loan on behalf of the borrower. These payments are made to us, irrespective of the borrower's payment status.

All remaining loans issued under our Assisted Housing or Mortgage Insurance activities have not been internally rated and therefore the low credit risk presumption is not used. Our SICR assessment of these loans is primarily based on days past due, as this is a historically reliable indicator of loan credit quality and performance status. Below are the staging criteria:

- Stage 1: All current loans to 30 days past due.
- Stage 2: Loans between 30 and 90 days past due.
- Stage 3: Loans more than 90 days past due. Also, a loan that is not past due but has been issued a workout loan to assist with financial difficulties is considered credit impaired irrespective of days past due.

If exceptional loan payment deferrals are granted, the circumstances under which they are granted are assessed to determine if their impact on days past due should result in a transfer between stages. When deferrals are the result of circumstances outside a borrower's control, the deferral will not be treated as additional days past due and should not, in itself, result in a stage transfer.

Under the terms of certain construction loans issued by our Assisted Housing Activity or workout loans issued by our Mortgage Insurance Activity, there may be a period of time where the loan has been advanced but is not under repayment and therefore days past due cannot be used in the SICR assessment. For these loans that are not under repayment, we assess SICR by applying the following criteria:

- Days past due on loans issued by the same borrower;
- Collective assessment by reviewing past due status of borrowers with shared credit risk characteristics;

- Qualitative assessment of specific indicators of the construction project such as: project delays, performance against budget and remaining costs to complete.

Financial guarantees

Under the NHA MBS program, a financial institution (the "NHA MBS issuer") creates a pool of eligible mortgages and sells the pool to investors. The underlying pool of mortgages is designed to provide sufficient cash flows to fund the NHA MBS. The issuer is obligated to fund any cash flow shortfalls that may arise, thus exposing us to credit risk with the underlying pool of mortgages serving as a credit enhancement. Our assessment of SICR is therefore based on both the credit risk of the issuer and the credit risk of the pool of mortgages underlying the NHA MBS. The pool of mortgages is considered low credit risk since only mortgages that we or approved private mortgage insurers insure are eligible to be pooled in NHA MBS.

Under the CMB program, the credit risk exposures are, by design, the CMB loans that are the sole source of funds to fulfill CHT's CMB obligations. As previously discussed, the NHA MBS, reinvestment assets and swaps represent the sole source of repayment on the loans. The SICR assessment for the CMB guarantee is based on the credit risk of these supporting assets, all of which have been assessed as low credit risk.

We have assessed the TPG under both the NHA MBS and CMB programs as having low credit risk and we therefore apply the low credit risk exemption (stage 1).

Forward-looking macroeconomic variables

We have incorporated forward-looking economic information into our ECL by performing the calculation under multiple scenarios resulting in a probabilityweighted average ECL based on the weightings of each scenario. We have used three sets of economic forecasts for all instruments representing a baseline, upside and downside scenario.

We performed an economic variable selection process to identify the sets of macroeconomic variables that had the highest correlation with our portfolios. This process resulted in using different sets of economic variables depending on the geographic and industry sector of the exposure. The following variables are included: unemployment rates, oil prices, 10-year corporate bond spreads and equity index values.

All macroeconomic variables are projected over a five-year period, with expected credit losses subsequently reverting to long-run averages. We base our forecasts and scenario weightings on forecasted macroeconomic inputs published by third parties that are reviewed and approved by our Chief Economist.

Financial liabilities at amortized cost

Canada Mortgage Bonds

CMB are interest-bearing bullet bonds issued by CHT that we guarantee. Coupon interest payments are made semi-annually for fixed rate CMB and quarterly for floating rate CMB. Principal repayments on the bonds are made at maturity. The approved MBS Sellers reimburse CHT for the cost of arranging financing, including the fees paid to underwriters and others for the distribution of CMB. Transaction costs directly attributable to the issuance of CMB net of reimbursements thereof are included in the amount initially recognized and amortized to interest expense using the EIRM.

We may purchase and resell CMB in the market for investment purposes. Purchases are treated as retirements of debt with the difference between the purchase price and the carrying value of the CMB being recognized as a gain or loss in net gains (losses) on financial instruments. Subsequent sales are treated as re-issuance of the debt with gains and losses deferred and amortized over the remaining life of the CMB sold. When we hold a CMB to maturity or acquire CMB in the primary market, the related cash flows are excluded from the consolidated statement of cash flows as they are not considered external cash flows to the consolidated entity.

CMB program and IMPP

Loans under the CMB program and under the IMPP represent amounts due from Canadian financial institutions as a result of the sale of their beneficial interest in NHA MBS securities to us. These loans are funded by the issuance of CMB (CMB program) or borrowings from the Government of Canada (IMPP). There are both fixed and floating rate loans in this category. Under the CMB program, principal is due at maturity, and under the IMPP, principal is due monthly (amortizing).

Under these arrangements, substantially all the risks and rewards of the NHA MBS are retained by the issuers through swap agreements with us. Consequently, the NHA MBS, and the reinvestment of principal proceeds under the CMB program, serve as collateral to the loans and are not recognized in the consolidated balance sheet. This collateral is, however, held in our name and represents the sole source of principal repayments for the loans. The amount due from the swap counterparties represents the interest earned on the loans and is recognized in interest income.

Cloud computing arrangements

We enter into cloud computing arrangements for certain Information Technology solutions. Under these arrangements, we incur costs for the right to access a supplier's application software, as well as for software configuration, customization and implementation.

To determine whether to expense or capitalize these costs, we assess them against the definition and recognition criteria for intangible assets; that is, identifiability, control over a resource, and the existence of future economic benefits. We expense all costs for software access, research and scoping, training, data migration and general overhead such as project management that is not directly attributable to preparing the software for use, and we present these costs in operating expenses. We capitalize costs for design, configuration, customization, integration with other software and testing, provided they meet the aforementioned criteria for intangible assets, and we present these amounts in accounts receivable and other assets.

After initial recognition, we carry intangible assets at cost less accumulated amortization and any impairment losses. We amortize these assets on a straight-line basis over their useful lives, which range from five to ten years, and we present amortization expense in operating expenses.

Investment property

Investment properties are properties held to earn rental income or for capital appreciation, or both. Investment properties are initially recognized at cost plus transaction costs. Subsequent to initial recognition, they are measured at fair value. Gains or losses arising from changes in fair value are recognized in other income in the period in which they arise.

Pension and other post-employment benefits

We have a number of benefit arrangements which provide pension and other post-employment benefits to eligible employees. These include a federally regulated pension plan (Pension Plan), an unregistered supplemental pension plan (Supplemental Plan) and other non-pension post-employment defined benefits consisting mainly of life and medical insurance. The Supplemental Plan offers benefits in excess of statutory limits as defined under the *Income Tax Act* (ITA).

The Pension Plan is subject to the federal Pension Benefits Standards Act, 1985 (PBSA) and its regulations and to the ITA. The Pension Plan is registered with the Office of the Superintendent of Financial Institutions (OSFI) and the Canada Revenue Agency (CRA).

Defined benefit plans

The defined benefit plans include the Pension Plan and the Supplemental Plan as well as the other non-pension post-employment benefits. The benefits available under both the Pension Plan and the Supplemental Plan are based on length of service and average annual salary.

The net defined benefit liability recognized is the present value of the obligations under the defined benefit plans less the fair value of the assets of those plans. The defined benefit plan assets are limited to the present value of any economic benefits available in the form of reductions in future contributions to these plans.

Net benefit costs of the plans include the current service costs and the interest cost on the defined benefit obligation net of the interest income on the plan assets and the gain or loss on curtailment. Net benefit costs are included in operating expenses.

Remeasurement gains and losses on defined benefit plans include actuarial gains and losses and changes in the return on plan assets (excluding net interest). They are recognized in OCI as incurred and then flow into retained earnings and are not reclassified to profit or loss in subsequent periods.

Income taxes

We are a prescribed federal Crown corporation under Reg. 7100 of the ITA and are subject to federal income tax as a prescribed corporation for purposes of subsection 27(2) of the ITA. We are not subject to provincial income tax. CHT is subject to federal and provincial income taxes on the amount of taxable income for the period and is permitted a deduction for all amounts paid or payable to CHT's beneficiaries in determining income for tax purposes. As all taxable income was distributed to the beneficiaries, no provision for income taxes has been reflected for CHT.

We use the liability method of accounting for income taxes. Under this method, deferred income tax assets and liabilities are recognized based on the estimated tax effect of temporary differences between the carrying value of assets and liabilities on the financial statements and their respective tax bases. We use substantively enacted income tax rates at the balance sheet date that are expected to be in effect when the asset is realized or the liability is settled. The carrying amount of deferred income tax assets is reviewed at each balance sheet date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred income tax asset to be utilized.

Related party transactions

Except for funds borrowed from the Government for Lending programs under the CBP, related party transactions are made on terms equivalent to those that prevail in arm's length transactions. Funds borrowed under the CBP, which we include in borrowings at amortized cost and borrowings designated at FVTPL, are at below market rates. In turn, this allows us to issue loans at favourable rates, which reduces the Government's cost to subsidize social housing. Borrowings at below market rates generate gains, which we recognize in net gains (losses) on financial instruments at the borrowing date, as discussed under Initial measurement of financial instruments above.

3. Current and Future Accounting Changes

Current accounting changes

There were no new or amended standards issued by the IASB that we adopted during the year ended 31 December 2021 that had an impact on our consolidated financial statements.

Future accounting changes

IFRS 17 Insurance Contracts – effective date of 1 January 2023

In May 2017, the IASB issued International Financial Reporting Standard (IFRS) 17 Insurance Contracts (IFRS 17), which will replace IFRS 4 Insurance Contracts.

In June 2020, the IASB amended IFRS 17 to address concerns and implementation challenges raised by stakeholders. The most notable amendment to us is that the IASB deferred the effective date by two years, to 1 January 2023. The other amendments will not have an impact on our implementation.

IFRS 17 allows you to redesignate your financial asset classification at the initial date of applying IFRS 17. We do not anticipate making any changes to the classification of our financial assets.

Under IFRS 17, insurance contract liabilities will include the present value of future insurance cash flows, adjusted for risk, as well as a contractual service margin and deferred acquisition costs, which will be released over the coverage period. Contractual service margin will represent the difference between the premium received at inception and the present value of the risk-adjusted cash flows (i.e., profit to be earned in the future). If this difference is negative at inception, the insurance contract would be considered onerous and the difference immediately recorded in income. There are also revised presentation and disclosure requirements.

IFRS 17 is to be applied retrospectively, unless it is impracticable to do so. Based on availability of data and to not make use of hindsight, we have determined that we are only able to retrospectively apply IFRS 17 starting on 1 January 2021. We have made the decision to apply the fair value approach for prior periods. Under the fair value approach, we will determine the fair value of our insurance contracts underwritten prior to 1 January 2021 as at the transition date, 1 January 2022.

The implementation of IFRS 17 is a significant project for us and is supported by a formal governance structure which includes a project steering committee, a technical steering committee and a multidisciplinary team dedicated to analyzing and implementing the new accounting standard. Our project steering committee provides oversight on project status, budget and resources, and a dedicated technical steering committee was created to review, challenge and approve key areas related to the technology implementation.

Our project plan includes the following phases: (a) Initiation and planning; (b) Future state assessment; (c) Design and implementation of technology; (d) Testing; (e) Deployment of technology; and (f) Parallel reporting. We are on track with the overall project timelines. Phases (a) to (c) have been completed, while testing and deployment are in progress.

We continue to evaluate where we will need to change our existing accounting and reporting processes and how this could affect our consolidated financial statements. In 2022, we plan to begin to determine the impacts on our reporting.

Amendments to IAS 1 Presentation of Financial Statements, IFRS Practice Statement 2 Making Materiality Judgements, and IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors – effective date of 1 January 2023

In February 2021, the IASB issued amendments to IAS 1, IFRS Practice Statement 2 and IAS 8 to improve accounting policy disclosures and clarify the distinction between a change in accounting policy and a change in accounting estimates.

Under the amended IAS 1, entities will disclose their material accounting policies rather than their significant accounting policies. IAS 1 will provide guidance on how to identify material accounting policies stating that an accounting policy is considered material if, when combined with other information within the financial statements, it can reasonably be expected to influence the decisions of the primary users of the financial statements. IFRS Practice Statement 2 has been amended to include guidance on how to apply materiality to accounting policy disclosures. The amendments to IAS 1 are effective for annual periods beginning on or after 1 January 2023, with earlier application permitted and are applied prospectively. We intend to apply the amendments to IFRS Practice Statement 2, which do not contain an effective date, at the same time as IAS 1.

Under the amended IAS 8, accounting estimates are "monetary amounts in financial statements that are subject to measurement uncertainty." The amendment also clarifies that a change in an accounting estimate as a result of new information or developments is not a correction of an error. The amendments to IAS 8 are effective for annual periods beginning on or after 1 January 2023, with earlier application permitted, and are applied prospectively.

We have not yet determined the full impact of these amended standards on our consolidated financial statements.

4. Critical Judgments in Applying Accounting **Policies and Making Estimates**

Judgments in applying accounting policies

In addition to judgments previously discussed in Note 2, we have made the following judgments, which have the most significant effect on the amounts recognized in our consolidated financial statements.

Consolidation

We apply significant judgment in assessing whether the substance of our relationship with CHT indicates that we control CHT. We guarantee the timely payment of principal and interest on the CMB, and choose when to provide that guarantee. CHT cannot undertake new business (e.g., issue new bonds) without the benefit of a guarantee, and we are currently its only available guarantor. Within that context, we have direct influence over the activities of CHT and can use this influence to manage our exposure to CHT.

Derecognition

In assessing whether transfers of NHA MBS from Issuers to CHT under the CMB program, and to us under the IMPP, qualify for derecognition, significant judgment is applied in determining whether substantially all the risks and rewards of ownership of the NHA MBS have been transferred. We have determined that the sellers of NHA MBS to CHT or to us fail to meet the derecognition criteria as they retain the risk and rewards of the NHA MBS through swap agreements. As a result, we do not recognize the underlying NHA MBS in the consolidated balance sheet but rather account for the transfers as loans.

Use of estimates and assumptions

In preparing our consolidated financial statements, we are required to make estimates and assumptions that affect the reported amount of revenues, expenses, assets and liabilities, and the accompanying disclosures. The key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below. We based our assumptions and estimates on information available when the consolidated financial statements were prepared. Existing circumstances and assumptions about future developments, however, may change due to market changes or circumstances arising that are beyond our control. Such changes are reflected in the assumptions when they occur.

The COVID-19 pandemic continues to affect economies globally and its impacts on our business have become clearer. Loans are no longer under deferral programs, the nature and extent of government and regulatory responses are clearer, and our economic projections are more optimistic. This has reduced the uncertainty with respect to the assumptions used in making estimates.

Provision for claims

The provision for claims at 31 December is determined by our external appointed actuary, and the main long-term assumptions are probability of default, loss given default and timing of the related cash flows, which are adjusted for the shortterm impact of current economic conditions. Historical experience, grouped by product and age of loans, adjusted for related changes to our insurance products and processes, is used throughout the actuarial valuation. Determining the provision for claims involves the risk that the actual results will deviate, and in certain cases significantly, from the estimates made. In addition, there is a risk that the timing of future liability payments will differ materially from the assumptions underlying the valuation of insurance policy liabilities.

The following factors affect the key actuarial assumptions used in the determination of the provision for claims:

- Claim frequency Claim frequency, or probability of default, is dependent on the loan-to-value, the underwriting year and other characteristics of the loans insured. It reflects historical and current trends and arrears reporting;
- Claim severity Claim severity, or loss given default, is dependent on the dollar value of claims, losses on sales of real estate properties, administrative expenses, payment delays and sale delays. These factors are generally based on historical experience; and

- Economic conditions - Recent past and projected economic factors, such as unemployment rates and house price index affect the forecast of future claim levels.

In 2020, as a result of the deferral programs made available by financial institutions, the resulting lower number of loans in arrears and the inability to determine if a loan in deferral was due to a default or not, we revised our provisioning methodology to be primarily driven by projections of economic variables. However, in 2021, we have resumed using arrears reporting from financial institutions as a primary input in our provisioning methodology combined with projections of economic variables. The two primary economic variables we use to establish the provision for claims at 31 December 2021 are the unemployment rate and house price index. In 2020 and up to and including Q3 2021, the two primary economic variables used were unemployment and gross domestic product.

House price index was used at 31 December 2021, in place of gross domestic product as an improvement to our modelling reflecting the current economic environment and its predictive power of insurance claims. Due to the interconnectedness of the various economic variables and arrears, it is not possible to precisely attribute the impact of any one change in our approach to the final provision for claims. However, the use of arrears and house price index, and the improvement in our unemployment rate and gross domestic product (until its discontinuation in Q4) forecasts drove the majority of the reduction in the provision for claims from 2021.

We consider a number of scenarios when establishing a reasonable range for the provision for claims and our final estimate reflects the following key assumptions for the next 18 months: average unemployment rate of 6.2% and a projected decrease in average house prices of 2.4%. These projections are more optimistic than recent interim reporting, which reflects a revised outlook of the economy at 31 December 2021, and also led to the reversal of a portion of higher insurance claims expense from 2020.

The provision for IBNER is estimated from the payment pattern of the supplementary amounts on open claims. The losses on CIP are estimated by multiplying the insured loan amount by the calculated average loss level.

Due to the uniqueness of the programs through which the SH and ILM loans are made, the provision for these loans is determined using the expected losses on the current outstanding balances of the insured loans.

For sensitivity analysis and further information on the measurement of the provision, see Note 7.

Unearned premiums

Mortgage insurance premiums are due at the inception of the mortgage being insured, at which time they are deferred and recognized as revenue over the period covered by the related insurance contracts using factors determined annually by the external appointed actuary. The premium earnings factors are based on claim occurrence patterns and amortization periods under the assumption that premiums would be earned at the same rate as claims are incurred. Distinct earning patterns are applied to product types that exhibit substantially different claim occurrence patterns. Claim occurrence patterns are based on long-term historical claim data grouped by age of loans.

Fair value measurement of financial instruments

When the fair values of financial assets and financial liabilities recorded in the consolidated balance sheet cannot be measured based on quoted prices in active markets, their fair value is measured using valuation techniques such as discounted cash flow, spread differential or other valuation models. These models include a degree of judgment in consideration of inputs such as yield curves, market spreads and risk premiums with reference to financial instruments that have similar yields, market risk and maturity characteristics. Changes in assumptions relating to these factors could affect the reported fair value of financial instruments. See Note 11 for further information on these inputs and assumptions.

Expected credit losses

The ECL is determined using judgment in weighting pessimistic, baseline and optimistic scenarios that consider forward-looking results for the macroeconomic factors listed in Note 2. The scenarios and weightings are reviewed and updated quarterly by our Chief Economist at the balance sheet date. The ECL at 31 December 2021 was calculated using a 40% weighting to the pessimistic scenario, 45% weighting to the baseline and 15% weighting to the optimistic scenario (2020 – 35% pessimistic, 45% baseline and 20% optimistic).

Our loan portfolio is not materially sensitive to changes in economic inputs or weightings as 99% of the loan book is guaranteed (see Note 14). See Notes 13 and 14 for more information on expected credit losses.

Valuation of pension benefit obligation

The cost of the defined benefit pension plan and the present value of the pension obligation are determined based on actuarial valuations. The actuarial valuation involves making various assumptions that may differ from actual developments in the future. These include the determination of the discount rate, rate of compensation increase, mortality rates and inflation. Due to the complexities involved in the valuation and its long-term nature, a defined benefit obligation is highly sensitive to changes in these assumptions. All assumptions are reviewed at least annually.

The assumption most sensitive to change is the discount rate. In determining the appropriate discount rate, we consider the interest rates of Canadian dollar corporate bonds with an "AA" rating and extrapolated as needed along the yield curve to correspond with the expected term of the defined benefit obligation. The mortality rate is based on publicly available Public Sector mortality tables for Canada. See Note 24 for more information on assumptions and sensitivity.

5. Segmented Information

Our operating segments include Assisted Housing, Mortgage Insurance, Mortgage Funding and CHT. As described in Note 1, we have determined our reportable segments to be Assisted Housing, Mortgage Insurance and Mortgage Funding.

Our Chief Operating Decision Maker (CODM) is our Executive Committee. Our CODM monitors the operating results of the activities separately for the purpose of making decisions about resource allocation and performance assessment. Segment performance is evaluated based on financial and nonfinancial metrics that are tied to the objectives of each operating segment and may differ by operating segment.

Assisted Housing includes Housing and Lending programs, which share many similarities and satisfy the same objective of supporting access to affordable housing for Canadians in need. Our CODM allocates resources and assesses performance of the Housing and Lending programs as one. Housing programs are administered either directly by us or by provinces and territories under SHA and the Federal/Provincial/Territorial Housing Partnership Framework. We lend to non-profit and private sectors, First Nation, Métis and Inuit organizations and communities, provinces and municipalities in the delivery of affordable and community housing programs. Assisted Housing earns interest income on loans and investments, and receives government funding to operate its housing programs. Mortgage Insurance provides mortgage insurance for transactional homeowner, portfolio and multi-unit residential loans in all parts of Canada. We operate these programs on a commercial basis with due regard for loss without the need for funding from the Government. Mortgage Insurance revenues are earned from premiums, fees and investment income.

Mortgage Funding provides TPGs of interest and principal of securities issued on the basis of eligible housing loans and on CMB. We provide these guarantees on a commercial basis. Mortgage Funding also includes interests in NHA MBS as a result of acquisitions under the IMPP in 2020.

CHT's functions include the acquisition of interests in eligible housing loans such as NHA MBS, the issuance of CMB, as well as the purchase of highly rated investments and certain related financial hedging activities.

For the purposes of our segmented reporting, we aggregate Mortgage Funding and CHT (a separate entity) in the Mortgage Funding reportable segment. Accordingly, Mortgage Funding earns revenues from guarantee and application fees, and investment income.

Corporate overheads are allocated to each operating segment and are included in the amounts presented.

We define a major lender to be one from which we receive premiums, guarantee fees and application fees amounting to 10% or more of our total premiums and fees received. In 2021, we received amounts totalling \$592 million, or 23% of our total premiums and fees received, from two major lenders (2020 -\$486 million or 16% from one major lender). We report these amounts in our Mortgage Insurance and Mortgage Funding Activities; see Note 2 for information on our revenue recognition policies.

For all segments, revenues are attributed to, and assets are located in, Canada.

Aggregation of the Mortgage Funding and CHT

Mortgage Funding and CHT both support our objective of ensuring adequate supply of funds for mortgage lending through mortgage securitization. Through the CMB program in its entirety (including the guarantee by Mortgage Funding) and the IMPP, we contribute to the stability of the financial system by allowing lenders to access funds for residential mortgage lending.

Both segments' business is generated by market demand for our TPG for mortgage funding through NHA MBS and through CMB issued by CHT.

There are many similarities in the nature of the issuance processes, customers and methods of distribution. CMB are available to both institutional investors and retail investors and can be bought through investment dealers, banks, trust companies and other types of financial institutions. The guarantee takes effect at issuance.

| | Assisted Housing Activity | | Mortgage Insurance Activity | | Mortgage Funding Activity | | Eliminations | | Total | |
|---|------------------------------|-------|--------------------------------|-------|------------------------------|-------|--------------|------|-------|-------|
| (in millions) | 2021 | 2020 | 2021 | 2020 | 2021 | 2020 | 2021 | 2020 | 2021 | 2020 |
| Interest income | 267 | 280 | - | - | 4,207 | 4,676 | (2) | (2) | 4,472 | 4,954 |
| Interest expense | 297 | 298 | - | - | 4,199 | 4,668 | (27) | (29) | 4,469 | 4,937 |
| Net interest income | (30) | (18) | - | - | 8 | 8 | 25 | 27 | 3 | 17 |
| Government funding for housing programs | 3,668 | 4,892 | - | - | - | - | - | - | 3,668 | 4,892 |
| Premiums and fees earned | - | - | 1,399 | 1,372 | 716 | 667 | - | - | 2,115 | 2,039 |
| Investment income (losses) | - | - | 303 | 349 | 46 | 70 | (6) | (11) | 343 | 408 |
| Net gains (losses) on financial instruments | 107 | 76 | 21 | 487 | 10 | 13 | (15) | (13) | 123 | 563 |
| Other income (loss) | 30 | 17 | (2) | (1) | 16 | 16 | - | - | 44 | 32 |
| Total revenues and government funding | 3,775 | 4,967 | 1,721 | 2,207 | 796 | 774 | 4 | 3 | 6,296 | 7,951 |
| Non-interest expenses | | | | | | | | | | |
| Housing programs | 3,359 | 4,496 | - | - | - | - | - | - | 3,359 | 4,496 |
| Insurance claims | - | - | (317) | 472 | - | - | - | - | (317) | 472 |
| Operating expenses | 299 | 389 | 324 | 311 | 70 | 67 | - | - | 693 | 767 |
| Total expenses | 3,658 | 4,885 | 7 | 783 | 70 | 67 | - | - | 3,735 | 5,735 |
| Income (loss) before income taxes | 117 | 82 | 1,714 | 1,424 | 726 | 707 | 4 | 3 | 2,561 | 2,216 |
| Income taxes | 26 | 14 | 429 | 362 | 181 | 177 | 1 | 1 | 637 | 554 |
| Net income | 91 | 68 | 1,285 | 1,062 | 545 | 530 | 3 | 2 | 1,924 | 1,662 |
| Total revenues and government funding | 3,775 | 4,967 | 1,721 | 2,207 | 796 | 774 | 4 | 3 | 6,296 | 7,951 |
| Less inter-segment income (loss) ¹ | 16 | 2 | 7 | 24 | (27) | (29) | 4 | 3 | - | - |
| External revenues and government funding | 3,759 | 4,965 | 1,714 | 2,183 | 823 | 803 | - | - | 6,296 | 7,951 |

¹ Inter-segment income (loss) relates to the following:

⁻ Assisted Housing recognizes interest income from investing in holdings of CMB;

⁻ Mortgage Insurance recognizes investment income from investing in holdings of CMB; and

⁻ Within Mortgage Funding, CHT recognizes interest expense on CMB held by Assisted Housing and Mortgage Insurance.

| | | Assisted Housing Activity | | Mortgage Insurance Activity | | Mortgage Funding Activity | | Eliminations ¹ | | Total | |
|---|--------|---------------------------|--------|--------------------------------|---------|------------------------------|-------|---------------------------|---------|---------|--|
| (in millions) | 2021 | 2020 | 2021 | 2020 | 2021 | 2020 | 2021 | 2020 | 2021 | 2020 | |
| Assets | | | | | | | | | | | |
| Cash and cash equivalents | 1,071 | 1,171 | 450 | 1,121 | 4 | 9 | - | - | 1,525 | 2,301 | |
| Securities purchased under resale agreements | - | 174 | - | - | - | - | - | - | - | 174 | |
| Accrued interest receivable | 82 | 91 | 84 | 95 | 556 | 529 | (2) | (1) | 720 | 714 | |
| Investment securities: | | | | | | | | | | | |
| Fair value through profit or loss | 159 | 318 | 130 | 81 | - | - | - | - | 289 | 399 | |
| Fair value through other comprehensive income | - | - | 16,835 | 18,676 | 3,615 | 4,821 | (468) | (403) | 19,982 | 23,094 | |
| Amortized cost | 3,259 | 1,447 | - | - | - | - | (442) | (20) | 2,817 | 1,427 | |
| Derivatives | 8 | 24 | 23 | 93 | - | - | - | - | 31 | 117 | |
| Due from the Government of Canada | 363 | 339 | - | - | - | - | - | - | 363 | 339 | |
| Loans: | | | | | | | | | | | |
| Fair value through profit or loss | 480 | 719 | 20 | 24 | - | - | - | - | 500 | 743 | |
| Amortized cost | 7,897 | 6,160 | 63 | 80 | 264,821 | 264,210 | - | - | 272,781 | 270,450 | |
| Accounts receivable and other assets | 116 | 190 | 804 | 694 | 115 | 47 | - | - | 1,035 | 931 | |
| Investment property | 314 | 281 | - | - | - | - | - | - | 314 | 281 | |
| | 13,749 | 10,914 | 18,409 | 20,864 | 269,111 | 269,616 | (912) | (424) | 300,357 | 300,970 | |
| Liabilities | | | | | | | | | | | |
| Accounts payable and other liabilities | 482 | 519 | 137 | 192 | 31 | 41 | - | - | 650 | 752 | |
| Accrued interest payable | 62 | 57 | - | - | 552 | 517 | (2) | (1) | 612 | 573 | |
| Derivatives | 32 | 8 | 18 | - | - | - | - | - | 50 | 8 | |
| Provision for claims | - | - | 310 | 735 | - | - | - | - | 310 | 735 | |
| Borrowings: | | | | | | | | | | | |
| Fair value through profit or loss | 475 | 1,156 | - | - | - | - | - | - | 475 | 1,156 | |
| Amortized cost | 11,921 | 8,529 | - | - | 264,821 | 264,210 | (873) | (370) | 275,869 | 272,369 | |
| Defined benefit plans liability | 102 | 242 | 140 | 299 | 8 | 8 | - | - | 250 | 549 | |
| Unearned premiums and fees | - | - | 6,500 | 6,129 | 2,184 | 1,892 | - | - | 8,684 | 8,021 | |
| Deferred income tax liabilities | 106 | 71 | 152 | 139 | - | 37 | (11) | (15) | 247 | 232 | |
| | 13,180 | 10,582 | 7,257 | 7,494 | 267,596 | 266,705 | (886) | (386) | 287,147 | 284,395 | |
| Equity of Canada | 569 | 332 | 11,152 | 13,370 | 1,515 | 2,911 | (26) | (38) | 13,210 | 16,575 | |
| | 13,749 | 10,914 | 18,409 | 20,864 | 269,111 | 269,616 | (912) | (424) | 300,357 | 300,970 | |

¹ The balance sheet eliminations remove inter-segment holdings of CMB and inter-segment receivables/payables.

6. Government Funding and Housing **Programs Expenses**

Our activities are presented into the following three core responsibilities:

- Assistance for housing needs: encompasses programs where we provide federal funding to improve access to affordable housing for Canadians in housing need, including Indigenous Peoples, Canadians with special or distinct needs, and certain vulnerable groups.
- Financing for housing: encompasses programs whereby we make financing available for new and existing housing-related initiatives.
- Housing expertise and capacity development: encompasses a variety of programs whereby we support capacity and skills development activities within the housing sector and conduct research and analysis as well as disseminate information on a range of issues that support the housing sector and informed decision making by Government and other sectors.

In 2020, financing for housing included \$2,152 million related to the Canada Emergency Commercial Rent Assistance program, which offered forgivable loans to eligible commercial property owners for the months of April through September 2020 to help them reduce the rent owed by their small business tenants facing financial hardship due to COVID-19.

The following table presents the amount of government funding, including housing programs expenses and operating expenses incurred to support these programs by core responsibility.

| (in millions) | 2021 | 2020 |
|---|-------|-------|
| Assistance for housing needs | 3,243 | 2,353 |
| Financing for housing | 455 | 2,507 |
| Housing expertise and capacity development | 135 | 139 |
| Total ¹ | 3,833 | 4,999 |
| Change in government funding deferred (net) | (165) | (107) |
| Total government funding for housing programs recognized ² | 3,668 | 4,892 |

¹ Includes operating expenses of \$296 million (2020 – \$369 million).

The following table presents the change in the Due from the Government of Canada account. The outstanding balance as at 31 December 2021 is mainly composed of housing programs expenses incurred but not yet reimbursed.

| (in millions) | 2021 | 2020 |
|--|---------|---------|
| Balance at beginning of year | 339 | 249 |
| Total government funding | 3,833 | 4,999 |
| Government funding received during the year | (3,833) | (4,903) |
| Third party remittances from (owing to) the Government of Canada | 8 | (8) |
| Balance at end of period before prior/future period adjustments | 347 | 337 |
| Change in prior period adjustments (net) | 16 | 2 |
| Balance at end of year | 363 | 339 |

7. Mortgage Insurance

Mortgage Insurance risk management

We assume the risk of loss from borrower default through mortgage insurance contracts entered into with approved lenders, exposing us to uncertainty surrounding the timing, frequency and severity of claims. Insurance risk management policies are in place to identify, mitigate, report and monitor this risk to ensure activities are managed within our risk appetite, tolerances and risk limits to successfully deliver on our mandate and meet our strategic directions.

We manage our exposure to insurance risk of loss through prudent product design, pricing, insurance underwriting policies, claims payment and default management, reserving, fraud and misrepresentation risk management, market diversification and borrower review and monitoring for the multi-unit, portfolio and transactional homeowner products.

² Total government funding recognized does not include gains resulting from below market rate funds borrowed under the CBP, which are recognized in net gains (losses) on financial instruments. These gains totalled \$126 million (2020 - \$102 million).

Product design

The development of mortgage insurance products takes into account changing client needs, new legislation and regulations, the evolving economic environment and our mandate to serve Canadians across the country, particularly in those market segments not served or less well served by the private sector. Product design is based on prudent underwriting practices combined with our goal to ensure that creditworthy borrowers have access to mortgage insurance products that meet their needs.

Pricing

Premiums are set based on projections of claim frequency, claim severity, return on investment, operating expenses, taxes, capital targets, profitability considerations and market demand. In addition, pricing decisions also take into account other considerations related to competition, strategic direction and our public mandate. Pricing risk refers to the potential that these projections and considerations may substantively and persistently differ from actual developments and values in the long term, which could have significant implications for our risk of loss, profitability and achievement of mandate.

At least annually, we conduct a pricing review of our products to: i) ensure they support Canadians in meeting their housing needs for a wide range of housing types and tenures; ii) support the profitability and long-term viability of the Mortgage Insurance Activity; iii) foster competition; iv) support financial stability; and v) be in line with our risk appetite and tolerances.

Insurance underwriting policies

Risks related to underwriting could arise from: i) the lender; ii) the borrower; iii) the property; and/or iv) the market. As a result, we have developed prudent and disciplined underwriting policies and guidelines, which set the contractual framework and general obligations with respect to underwriting, provides approved lenders with underwriting criteria for mortgage insurance and also includes policies to obtain the approved lender designation.

In addition, for transactional homeowner products, risks related to insurance for different types of residential properties are assessed using our mortgage insurance risk assessment methodology and a rigorous underwriting and postapproval due diligence process.

In the case of multi-unit underwriting, due to different risk characteristics, applications undergo additional individual in-depth assessments to evaluate borrower, property, market and loan characteristics by our underwriters.

Claims payment and default management

Our Claims Payment Centre supports approved lenders in managing default related to homeowner and small rental loans to reduce risk of default on payment.

Our Insurance Servicing team works with approved lenders for multi-unit residential rental, licensed care or retirement properties in resolving default situations, evaluating workout alternatives and other matters. We consider workouts through effective management of projects in difficulty by following established frameworks.

We actively pursue recoveries, which are amounts expected to be recovered from borrowers in order to mitigate our potential loss.

Reserving

Reserving risk refers to the risk that insurance liabilities differ significantly from the actual claim payments. We estimate insurance policy liabilities to cover future losses and payments on claims. These policy liabilities are established based on projections of claim frequency, severity and timing, within the context of the economic environment and recent performance indicators such as arrears rates.

Fraud and misrepresentation risk management

Fraud risk management comprises all activities aiming to detect and prevent fraud or misrepresentation and mitigating losses due to fraud or misrepresentation. We mitigate fraud using models to identify mortgage loan applications that have a high probability of containing misrepresentation and taking the appropriate measures upon identification. We maintain specialized underwriting staff to review these claims and, if appropriate, require enhanced due diligence by the lender.

Market diversification

Concentration risk may arise from insurance contracts issued in a particular geographical area where local economic conditions are significantly different from the national average that could expose us to a greater risk of loss. The relative impact of the outcome is mitigated as a result of the distribution of business across different geographic areas. We monitor the conditions of the housing market and economy in each region of Canada against predetermined risk tolerances in accordance with our Risk Appetite Framework.

The table below sets out the concentration of loan amount insured during the period:

| | | 20 | 21 | | 2020 | | | |
|--------------------------|-------------------------|-----------|---------------------------|---------|-------------------------|-----------|---------------------------|---------|
| (in percentages) | Transactional homeowner | Portfolio | Multi-Unit residential | Overall | Transactional homeowner | Portfolio | Multi-Unit residential | Overall |
| Atlantic | 7 | 4 | 6 | 6 | 6 | 2 | 5 | 5 |
| Quebec | 36 | 14 | 28 | 29 | 34 | 8 | 24 | 23 |
| Ontario | 22 | 49 | 36 | 32 | 27 | 57 | 42 | 41 |
| Prairies and territories | 25 | 15 | 13 | 18 | 23 | 10 | 14 | 16 |
| British Columbia | 10 | 18 | 17 | 15 | 10 | 23 | 15 | 15 |
| Canada | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Monitoring

A comprehensive monitoring and quality assurance framework also enables our ongoing rigorous review of business trends, performance and lender compliance in order to make timely adjustments to underwriting and other risk management criteria and processes as needed.

Insurance-in-force

At 31 December 2021, insurance-in-force, which represents the maximum potential total risk exposure of the Mortgage Insurance Activity, totalled \$401 billion (2020) - \$431 billion). This amount includes \$3,174 million (2020 - \$1,694 million) in outstanding loan balances from the Lending programs included in the Assisted Housing Activity (see Note 14). Under Section 11 of the NHA, the total of outstanding insured amounts of all insured loans may not exceed the limit of \$750 billion (2020) - \$750 billion). The insurance-in-force limit was increased in March 2020 for a five-year period to accommodate the expanded eligibility criteria for portfolio insurance in conjunction with the IMPP.

The following table presents the percentage distribution of insurance-in-force by region:

| | | 2021 | | | 2020 | | | |
|--------------------------|-------------------------|-----------|---------------------------|---------|-------------------------|-----------|---------------------------|---------|
| (in percentages) | Transactional homeowner | Portfolio | Multi-Unit residential | Overall | Transactional homeowner | Portfolio | Multi-Unit residential | Overall |
| Atlantic | 7 | 4 | 6 | 6 | 7 | 4 | 6 | 6 |
| Quebec | 25 | 12 | 28 | 23 | 25 | 12 | 27 | 22 |
| Ontario | 25 | 47 | 37 | 34 | 27 | 48 | 38 | 35 |
| Prairies and territories | 33 | 19 | 14 | 24 | 31 | 18 | 15 | 24 |
| British Columbia | 10 | 18 | 15 | 13 | 10 | 18 | 14 | 13 |
| Canada | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Earned and unearned premiums and fees

The following table presents the composition of premiums and fees earned.

| (in millions) | 2021 | 2020 |
|--------------------------------------|-------|-------|
| Earned premiums | 1,377 | 1,343 |
| Earned application fees ¹ | 22 | 29 |
| Total | 1,399 | 1,372 |

¹ Includes application fees on multi-unit residential loans of \$8 million (2020 – \$12 million) and \$14 million (2020 – \$17 million) application fees on transactional homeowner loans.

The following table presents the changes in the unearned premiums and fees balance.

| (in millions) | 2021 | 2020 |
|--|---------|---------|
| Balance at beginning of year | 6,129 | 5,496 |
| Premiums deferred on contracts written in the year | 1,732 | 1,965 |
| Premiums earned in the year | (1,377) | (1,343) |
| Application fees deferred on contracts written in the year | 24 | 24 |
| Application fees earned in the year ¹ | (8) | (13) |
| Balance at end of year | 6,500 | 6,129 |

¹ Only includes earned application fees on multi-unit residential loans during the period. Application fee revenue earned on low loan-to-value transactional homeowner application fees are earned immediately as they are received.

Deferred acquisition costs

The following table presents the changes in the DAC balance.

| (in millions) | 2021 | 2020 |
|--|------|------|
| Balance at beginning of year | 200 | 194 |
| Acquisition costs deferred | 54 | 61 |
| Amortization of deferred acquisition costs | (57) | (55) |
| Balance at end of year ¹ | 197 | 200 |

¹ Included in accounts receivable and other assets (Note 21).

Provision for claims

The provision for claims includes amounts set aside for IBNR claims, IBNER claims, CIP and SH and ILM.

Provision for claims comprises the following:

| (in millions) | 2021 | 2020 |
|--|------|------|
| Undiscounted estimated losses | 287 | 676 |
| Discounting | (6) | (6) |
| Discounted provision for adverse deviation | 29 | 65 |
| Total provision for claims | 310 | 735 |

The following table presents the changes in the provision for claims balance.

| (in millions) | 2021 | 2020 |
|--|-------|-------|
| Provision for claims, beginning of year | 735 | 407 |
| Net claims paid during the year | (139) | (144) |
| Provision for claims provided for and losses incurred during the period ¹ | 199 | 452 |
| Unfavourable (favourable) development on prior period insurance claims | (485) | 20 |
| Provision for claims, end of year | 310 | 735 |

¹ Included as part of insurance claims on the consolidated statement of income and comprehensive income. Provision for claims provided for and losses may not equal insurance claims expense as certain expenses incurred do not impact the provision for claims.

Estimates of the timing of net cash outflows resulting from our recognized insurance liabilities are provided in Note 29.

Sensitivity analysis

The following table presents the sensitivity in the significant assumptions that have the greatest effect on the measurement of the insurance contract liabilities. The significant assumptions have been revised to reflect the relevant risk variables in the current environment, which led to the removal of the Gross Domestic Product and the addition of the Housing Price Index. The percentage change in variables is applied to a range of existing actuarial modelling assumptions to derive the possible impact on income before income taxes and equity of Canada for reasonably possible movements in key assumptions with all other assumptions held constant. In practice, this is unlikely to occur and changes in some of the assumptions might be correlated, which might magnify or counteract the sensitivities. The relationship of a change in assumption to the change in value may not be linear. The methodology for sensitivity testing has not changed significantly from the prior year.

| | | | Impact on income before income taxes | | Impact on equity of Canada | |
|---|------------------|-----------------------|--------------------------------------|------|----------------------------|------|
| (in millions, unless otherwise indicated) | Change indicator | Change in assumptions | 2021 | 2020 | 2021 | 2020 |
| Loss sensitivity factors | | | | | | |
| Claim frequency | Relative | +10% | (30) | (71) | (22) | (53) |
| | Relative | -10% | 30 | 71 | 22 | 53 |
| Claim severity | Relative | +10% | (30) | (72) | (22) | (54) |
| | Relative | -10% | 30 | 72 | 22 | 54 |
| Economic sensitivity factor | | | | | | |
| Unemployment rate | Absolute | +1% | (14) | (41) | (11) | (31) |
| Gross domestic product | Absolute | -1% | N/A | (27) | N/A | (20) |
| Housing Price Index | Relative | -10% | (29) | N/A | (21) | N/A |

Claims development

Incurred but not reported, incurred but not enough reported and claims in process

The following table shows the development of the expected losses on IBNR, IBNER and CIP claims and their related expenses (excluding SH and ILM) over a period of time and the estimated ultimate cost of claims for 2012 through 2021 to present the earliest material claim that has arisen and for which there is still uncertainty about the amount and timing of claim payments. The information is presented on a default year basis where claims are related to the period in which the insured event occurred and not the period in which the policy was underwritten.

| (in millions, unless otherwise indicated) | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | Total |
|--|------|------|------|------|------|------|------|------|------|------|-------|
| Expected losses | | | | | | | | | | | |
| Default year | 522 | 388 | 346 | 303 | 306 | 247 | 258 | 263 | 452 | 195 | |
| One year later | 428 | 370 | 328 | 324 | 272 | 253 | 258 | 329 | 137 | | |
| Two years later | 432 | 372 | 351 | 319 | 280 | 241 | 258 | 195 | | | |
| Three years later | 439 | 376 | 345 | 312 | 274 | 242 | 241 | | | | |
| Four years later | 440 | 378 | 343 | 310 | 277 | 247 | | | | | |
| Five years later | 441 | 381 | 339 | 310 | 277 | | | | | | |
| Six years later | 440 | 376 | 338 | 310 | | | | | | | |
| Seven years later | 437 | 377 | 338 | | | | | | | | |
| Eight years later | 437 | 374 | | | | | | | | | |
| Nine years later | 436 | | | | | | | | | | |
| Current estimate of cumulative claims | 436 | 374 | 338 | 310 | 277 | 247 | 241 | 195 | 137 | 195 | 2,750 |
| Claims paid | | | | | | | | | | | |
| Default year | 29 | 22 | 19 | 16 | 23 | 19 | 19 | 22 | 6 | 5 | |
| One year later | 225 | 194 | 175 | 175 | 144 | 126 | 136 | 94 | 51 | | |
| Two years later | 134 | 119 | 120 | 95 | 87 | 75 | 65 | 61 | | | |
| Three years later | 37 | 29 | 23 | 20 | 20 | 13 | 19 | | | | |
| Four years later | 12 | 13 | 3 | 3 | 3 | 11 | | | | | |
| Five years later | 2 | 1 | (1) | - | - | | | | | | |
| Six years later | (1) | (1) | (1) | - | | | | | | | |
| Seven years later | (1) | - | (1) | | | | | | | | |
| Eight years later | - | (1) | | | | | | | | | |
| Nine years later | (1) | | | | | | | | | | |
| Cumulative payments to date | 436 | 376 | 337 | 309 | 277 | 244 | 239 | 177 | 57 | 5 | 2,457 |
| Provision for claims ¹ | - | (2) | 1 | 1 | - | 3 | 2 | 18 | 80 | 190 | 293 |
| Current estimate of surplus (deficit) | 86 | 14 | 8 | (7) | 29 | - | 17 | 68 | 315 | - | - |
| Surplus of initial expected loss on claims | 16% | 4% | 2% | (2)% | 9% | 0% | 7% | 26% | 70% | 0% | - |

¹ Excludes SH and ILM provision of \$17 million at 31 December 2021.

Insurance policy liability adequacy

A liability adequacy test on the premium liabilities and claim liabilities is performed quarterly. Premium liabilities represent a provision for future claims and expenses which are expected to arise from the unearned portion of the policies in-force. Thus, this provision is for claims that have not yet occurred and, therefore, covers the period from the date of the valuation to the date of default (the assumed claim occurrence date).

Our liability adequacy test for the year ended 31 December 2021 has identified that no premium deficiency reserve is required (2020 – nil).

8. Mortgage Funding

We guarantee the timely payment of principal and interest of CMB issued by CHT under the CMB program and NHA MBS issued by Approved Issuers on the basis of housing loans under the NHA MBS program and under the IMPP in the event that an issuer is unable to satisfy its obligations under these programs. In that circumstance, we will mitigate our loss by realizing on the collateral securing the obligations, consisting primarily of insured mortgage loans, under each of the programs.

At the balance sheet date, we have not received a claim on our TPG. As such, no provision in addition to the remaining unearned premium is required.

The following table presents the changes in the unearned TPG fees balance.

| | 2021 | | | 2020 | | | |
|-------------------------------|------------|-------|-------|------------|-------|-------|--|
| (in millions) | NHA MBS | СМВ | Total | NHA MBS | СМВ | Total | |
| Balance at beginning of year | 1,341 | 551 | 1,892 | 1,152 | 503 | 1,655 | |
| TPG fees received in the year | 841 | 167 | 1,008 | 708 | 196 | 904 | |
| TPG fees earned in the year | (565) | (151) | (716) | (519) | (148) | (667) | |
| Balance at end of year | 1,617 | 567 | 2,184 | 1,341 | 551 | 1,892 | |

The unearned TPG fees balance relates to the consideration received from customers at inception of the TPG contracts, for which revenue is recognized over the expected life of the security. The expected life of the securities varies with the average expected life being five years (2020 – five years).

Transaction price allocated to the remaining timely payment guarantee

The following table presents the revenue expected to be recognized in future periods related to guarantees that are unsatisfied at the balance sheet date.

| (in millions) | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 and thereafter |
|---------------|------|------|------|------|------|------------------------|
| NHA MBS | 495 | 399 | 298 | 195 | 81 | 149 |
| CMB | 140 | 117 | 92 | 70 | 47 | 101 |

Guarantees-in-force

Total guarantees-in-force represents the maximum principal obligation related to TPGs1. Under Section 15 of the NHA, the aggregate outstanding amount of principal guarantees may not exceed \$750 billion (2020 - \$750 billion). The guarantees-in-force limit was increased in March 2020 for a five-year period to accommodate the one-year increase in NHA MBS and CMB guarantee limits of \$295 billion and \$60 billion, respectively.

The following table presents the total guarantees-in-force by program. We do not expect these to result in future cash outflows.

| (in billions) | 2021 | 2020 |
|------------------|------|------|
| NHA MBS | 202 | 232 |
| CMB ² | 259 | 257 |
| Total | 461 | 489 |

¹ Exposure excludes the realizable value of the related assets securing the NHA MBS and CMB guaranteed.

² Includes \$0.9 billion (2020 – \$0.4 billion) in investments which are eliminated in the consolidated balance sheet.

The following table presents the maturity profile of the guarantees-in-force based on principal amount outstanding as at 31 December 2021.

| (in millions) | NHA MBS guarantees | CMB guarantees | Total guaranteed |
|---------------------|-----------------------|-------------------|---------------------|
| 2022 | 14,015 | 44,250 | 58,265 |
| 2023 | 27,548 | 45,500 | 73,048 |
| 2024 | 43,046 | 37,500 | 80,546 |
| 2025 | 55,834 | 40,750 | 96,584 |
| 2026 | 57,717 | 32,500 | 90,217 |
| 2027 and thereafter | 3,659 | 58,250 | 61,909 |
| Total | 201,819 | 258,750 | 460,569 |

9. Structured Entities

Canada Housing Trust

CHT was established in 2001 as a special-purpose trust, separate from us. While we control the activities of CHT, its assets and liabilities are neither owned by nor held for our benefit. CHT's functions are limited to the acquisition of interests in eligible housing loans such as NHA MBS, the issuance of CMB, as well as the purchase of highly rated investments and certain related financial hedging activities. The beneficiaries of the Trust, after payment of all obligations, are one or more charitable organizations. Financial information for CHT is presented in the following tables on an unconsolidated basis.

Condensed Balance Sheet

| (in millions) | 2021 | 2020 |
|-----------------------------|---------|---------|
| Loans – amortized cost | 260,587 | 258,962 |
| Other assets | 550 | 512 |
| Total assets | 261,137 | 259,474 |
| Borrowings – amortized cost | 260,587 | 258,962 |
| Other liabilities | 550 | 512 |
| Total liabilities | 261,137 | 259,474 |
| Total equity of Canada | - | - |

Condensed Statement of Income

| (in millions) | 2021 | 2020 |
|-------------------------|-------|-------|
| Interest income – loans | 4,128 | 4,606 |
| Interest expense | 4,120 | 4,598 |
| Net interest income | 8 | 8 |
| Total revenues | 8 | 8 |
| Operating expenses | 8 | 8 |
| Total expenses | 8 | 8 |
| Net income | - | - |

10. Capital Management

For capital management, we consider our capital available to be equal to the total equity of Canada less assets with a capital requirement of 100%.

Our primary objective with respect to capital management is to ensure that our commercial operations, being our Mortgage Insurance and Mortgage Funding Activities, have adequate capital to deliver their mandate while remaining financially self-sustaining and also to follow prudent business practices and guidelines existing in the private sector as appropriate. We voluntarily follow guidelines set out by the Office of the Superintendent of Financial Institutions (OSFI).

We perform an Own Risk & Solvency Assessment (ORSA), which is an integrated process that evaluates capital adequacy on both a regulatory and economic capital basis and is used to establish capital targets taking into consideration our strategy and risk appetite. Our "Own View" of capital needs is determined by identifying our risks and evaluating whether or not an explicit amount of capital is necessary to absorb losses from each risk. With the above we have also met the requirements of the CMHC Act and the NHA.

We set an internal target for our Mortgage Insurance Activity and our Mortgage Funding Activity at a level that is expected to cover all material risks. The internal target is calibrated using specified confidence intervals and is designed to provide an early indication of the need to resolve financial problems. Under our capital management policy, we operate at available capital levels above the internal target on all but unusual and infrequent occasions. Accordingly, we have established an

operating level for our Mortgage Insurance Activity and our Mortgage Funding Activity in excess of our internal target. The operating level is calibrated using confidence intervals specified by our capital management policy and is designed to provide us with adequate time to resolve financial problems before available capital decreases below the internal target.

In August 2021, the Board approved the recommendation to maintain the internal targets and operating levels of 155% and 165%, respectively, for Mortgage Insurance and 105% and 110% for Mortgage Funding.

The COVID-19 Emergency Response Act amended the Canada Mortgage and Housing Corporation Act (CMHC Act) effective 25 March 2020 to authorize the Minister of Finance, with the approval of the Governor in Council, to make payments to us out of the Consolidated Revenue Fund for the purpose of increasing our capital by up to \$10 billion.

We declare dividends to the Government from our Mortgage Insurance and Mortgage Funding Activities, to the extent there are profits and retained earnings not allocated to reserves, capitalization or to meet our needs for purposes of the NHA, CMHC Act or any other purpose authorized by Parliament relating to housing. In the current year, we declared and paid \$5,080 million in dividends (2020 - nil dividends declared and nil dividends paid).

The components of consolidated capital available are presented below.

| (in millions) | 2021 | 2020 |
|---|--------|--------|
| Contributed capital | 25 | 25 |
| Accumulated other comprehensive income | 131 | 607 |
| Appropriated retained earnings | 9,299 | 9,905 |
| Unappropriated retained earnings ¹ | 3,755 | 6,038 |
| Total equity of Canada ² | 13,210 | 16,575 |
| Less: assets with a capital requirement of 100% | (88) | (67) |
| Total capital available | 13,122 | 16,508 |

¹ Unappropriated retained earnings represent retained earnings in excess of our operating level for the Mortgage Insurance and Mortgage Funding Activities.

Mortgage Insurance capital

The appropriated retained earnings of the Mortgage Insurance Activity is based on our ORSA. As regulatory capital, based on guidelines developed by OSFI, is higher than our economic capital requirements, we have set our capital targets based on regulatory capital. OSFI's minimum regulatory capital requirement is 100% of its Mortgage Insurer Capital Adequacy Test (MICAT). The OSFI Supervisory target is 150% of the minimum capital required. We set an internal target above the Supervisory capital required under OSFI guidelines. The following table presents the components of capital available.

| (in millions, unless otherwise indicated) | 2021 | 2020 |
|---|--------|--------|
| Accumulated other comprehensive income | 86 | 460 |
| Appropriated retained earnings | 8,488 | 8,914 |
| Appropriated capital ¹ | 8,574 | 9,374 |
| Unappropriated capital | 2,578 | 3,996 |
| Total Mortgage Insurance capital | 11,152 | 13,370 |
| Less: assets with a capital requirement of 100% | (88) | (67) |
| Total Mortgage Insurance capital available | 11,064 | 13,303 |
| Internal target | 155% | 155% |
| Operating level | 165% | 165% |
| Capital available to minimum capital required (% MICAT) | 213% | 234% |

¹ We appropriate retained earnings and AOCI at our operating level of 165% of MICAT.

Mortgage Funding capital

Mortgage Funding capital is appropriated for the guarantees provided by our NHA MBS and CMB programs. There is no regulatory capital and the appropriated amount of capital is based on the economic capital methodology. At 31 December 2021, the total asset required (economic capital required) at the operating level is \$3 billion, which compares to \$3.7 billion of assets available (31 December 2020 – \$3 billion total assets required and \$4.8 billion assets available). These amounts exclude assets and liabilities related to IMPP. Appropriated capital is determined by deducting unearned guarantee and application fees from the total asset required. The Board approved a reduction of the economic capital required from \$3 billion to \$2.7 billion, effective 1 January 2022, which will be applied prospectively from that date.

² Equity of Canada includes the impact of eliminations.

We do not have separate capital amounts for Canada Housing Trust (CHT) because the TPG exposure to CMB issued by CHT is covered by the Mortgage Funding capital. The amounts of Mortgage Funding capital held also recognize the risk mitigation provided by mortgage insurers, who are required to hold capital for the underlying mortgage default risk.

Although we manage dividends using target asset requirements, retained earnings and AOCI are appropriated for disclosure purposes using capital required (which is obtained by deducting the unearned fees from the target asset required). The following table presents the components of the capital available.

| (in millions, unless otherwise indicated) | 2021 | 2020 |
|--|-------|-------|
| Accumulated other comprehensive income | 5 | 116 |
| Appropriated retained earnings | 811 | 991 |
| Appropriated capital ¹ | 816 | 1,107 |
| Unappropriated capital | 699 | 1,804 |
| Total Mortgage Funding capital available | 1,515 | 2,911 |
| Capital available to capital required (%) ² | 279% | 349%³ |

¹ We appropriate retained earnings and AOCI at the operating level of accounting capital required (as defined above), which is set at 110% of our capital needs determined by ORSA less unearned guarantee and application fees. Our internal target is set at 105% of our "Own View" of capital needs less unearned premiums and fees.

Assisted Housing capital

Lending programs

We maintain a reserve fund pursuant to Section 29 of the CMHC Act. A portion of the Lending programs' earnings is retained in this reserve fund as part of our strategy to address interest rate risk exposure on pre-payable loans as well as credit risk exposure on unsecured loans. The reserve fund is subject to a statutory limit of \$240 million (2020 – \$240 million), which we have determined through our ORSA to be in a reasonable range. Should we exceed the statutory limit, we would be required to pay the excess to the Government. Aside from the reserve fund, we do not hold capital for our Assisted Housing activities, as they do not present material financial risks for us that we do not already otherwise mitigate (see Note 14).

Unrealized fair value fluctuations as well as remeasurement gains and losses on defined benefit plans are absorbed in retained earnings. The Housing programs' portion of remeasurements is recorded in retained earnings until it is reimbursed by the Government through government funding for housing programs.

The following table presents the components of the capital available.

| (in millions) | 2021 | 2020 |
|--|------|------|
| Reserve fund | 41 | 59 |
| Retained earnings | 503 | 248 |
| Total Lending programs capital available | 544 | 307 |

Housing programs

We do not hold additional capital for Housing programs as this activity does not present risks that would require us to set capital aside.

11. Fair Value Measurement

Fair value measurement

We measure certain financial instruments and non-financial assets at fair value in the consolidated balance sheet and disclose the fair value of certain other items. Fair value is determined using a consistent measurement framework.

Fair value 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 fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest. Fair value measurement of non-financial assets (i.e., investment property) takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use. For financial instruments, accrued interest is separately recorded and disclosed.

² Economic capital available to economic capital required as at 31 December 2021 is 136% (31 December 2020 - 176%).

³ On 24 November 2020, the Board approved a revision to the economic capital methodology for determining the required capital for Mortgage Funding. We applied the revised formula in the current year and amended the 2020 capital available to capital required ratio from 263% to 349% to conform with the revised methodology.

Fair value hierarchy

The methods used to measure fair value make maximum use of relevant observable inputs and minimize the use of unobservable inputs. Fair value measurements are classified in a fair value hierarchy as Level 1, 2 or 3 according to the observability of the most significant 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.

Level 2

Assets and liabilities that are measured based on observable inputs other than Level 1 prices. Level 2 inputs include prices obtained from markets that are not considered sufficiently active, and fair values obtained by discounting expected future cash flows, making maximum use of directly or indirectly observable market data.

Level 3

Assets and liabilities not quoted in active markets that are measured using valuation techniques. Where observable inputs are not available, unobservable inputs are used. For Level 3 assets and liabilities, unobservable inputs are significant to the overall measurement of fair value.

We have processes and controls in place to ensure fair value is appropriately measured. The valuation of financial instruments is performed by the Systems and Analytics Division (SAD) of the Investments and Treasury group. SAD has developed models and methodologies to determine fair value of financial instruments not quoted in active markets which are reviewed and monitored on an ongoing basis. All valuations are subject to independent price verification (IPV) managed by the sector of the Chief Risk Officer. IPV is a process where valuations are independently verified against external market prices and other relevant market data on an ongoing basis.

Generally, the unit of account for a financial instrument is the individual instrument, and valuation adjustments are applied at an individual instrument level, consistent with that unit of account.

For investment property, fair value is determined by independent external property appraisers who hold recognized and relevant professional qualifications and have recent relevant experience and our internal appraisers on a rotational basis.

Methods and assumptions

We measure fair value using the following methods and assumptions:

Investment securities

Equity securities are valued using closing bid price quotes from active markets.

Fixed-income securities are valued based on a third-party pricing provider, which uses market data from a variety of sources. Actively traded instruments are valued based on market data such as indicative quotes or trade prices for identical securities. Instruments that are not sufficiently actively traded are valued based on techniques using other observable inputs, such as spread differentials of similar actively traded securities. Future cash flows of certain floating rate bonds are estimated based on observable implied forward rate curves.

For our private limited partnership and real estate investment trust equity investments, fair value is measured as our share of the partnership's or trust's net asset value. In measuring net asset value, the fair value of the partnership's or trust's real estate assets is determined at least annually by independent appraisers using the income approach or the market approach, and the fair value of its long-term debt is measured by discounting expected future cash flows.

Loans

Loans are valued by discounting future cash flows using discount rate curves that reflect the collection guarantees provided by provincial, territorial or federal levels of government. Inputs into the discounting model are the Government yield curve and spreads derived from assets with comparable financial risks.

Loans issued under the FTHBI are valued by multiplying the carrying amount of the loans by a home price index (HPI). The HPI is intended to reflect the increase/decrease in the fair values of the individual properties.

Derivatives

Derivatives consist of over-the-counter interest rate swaps and foreign currency forward contracts. These are valued by discounting estimated future cash flows using observable discount rate curves constructed using benchmark interest rates and foreign exchange rates. Future cash flows for floating rate legs are estimated based on observable implied forward rate curves. An adjustment is made to reflect the credit risk that either counterparty may not be able to fulfil its obligations. Inputs to this adjustment include market-implied default rates and estimated recovery rates, and the adjustment takes into account master netting and collateral arrangements in place.

First Time Home Buyer loan derivatives result from the recognition of a payable or receivable to the Government of Canada when there are underlying loan gains or losses. The value of these derivatives is derived from movement on the fair value of the underlying home values, which affects the fair value of the loans.

Investment property

The fair value of investment property is determined using either the income approach or the market approach, incorporating the highest and best use of the property. Of the total fair value of investment properties, 67% (2020 – 72%) was based on valuations performed by independent valuators and 33% (2020 – 28%) was based on internal valuations during 2021.

The income approach is primarily applied in determining the fair value of rent-producing properties. Under the income approach, fair value is based upon the present value of expected future cash flows of each property using an unobservable discount rate reflective of the characteristics of the property. Future cash flows are estimated using unobservable assumptions about future rental values and vacancy rates.

The market approach is primarily applied in determining the fair value of vacant land. Under the market approach, fair value is based upon market transactions involving comparable property, with adjustments made to reflect the unique aspects of the property being valued.

The highest and best use of the investment property held in the Assisted Housing Activity (\$314 million as at 31 December 2021; \$281 million as at 31 December 2020) differs from its current use as these investment properties are used to carry out our social housing mandate rather than maximize economic value.

Borrowings

Borrowings from the Government of Canada are valued by discounting future cash flows using discount rate curves derived from the directly observable yields of our market-traded borrowings (i.e., CMBs).

Comparison of carrying and fair values for financial instruments not carried at fair value

The following table compares the carrying and fair values of financial instruments not carried at fair value. Carrying value is the amount at which an item is measured in the consolidated balance sheet.

| | 2021 | | | 2020 | | | |
|--|----------------|------------|--|---------|------------|---|--|
| (in millions) | Carrying value | Fair value | Fair value over (under) carrying value | | Fair value | Fair value over (under) carrying value | |
| Financial assets ¹ | | | | | | | |
| Investments at amortized cost ² | 2,817 | 2,800 | (17) | 1,427 | 1,439 | 12 | |
| Loans at amortized cost ³ | 272,781 | 274,574 | 1,793 | 270,450 | 280,561 | 10,111 | |
| Financial liabilities | | | | | | | |
| Borrowings at amortized cost ⁴ | 275,869 | 277,848 | 1,979 | 272,369 | 282,708 | 10,339 | |

Does not include cash and cash equivalents of \$1,000 million (2020 - \$1,023 million) and securities purchased under resale agreements of nil (2020 - \$174 million) carried at amortized cost as the fair value of these financial instruments is equal to their carrying value.

² \$933 million (2020 – \$485 million) fair value categorized as Level 1 and \$1,867 million (2020 – \$954 million) fair value categorized as Level 2. In the prior year financial statements, we disclosed the entire \$1,439 million as Level 2. In the current year, we performed a more thorough analysis, which revealed that \$485 million of the investments would have been more appropriately classified as Level 1 in the prior year.

^{3 \$271,089} million (2020 – \$278,750 million) fair value categorized as Level 2, \$3,485 million (2020 – \$1,811 million) fair value categorized as Level 3.

⁴ \$208,639 million (2020 – \$219,834 million) fair value categorized as Level 1, \$69,209 million (2020 – \$62,874 million) fair value categorized as Level 2.

Fair value hierarchy for items carried at fair value

The following table presents the fair value hierarchy for assets and liabilities carried at fair value in the consolidated balance sheet.

| | As at | | | | | | | | | |
|---|---------|---------|---------|--------|---------|---------|---------|---------|--|--|
| | | 202 | 1 | | | 2020 |) | | | |
| (in millions) | Level 1 | Level 2 | Level 3 | Total | Level 1 | Level 2 | Level 3 | Total | | |
| Assets | | | | | | | | | | |
| Cash equivalents | | | | | | | | | | |
| Interest bearing deposits with banks | - | 130 | - | 130 | - | 290 | - | 290 | | |
| Federal government issued | - | 378 | - | 378 | 710 | 266 | - | 976 | | |
| Corporate/other entities | - | 17 | - | 17 | - | 12 | - | 12 | | |
| Total cash equivalents | - | 525 | - | 525 | 710 | 568 | - | 1,278 | | |
| Investment securities | | | | | | | | | | |
| FVTPL | | | | | | | | | | |
| Debt instruments | | | | | | | | | | |
| Corporate/other entities | - | 151 | - | 151 | 38 | 20 | - | 58 | | |
| Provinces/municipalities | 26 | 25 | - | 51 | 103 | 76 | - | 179 | | |
| Sovereign and related entities | - | 8 | - | 8 | - | 81 | - | 81 | | |
| Equities | | | | | | | | | | |
| Limited partnership units | - | - | 79 | 79 | - | - | 81 | 81 | | |
| Total at FVTPL | 26 | 184 | 79 | 289 | 141 | 177 | 81 | 399 | | |
| FVOCI | | | | | | | | | | |
| Debt instruments | | | | | | | | | | |
| Corporate/other entities | 2,829 | 5,133 | - | 7,962 | 1,891 | 5,856 | - | 7,747 | | |
| Federal government issued | 8,388 | 442 | - | 8,830 | 11,280 | 532 | - | 11,812 | | |
| Provinces/municipalities | 2,943 | 180 | - | 3,123 | 2,797 | 562 | - | 3,359 | | |
| Sovereign and related entities | 16 | 51 | - | 67 | 16 | 160 | - | 176 | | |
| Total at FVOCI | 14,176 | 5,806 | - | 19,982 | 15,984 | 7,110 | - | 23,094 | | |
| Loans designated at FVTPL | - | 182 | - | 182 | - | 537 | - | 537 | | |
| Loans mandatorily at FVTPL | - | 20 | 298 | 318 | - | 17 | 189 | 206 | | |
| Derivatives | - | 31 | - | 31 | - | 117 | - | 117 | | |
| Investment property | - | - | 314 | 314 | - | - | 281 | 281 | | |
| Total assets carried at fair value | 14,202 | 6,748 | 691 | 21,641 | 16,835 | 8,526 | 551 | 25,912 | | |
| Liabilities | | | | | | | | | | |
| Borrowings designated at FVTPL | - | (475) | - | (475) | - | (1,156) | - | (1,156) | | |
| Derivatives | - | (19) | (31) | (50) | - | (8) | - | (8) | | |
| Total liabilities carried at fair value | - | (494) | (31) | (525) | - | (1,164) | - | (1,164) | | |
| Net assets at FVTPL | 14,202 | 6,254 | 660 | 21,116 | 16,835 | 7,362 | 551 | 24,748 | | |

Transfers between fair value hierarchy levels

For assets and liabilities measured at fair value on a recurring basis, we determine if reclassifications have occurred between levels in the hierarchy by re-assessing categorization at each balance sheet date. Transfers are dependent on internal classification criteria that are based on variables such as observability of prices and market trading volumes considered as at each balance sheet date. Transfers between levels are deemed to occur at the beginning of the quarter in which the transfer occurs. There were \$3,363 million of transfers from Level 2 to Level 1, \$2,458 million of transfers from Level 1 to Level 2, and \$12 million of transfers from Level 2 to Level 3 during the year ended 31 December 2021 (2020 - \$7,962 million, \$7,126 million, and nil, respectively). The decrease in transfers for 2021 is mainly the result of an increase in the number of days included in our analysis of market trading volumes. We are now using an average of market trading volumes in the final month of each period instead of only in the final trading day of each period.

Change in fair value measurement for items classified as Level 3

The following table presents the change in fair value for items carried at fair value and classified as Level 3.

| (in millions) | Investment securities – FVOCI | Investment securities – FVTPL | Loans – FVTPL | Investment property | Derivatives designated at FVTPL | Total |
|--|-------------------------------|----------------------------------|---------------|------------------------|---------------------------------------|-------|
| 2021 | | | | | | |
| Fair value as at 1 January 2021 | - | 81 | 189 | 281 | - | 551 |
| Purchases/Issuances | 7 | 5 | 121 | 2 | - | 135 |
| Net gains in profit or loss ^{1,2} | - | (5) | 35 | 31 | (31) | 30 |
| Level transfers | 12 | - | - | - | - | 12 |
| Cash receipts on settlements/disposals | (19) | (2) | (47) | - | - | (68) |
| Fair value as at 31 December 2021 | - | 79 | 298 | 314 | (31) | 660 |
| 2020 | | | | | | |
| Fair Value as at 1 January 2020 | - | 118 | 70 | 276 | - | 464 |
| Purchases/Issuances | - | 3 | 166 | - | - | 169 |
| Net gains in profit or loss ^{1,2} | - | (1) | 4 | 18 | - | 21 |
| Loan transfer to contribution ³ | - | - | (20) | - | - | (20) |
| Cash receipts on settlements/disposals | - | (39) | (31) | (13) | - | (83) |
| Fair value as at 31 December 2020 | - | 81 | 189 | 281 | - | 551 |

¹ Included in net gains on financial instruments for investment securities; other income for investment property.

² Solely relates to unrealized gains for assets held at the end of the respective periods.

³ Loans previously recognized as FVTPL reclassified to reflect contributions.

Unobservable inputs for items classified as Level 3

The valuations of items classified as Level 3 use unobservable inputs, changes in which may significantly affect the measurement of fair value. Valuations were based on assessments of the prevailing conditions at 31 December 2021, which may change materially in subsequent periods. The following table presents quantitative information about the significant unobservable inputs used in Level 3 fair value measurements for items carried at fair value.

| | | | 20 |)21 | 20 | 20 |
|---|-----------------------------|--|---------------------|------------------------------------|---------------------|------------------------------------|
| (in millions, unless otherwise indicated) | Valuation technique | Unobservable inputs | Asset fair value | Weighted average input/range | Asset fair value | Weighted average input/range |
| Investment securities | | | | | | |
| Equities at FVTPL – Limited partnership units | Share of partnership equity | Reported partnership equity | 79 | n/a | 81 | n/a |
| Loans at FVTPL | | | | | | |
| MI Activity workout loans | Discounted cash flow | Loss rate | 3 | 63% | 5 | 63% |
| MI Activity mortgage assignments | Market approach | Value per square foot | 17 | \$11-\$349 | 18 | \$1-\$818 |
| AH Activity Ioans – FTHBI | Market approach | HPI | 278 | n/a | 166 | n/a |
| Total loans at FVTPL | | | 298 | - | 189 | - |
| Investment property | | | | | | |
| AH Activity | Discounted cash flow | Estimated rental value per square foot | 65 | \$16-\$289 | 52 | \$16-\$219 |
| | | Discount rate | - | 4%-6% | - | 5%-6% |
| | Market approach | Value per square foot | 249 | \$6-\$551 | 229 | \$5 - \$613 |
| Total investment property | | | 314 | - | 281 | - |
| Derivatives designated at FVTPL | | | | | | |
| FTHBI loan derivative | Market approach | HPI | (31) | n/a | - | n/a |
| Total Level 3 items carried at fair value | | | 660 | - | 551 | - |

Level 3 sensitivity analysis

Investment property

For investment property, increases (decreases) in estimated rental value and price per square foot could result in a significantly higher (lower) fair value of the properties. Increases (decreases) in discount rates could result in a significantly lower (higher) fair value.

12. Cash and Cash Equivalents

The following table provides a breakdown of our cash and cash equivalents:

| | 2021 | | | | 2020 | | | |
|--------------------------------------|----------------|-------|-------|-------|----------------|-------|-------|-------|
| _(in millions) | Amortized cost | FVOCI | FVTPL | Total | Amortized cost | FVOCI | FVTPL | Total |
| Cash | 98 | - | - | 98 | 141 | - | - | 141 |
| Interest-bearing deposits with banks | 745 | - | 130 | 875 | 882 | - | 290 | 1,172 |
| Corporate/other entities | - | 17 | - | 17 | - | 12 | - | 12 |
| Federal government issued | - | 378 | - | 378 | - | 976 | - | 976 |
| Provinces/municipalities | 157 | - | - | 157 | - | - | - | - |
| Total cash and cash equivalents | 1,000 | 395 | 130 | 1,525 | 1,023 | 988 | 290 | 2,301 |

We hold the following cash and cash equivalents that are intended for use as part of the respective programs:

| (in millions) | 2021 | 2020 |
|---|------|-------|
| Affordable Rental Housing Innovation Fund | 55 | 29 |
| Rental Construction Financing initiative (RCFi) | 242 | 655 |
| National Housing Co-Investment Fund (NHCF) | 308 | 122 |
| Direct Lending (DL) – Economically Hedged | 130 | 290 |
| Canada Emergency Commercial Rent Assistance | - | 7 |
| Total | 735 | 1,103 |

13. Investment Securities

The following tables present the contractual maturity profile and average yield of investment securities.

| | | Remair | ning term to matu | rity | | |
|--------------------------------|---------------|--------------|-------------------|--------------|------------|------------|
| (in millions) | Within 1 year | 1 to 3 years | 3 to 5 years | Over 5 years | Total 2021 | Total 2020 |
| FVTPL | | | · | | | |
| Fixed income ¹ | | | | | | |
| Corporate/other entities | 109 | 34 | 8 | - | 151 | 58 |
| Provinces/municipalities | 26 | 25 | - | - | 51 | 179 |
| Sovereign and related entities | - | 8 | - | - | 8 | 81 |
| Total fixed income | 135 | 67 | 8 | - | 210 | 318 |
| Yield ² | 1.0% | 1.3% | 1.6% | - | 1.1% | 1.5% |
| Canadian equities | | | | | 79 | 81 |
| Yield ³ | | | | | 16.0% | 2.4% |
| Total at FVTPL | | | | | 289 | 399 |
| FVOCI | | | | | | |
| Fixed income ⁴ | | | | | | |
| Corporate/other entities | 333 | 1,912 | 2,084 | 3,633 | 7,962 | 7,747 |
| Federal government issued | 2,262 | 4,434 | 1,154 | 980 | 8,830 | 11,812 |
| Provinces/municipalities | 101 | 827 | 717 | 1,478 | 3,123 | 3,359 |
| Sovereign and related entities | - | - | 43 | 24 | 67 | 176 |
| Total at FVOCI | 2,696 | 7,173 | 3,998 | 6,115 | 19,982 | 23,094 |
| Yield ² | 0.8% | 1.2% | 1.7% | 2.1% | 1.5% | 1.5% |
| Amortized cost | | | | | | |
| Fixed income | | | | | | |
| Corporate/other entities | 252 | 197 | 20 | - | 469 | 320 |
| Federal government issued | - | 5 | - | - | 5 | 50 |
| Provinces/municipalities | 514 | 577 | 221 | - | 1,312 | 701 |
| Sovereign and related entities | 192 | 391 | 448 | - | 1,031 | 356 |
| Total at Amortized cost | 958 | 1,170 | 689 | - | 2,817 | 1,427 |
| Yield ² | 0.7% | 0.8% | 1.0% | - | 0.8% | 1.0% |
| Total | - | - | - | - | 23,088 | 24,920 |

¹ Includes debt securities denominated in U.S. dollars with a carrying value of \$40 million (31 December 2020 – nil).

² Represents the weighted-average yield, determined as the weighted average of the effective yields of individual securities.

³ Represents the average yield, determined by dividing dividend income by average cost in 2021.

⁴ Includes debt securities denominated in U.S. dollars with a carrying value of \$4,393 million (31 December 2020 – \$4,347 million).

The following table shows the cumulative unrealized gains (losses) on investment securities recorded at fair value.

| | | 2021 | | | | 2020 | | | | |
|--------------------|-----------------------------|-----------------------------------|------------------------------------|------------|-----------------------------|-----------------------------------|------------------------------------|------------|--|--|
| (in millions) | Amortized cost ¹ | Gross cumulative unrealized gains | Gross cumulative unrealized losses | Fair value | Amortized cost ¹ | Gross cumulative unrealized gains | Gross cumulative unrealized losses | Fair value | | |
| Debt instruments | | | | | | | | | | |
| FVTPL ² | 209 | 1 | - | 210 | 315 | 3 | - | 318 | | |
| FVOCI ³ | 20,065 | 261 | (344) | 19,982 | 22,533 | 777 | (216) | 23,094 | | |
| Equities | | | | | | | | | | |
| FVTPL | 64 | 26 | (11) | 79 | 54 | 34 | (7) | 81 | | |

¹ Amortized cost for equities is weighted-average acquisition cost.

Expected credit losses

See Note 19 for further information about the credit quality of our investment securities. At 31 December 2021, all of our debt instruments held at FVOCI and at amortized cost had a 12-month ECL allowance.

The ECL allowance for debt instruments held at FVOCI and amortized cost was \$12 million at 31 December 2021 (2020 – \$5 million).

We performed a sensitivity analysis by shifting economic scenario weightings to each extreme in order to assess the ECL impacts on our investment securities at amortized cost and FVOCI. The focus of these analyses is on Stage 1 and Stage 2 exposures, as Stage 3 ECLs do not vary between scenarios. Each scenario has been run independently from the others, and the results represent a simulated impact as at 31 December 2021:

| | A | As at 31 December 202 | 1 |
|-------------|--------|-----------------------|--------------|
| | Weight | Unweighted ECL | Weighted ECL |
| Optimistic | 15% | 1 | - |
| Baseline | 45% | 9 | 12 |
| Pessimistic | 40% | 19 | - |

² Includes debt securities denominated in U.S. dollars with a carrying value of \$40 million (31 December 2020 – nil).

³ Includes debt instruments denominated in U.S. dollars with a carrying value of \$4,393 million (2020 – \$4,347 million).

14. Loans

The following tables present the contractual maturity profile and average yield of loans based on carrying value.

| | | | Year of | maturity | | | | |
|---|--------|--------|---------|----------|--------|---------------------|------------|------------|
| (in millions, unless otherwise indicated) | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 and thereafter | Total 2021 | Total 2020 |
| FVTPL | | | | | | _ | | |
| Lending programs | 30 | 54 | 39 | 55 | 4 | 298 | 480 | 719 |
| MI Activity loans | 19 | 1 | - | - | - | - | 20 | 24 |
| Total FVTPL | 49 | 55 | 39 | 55 | 4 | 298 | 500 | 743 |
| Yield | 2.1% | 2.5% | 2.3% | 1.6% | 1.6% | - | 0.8% | 1.4% |
| Amortized cost | | | | | | | | |
| CMB program loans | 44,284 | 45,781 | 37,781 | 41,430 | 32,492 | 58,819 | 260,587 | 258,962 |
| Lending programs | 514 | 393 | 508 | 668 | 638 | 5,176 | 7,897 | 6,160 |
| IMPP loans | 444 | 457 | 2,330 | 1,003 | - | - | 4,234 | 5,248 |
| MI Activity loans | 41 | 9 | 5 | 2 | - | 6 | 63 | 80 |
| Total amortized cost | 45,283 | 46,640 | 40,624 | 43,103 | 33,130 | 64,001 | 272,781 | 270,450 |
| Yield | 1.9% | 2.1% | 1.9% | 1.5% | 1.3% | 2.1% | 1.8% | 1.9% |
| Total | 45,332 | 46,695 | 40,663 | 43,158 | 33,134 | 64,299 | 273,281 | 271,193 |

The following table presents the cash flows and non-cash changes for loans.

| | | Cas | sh flows | Non-cash changes | | | | | |
|----------------------|--------------------|------------|---------------|-----------------------|-----------|------|------------------------|-------------------------|--------------------------------|
| (in millions) | Opening balance | Repayments | Disbursements | Fair value changes | Accretion | ECL | Transfers ¹ | Capitalized interest | Balance at end of period |
| 2021 | | | | <u> </u> | | | | | |
| FVTPL | | | | | | | | | |
| Lending programs | 719 | (72) | 90 | 23 | - | - | (280) | - | 480 |
| MI Activity loans | 24 | (33) | 29 | - | - | - | - | - | 20 |
| Total at FVTPL | 743 | (105) | 119 | 23 | - | - | (280) | - | 500 |
| Amortized cost | | | | | | | | | |
| CMB program loans | 258,962 | (38,370) | 39,955 | - | 40 | - | - | - | 260,587 |
| Lending programs | 6,160 | (720) | 2,164 | - | - | (10) | 280 | 23 | 7,897 |
| IMPP loans | 5,248 | (1,014) | - | - | - | - | - | - | 4,234 |
| MI Activity loans | 80 | (50) | 2 | - | 9 | 22 | - | - | 63 |
| Total amortized cost | 270,450 | (40,154) | 42,121 | - | 49 | 12 | 280 | 23 | 272,781 |
| Total | 271,193 | (40,259) | 42,240 | 23 | 49 | 12 | - | 23 | 273,281 |
| 2020 | | | | | | | | | |
| FVTPL | | | | | | | | | |
| Lending programs | 1,307 | (160) | 139 | 16 | - | - | (583) | - | 719 |
| MI Activity loans | 24 | (31) | 27 | 4 | - | - | - | - | 24 |
| Total at FVTPL | 1,331 | (191) | 166 | 20 | - | - | (583) | - | 743 |
| Amortized cost | | | | | | | | | |
| CMB program loans | 244,445 | (40,402) | 54,871 | - | 48 | - | - | - | 258,962 |
| Lending programs | 4,893 | (633) | 1,324 | - | - | (1) | 563 | 14 | 6,160 |
| IMPP loans | - | (568) | 5,817 | - | (1) | - | - | - | 5,248 |
| MI Activity loans | 101 | (42) | 2 | - | 7 | 12 | - | - | 80 |
| Total amortized cost | 249,439 | (41,645) | 62,014 | - | 54 | 11 | 563 | 14 | 270,450 |
| Total | 250,770 | (41,836) | 62,180 | 20 | 54 | 11 | (20) | 14 | 271,193 |

¹ Transfers are matured loans that have been renewed where the new loans are no longer part of a portfolio of economically hedged loans and borrowings and therefore classified at amortized cost. Transfers for loans at FVTPL in 2020 also included a \$20 million reclassification from loans at FVTPL to contributions recognized in other income.

Credit quality - amortized cost

The following table presents the credit quality of loans at amortized cost, presented separately for those based on 12-month or lifetime ECL. For loans where past due information is used as the primary criteria in assessing SICR, aging of loans past due from contractual due date is presented. For loans where past due information is not the primary criteria used in assessing SICR, credit quality is presented by credit rating category based on our internal credit rating system. Amounts in the table represent the gross carrying amount of the financial asset.

| | | | 2021 | | | 2020 |
|-------------------------------|--------------------------|---|---|------|---------|---------|
| (in millions) | Stage 1: 12-month ECL | Stage 2: Lifetime ECL (not credit impaired) | Stage 3: Lifetime ECL (credit impaired) | POCI | Total | Total |
| Days past due: | | | | | | |
| 0-30 days | 6,434 | - | - | - | 6,434 | 4,516 |
| 30-90 | - | - | - | - | - | 38 |
| 90+ | - | - | 77 | - | 77 | 84 |
| POCI | - | - | - | 76 | 76 | 99 |
| Total gross carrying amount | 6,434 | - | 77 | 76 | 6,587 | 4,737 |
| Internal credit ratings: | | | | | | |
| AA- to AA+ | 815 | - | - | - | 815 | 1,052 |
| A- to A+ | 460 | - | - | - | 460 | 396 |
| BBB- to BBB+ | 178 | - | - | - | 178 | 147 |
| Total gross carrying amount | 1,453 | - | - | - | 1,453 | 1,595 |
| Total | 7,887 | - | 77 | 76 | 8,040 | 6,332 |
| ECL allowance | (6) | - | (39) | (35) | (80) | (92) |
| Total, net of ECL allowance | 7,881 | - | 38 | 41 | 7,960 | 6,240 |
| CMB program loans | - | - | - | - | 260,587 | 258,962 |
| IMPP loans | - | - | - | - | 4,234 | 5,248 |
| Total loans at amortized cost | | | | | 272,781 | 270,450 |

Total undrawn loan commitments outstanding at 31 December 2021 were \$7,250 million (2020 - \$5,022 million), of which \$6,789 million are subject to 12-month ECL (2020 – \$4,618 million) and \$6 million are commitments outstanding on purchased or originated credit impaired loans (2020 – \$7 million).

We revised the comparative portion of undrawn loan commitments subject to 12-month ECL from \$5,015 million to \$4,618 million to align with current year presentation.

The allowance for expected credit losses on undrawn loan commitments, which we record in accounts payable and other liabilities, was \$15 million at 31 December 2021 (2020 – \$7 million), an increase of \$8 million for the year (2020 – increase of \$1 million).

Expected credit losses

The table below presents the change in the ECL allowance recognized in the consolidated statement of income on loans held at amortized cost.

| | | 2021 | | | | | | |
|---|--------------------------|---|--|------|-------|-------|--|--|
| (in millions) | Stage 1: 12-month ECL | Stage 2: Lifetime ECL (not credit impaired) | Stage 3: Lifetime ECL (credit impaired) | POCI | Total | Total | | |
| ECL allowance – beginning of period: | | | | | | | | |
| Lending program loans | 3 | - | 4 | - | 7 | 6 | | |
| MI Activity loans | - | - | 34 | 51 | 85 | 96 | | |
| Total ECL allowance – beginning of period | 3 | - | 38 | 51 | 92 | 102 | | |
| Increase (decrease) in ECL allowance: | | | | | | | | |
| Lending program loans | 3 | - | 7 | - | 10 | 1 | | |
| MI Activity loans | - | - | (6) | (16) | (22) | (11) | | |
| Total increase (decrease) in ECL allowance ¹ | 3 | - | 1 | (16) | (12) | (10) | | |
| ECL allowance - end of period: | | - | | | | | | |
| Lending program loans | 6 | - | 11 | - | 17 | 7 | | |
| MI Activity loans | - | - | 28 | 35 | 63 | 85 | | |
| Total ECL allowance – end of period | 6 | - | 39 | 35 | 80 | 92 | | |

¹ Included in net gains (losses) on financial instruments for Lending program loans and insurance claims expense for MI Activity loans.

The ECL allowance on our loan portfolio is not materially sensitive to changes in economic inputs or weightings as the majority of the allowance is comprised of loans classified as Stage 3, where ECL does not vary between scenarios.

Sources of guarantee

We are assured collection of principal and accrued interest on 99% (2020 – 99%) of our loans. The sources of guarantee for these loans are provided below.

| | 2021 | | | | 2020 | |
|--|-------|----------------|---------|-------|----------------|---------|
| (in millions) | FVTPL | Amortized cost | Total | FVTPL | Amortized cost | Total |
| Provinces and territories through provisions in the SHA | 181 | 1,351 | 1,532 | 391 | 1,440 | 1,831 |
| Government of Canada through provisions in the NHA | - | 367 | 367 | - | 441 | 441 |
| Indigenous Services Canada through Ministerial Loan Guarantees | - | 1,420 | 1,420 | 131 | 1,293 | 1,424 |
| Loans underwritten by our MI Activity | - | 3,174 | 3,174 | 13 | 1,681 | 1,694 |
| Collateral ¹ | - | 264,821 | 264,821 | - | 264,210 | 264,210 |
| Total guaranteed loans | 181 | 271,133 | 271,314 | 535 | 269,065 | 269,600 |
| Other Lending programs loans ² | 299 | 1,585 | 1,884 | 184 | 1,305 | 1,489 |
| MI Activity loans | 20 | 63 | 83 | 24 | 80 | 104 |
| Total | 500 | 272,781 | 273,281 | 743 | 270,450 | 271,193 |

¹ Represents collateral held for CMB program and IMPP loans, which consists of NHA MBS securities and, in the case of the CMB program only, high-quality reinvestment assets.

² Consists of loans to provincial entities, municipalities and partnerships between governments, non-profits and private sector. Losses on some of these loans would be eligible for partial reimbursement from the Government of Canada.

15. Borrowings

The following tables present the contractual maturity profile and average yield of borrowings based on carrying value.

| | | Year of maturity | | | | | | |
|---|--------|------------------|--------|--------|--------|------------------------|------------|------------|
| (in millions, unless otherwise indicated) | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 and Thereafter | Total 2021 | Total 2020 |
| Designated at FVTPL | | | | | | | | |
| Borrowings from the Government of Canada – Lending programs | 81 | 165 | 79 | 129 | 21 | - | 475 | 1,156 |
| Yield ¹ | 1.9% | 2.4% | 2.3% | 1.6% | 1.3% | - | 2.0% | 1.6% |
| Borrowings at amortized cost | | | | | | | | |
| Canada mortgage bonds | 44,222 | 45,570 | 37,529 | 41,234 | 32,384 | 58,775 | 259,714 | 258,592 |
| Borrowings from the Government of Canada – Lending programs | 1,165 | 784 | 759 | 586 | 521 | 8,106 | 11,921 | 8,529 |
| Borrowings from the Government of Canada – IMPP | 444 | 457 | 2,330 | 1,003 | - | - | 4,234 | 5,248 |
| Total borrowings at amortized cost | 45,831 | 46,811 | 40,618 | 42,823 | 32,905 | 66,881 | 275,869 | 272,369 |
| Yield ¹ | 1.9% | 2.1% | 2.0% | 1.6% | 1.3% | 2.0% | 1.8% | 1.9% |
| Total | 45,912 | 46,976 | 40,697 | 42,952 | 32,926 | 66,881 | 276,344 | 273,525 |

¹ Represents the weighted-average yield, determined by applying the weighted-average effective yields of individual fixed rate borrowings and the weighted-average yields-to-reset of floating rate borrowings.

Borrowings – designated at fair value through profit or loss

Included in this category are medium-term borrowings from the Government taken to fund certain Assisted Housing Activity loans originated prior to August 2016. Medium-term debt includes fixed rate notes, with an original term to maturity ranging from two to ten years.

The carrying amount at 31 December 2021 of borrowings – designated at FVTPL is \$7 million higher (2020 – \$26 million higher) than the contractual amount due at maturity. Our liabilities are backed by the credit of the Government and there is no significant change in value that can be attributed to changes in credit risk.

Borrowings - amortized cost

This category includes borrowings under the CMB program and under the IMPP, as well as short- and medium-term borrowings from the Government taken to fund certain Assisted Housing Activity loans, including all those originated after July 2016. Short-term debt, having an original term to maturity less than 365 days, was \$367 million at 31 December 2021 (2020 – \$410 million). Medium-term debt includes fixed rate notes, with an original term to maturity ranging from two to ten years. The following table presents the cash flows and non-cash changes for borrowings.

| | | Cash flows | | | Non-cash change | es | |
|---|------------------------------|------------|------------|-----------------------|---------------------|--------------|------------------------|
| (in millions, unless otherwise indicated) | Balance at beginning of year | Issuances | Repayments | Fair value changes | Accretion and other | Eliminations | Balance at end of year |
| 2021 | | | | | | | |
| Designated at FVTPL | | | | | | | |
| Borrowings from the Government of Canada – Lending programs | 1,156 | - | (662) | (19) | - | - | 475 |
| Borrowings at amortized cost | | | | | | | |
| Canada mortgage bonds | 258,592 | 39,904 | (38,229) | - | 40 | (593) | 259,714 |
| Borrowings from the Government of Canada – Lending programs | 8,529 | 11,204 | (7,708) | (126) | 22 | - | 11,921 |
| Borrowings from the Government of Canada – IMPP | 5,248 | - | (1,014) | - | - | - | 4,234 |
| Total borrowings at amortized cost | 272,369 | 51,108 | (46,951) | (126) | 62 | (593) | 275,869 |
| Total | 273,525 | 51,108 | (47,613) | (145) | 62 | (593) | 276,344 |
| 2020 | | | | | | | |
| Designated at FVTPL | | | | | | | |
| Borrowings from the Government of Canada – Lending programs | 2,374 | - | (1,248) | 30 | - | - | 1,156 |
| Borrowings at amortized cost | | | | | | | |
| Canada mortgage bonds | 243,454 | 54,774 | (39,822) | - | 47 | 139 | 258,592 |
| Borrowings from the Government of Canada – Lending programs | 6,287 | 10,805 | (8,506) | (102) | 45 | - | 8,529 |
| Borrowings from the Government of Canada – IMPP | | 5,817 | (568) | - | (1) | - | 5,248 |
| Total borrowings at amortized cost | 249,741 | 71,396 | (48,896) | (102) | 91 | 139 | 272,369 |
| Total | 252,115 | 71,396 | (50,144) | (72) | 91 | 139 | 273,525 |

When we hold CMB to maturity or acquire CMB in the primary market, we exclude the related cash flows from the consolidated statement of cash flows. During the year ended 31 December 2021, we have excluded \$141 million (2020 – \$580 million) of CMB maturities from repayments in the table above and from investment securities – sales and maturities in the consolidated statement of cash flows. We have also excluded \$51 million (2020 – \$97 million) of CMB purchases in the primary market from issuances in the table above and from investment securities – purchases in the consolidated statement of cash flows.

Borrowing authorities

The Minister of Finance approves our Borrowing Plan annually and establishes limits and parameters for borrowings, namely capital market borrowings and borrowings from the Government of Canada in the Assisted Housing and Mortgage Funding Activities.

For 2021, the limits on our short-term borrowings outstanding and long-term borrowings issued were \$6 billion and \$6.5 billion, respectively (2020 - \$20 billion and \$154 billion). Actual short-term borrowings outstanding as at 31 December 2021 and long-term borrowings issued in 2021 were \$367 million and \$4.2 billion, respectively (2020 - \$410 million and \$8.6 billion).

For 2020 only, the Minister of Finance increased our authorities in conjunction with the Government of Canada's launch of the IMPP. This program was a measure to respond to the economic impacts of COVID-19, under which the Government authorized the purchase of up to \$150 billion of insured mortgage pools through CMHC. The IMPP ended by 31 December 2020; accordingly, the Minister of Finance reduced our authorities for 2021.

The legislative authority, which is separate from the limits above and does not apply to borrowings of CHT, requires that the total indebtedness outstanding at any time, other than to the Government, not exceed \$20 billion (2020 -\$20 billion). The outstanding principal balance of this indebtedness was nil as at 31 December 2021 (2020 - nil).

16. Derivatives

Derivatives are financial contracts whose value is derived from movements in one or more underlying securities, rates, indices or other instruments. We use derivatives in conjunction with our risk management activities.

Interest rate swaps are transactions in which two parties exchange interest cash flows on a specified notional amount for a predetermined period based on agreed-upon fixed and floating rates. Notional amounts are not exchanged. The value of these swaps is derived from movements in interest rates. We use them to manage either reinvestment risk or mismatches in the timing of receipts from assets versus payments of liabilities.

Foreign currency forward contracts are over-the-counter contracts in which two parties agree to exchange one currency for another at a specified price for settlement at a future predetermined date. The value of these contracts is derived from movements in foreign exchange and interest rates. We use them to manage currency risk associated with U.S. dollar-denominated debt securities.

FTHBI loan derivatives result from the recognition of a payable or receivable to the Government of Canada when there are underlying loan gains or losses. Upon loan settlement, we will either pay loan gains to, or recover loan losses from, the Government. The value of these derivatives is derived from movement in the fair value of the underlying home values, which affects the fair value of the loans.

The table below provides the notional amounts of the derivative transactions recognized in the consolidated financial statements. Notional amounts, which are off-balance sheet, serve as a point of reference for calculating payments and do not represent the fair value, or the potential gain or loss associated with the credit or market risk of such instruments.

| | 2021 | | | | 2020 | | | | |
|---------------------------------------|-----------------------------|--------------------|-----------------|-------------------|--------------------------|--------------------|-----------------|-------------------|--|
| (in millions) | Average term to maturity | Notional amount | Fair v Asset | alue Liability | Average term to maturity | Notional amount | Fair v Asset | alue Liability | |
| Interest rate swaps | 2 years | 788 | 8 | 1 | 1 year | 2,020 | 24 | 4 | |
| Foreign currency forward contracts | Within 1 year | 4,489 | 23 | 18 | Within 1 year | 4,364 | 93 | - | |
| First-Time Home Buyer loan derivative | 24 years | 278 | - | 31 | 24 years | 166 | - | 4 | |
| Total | | 5,555 | 31 | 50 | | 6,550 | 117 | 8 | |

Credit exposure of derivatives

The following table presents the credit exposure of derivatives by term to maturity. The replacement value is the total current fair value including accrued interest of all outstanding contracts with a positive fair value, after factoring in the impact of master netting agreements. The replacement value represents our maximum derivative credit exposure. Potential future credit exposure represents an estimate of the potential change in the market value of the transaction up to maturity, which is calculated in relation to the notional principal of the contracts by applying factors consistent with guidelines issued by OSFI.

Credit risk equivalent is the total of the replacement value and the potential future credit exposure. The risk-weighted equivalent is determined by applying a standard OSFI defined measure of counterparty credit risk to the credit equivalent amount.

| | Replacement value | | | 20 | 021 | 2 | .020 | |
|---------------|-------------------|-----------------|-----------------|----------------------------------|-----|-----------------------------|------|-----------------------------|
| (in millions) | Within 1 year | 1 to 5 years | Over 5 years | Potential future credit exposure | | Risk-weighted equivalent | | Risk-weighted equivalent |
| Derivatives | 22 | 9 | - | 32 | 63 | 13 | 163 | 32 |

The fair value of the collateral we hold related to our derivatives as at 31 December 2021 was nil (2020 – nil).

17. Financial Instruments Income and Expenses

Interest income, investment income and interest expense

The following table outlines the total interest income and expense for financial instruments and the investment income recognized in the consolidated statement of income and comprehensive income.

| | | 2021 | | | 2020 | |
|---|-----------------|-------------------|------------------|-----------------|-------------------|------------------|
| (in millions) | Interest Income | Investment Income | Interest Expense | Interest Income | Investment Income | Interest Expense |
| Interest for financial instruments not at FVTPL: | | | | | | |
| Cash equivalents | 1 | 1 | - | 5 | 3 | - |
| Debt instruments – FVOCI | - | 329 | - | - | 403 | - |
| Debt instruments – amortized cost | 18 | - | - | 15 | - | - |
| Loans – amortized cost | 4,439 | - | - | 4,904 | - | - |
| Borrowings – amortized cost | - | - | 4,456 | - | - | 4,909 |
| Total interest for financial instruments not at FVTPL | 4,458 | 330 | 4,456 | 4,924 | 406 | 4,909 |
| Interest for financial instruments at FVTPL: | | | | | | |
| Debt instruments | 3 | - | - | 9 | - | - |
| Loans | 3 | - | - | 10 | - | - |
| Borrowings | - | - | 13 | - | - | 28 |
| Derivatives | 8 | - | - | 11 | - | - |
| Total interest for financial instruments at FVTPL | 14 | - | 13 | 30 | - | 28 |
| Total Interest | 4,472 | 330 | 4,469 | 4,954 | 406 | 4,937 |
| Dividend income | - | 13 | - | - | 2 | - |
| Total | 4,472 | 343 | 4,469 | 4,954 | 408 | 4,937 |

Net gains (losses) on financial instruments

The following table presents the net gains (losses) on financial instruments recognized in the consolidated statement of income and comprehensive income.

| (in millions) | 2021 | 2020 |
|---|------|------|
| Financial instruments designated at FVTPL | | |
| Investment securities | (2) | 4 |
| Loans | (7) | 13 |
| Borrowings | 19 | (30) |
| Total financial instruments designated at FVTPL | 10 | (13) |
| Financial instruments mandatorily at FVTPL | | |
| Equity securities | (5) | (1) |
| Derivatives | (13) | 160 |
| Loans | 37 | 2 |
| Total financial instruments mandatorily at FVTPL | 19 | 161 |
| Debt instruments held at FVOCI ¹ | 9 | 326 |
| Loans at amortized cost | (6) | (3) |
| Borrowings – amortized cost ² | 111 | 93 |
| Expected credit losses on financial assets ³ | (20) | (1) |
| Total | 123 | 563 |

¹ Includes foreign exchange losses of \$34 million (2020 – losses of \$160 million) resulting from translation of U.S. dollar-denominated debt securities.

18. Market Risk

Market risk is the risk of adverse financial impacts arising from changes in underlying market factors, including interest rates, foreign exchange rates and equity prices.

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.

The investment portfolios for the Mortgage Insurance and Mortgage Funding Activities are managed in accordance with their Strategic Asset Allocation (SAA), which limits interest rate risk relative to internal limits and benchmarks.

The Assisted Housing Activity is exposed to interest rate risk when asset and liability principal and interest cash flows have different payment, repricing or maturity dates. Some of our loans contain prepayment and/or repricing options. As we do not have the right to prepay our borrowings from the Government of Canada totalling \$12,396 million (2020 – \$9,685 million) without penalty, we are exposed to interest rate risk.

We manage interest rate risk in the Assisted Housing Activity's lending programs differently depending on the cash flow characteristics of the program's loans and when the loans were originated. Overall sensitivity of the Assisted Housing Activity to interest rate risk is managed by ensuring the economic value of net assets in the lending programs on an aggregated and standalone basis plus the reserve fund remains positive under certain interest rate shock scenarios.

For DL loans originated prior to August 2016 and having a gross carrying amount of \$181 million at 31 December 2021 (2020 - \$550 million), we use derivatives to manage reinvestment and refinancing risks as well as mismatches in the timing of cash flows between the loans, reinvested principal receipts and borrowings. For DL loans originated after July 2016 and having a gross carrying amount of \$2,404 million at 31 December 2021 (2020 – \$2,374 million), we use an asset/ liability matching strategy on a portfolio basis whereby we structure our borrowings so that the associated future obligations match the future cash flows to be received on the loans. Under this matching strategy, we do not use derivatives and the term over which we must reinvest principal receipts is significantly reduced. Cumulative cash flow mismatches are limited by policy to \$30 million (2020 - \$30 million).

² Includes losses from the retirement of borrowings from the Government of Canada of \$15 million (2020 – \$9 million), net of gains from the issuance of borrowings of \$126 million (2020 – \$102 million).

³ Excludes a release of ECL on MI activity loans at amortized cost of \$14 million (2020 – \$13 million). These are presented in insurance claims expense.

For the Municipal Infrastructure Lending Program, closed to new loans since 2011, we manage interest rate risk through matching the present value of cash flows of the program's assets and liabilities. Loans in this program had a gross carrying amount of \$741 million at 31 December 2021 (2020 – \$832 million).

For the RCFi and NHCF programs, which have longer-term expected draw schedules, we manage the uncertainty of the timing of loan cash flows and of investment returns earned on borrowed funds by building these factors into our loan pricing. The gross carrying amount of loans in these programs was \$3,715 million at 31 December 2021 (2020 - \$1,725 million).

For the FTHBI program, which provides non-interest bearing loans, we manage interest rate risk through the receipt of government funding for interest costs. Loans in this program had a gross carrying amount of \$278 million at 31 December 2021 (2020 – \$ 169 million).

Interest rate risk on other Assisted Housing Activity loans of \$1,074 million at 31 December 2021 (2020 - \$1,193 million), is managed primarily through the maintenance of a reserve fund pursuant to Section 29 of the CMHC Act.

Loans under the CMB program and under the IMPP are exposed to both interest rate risk and prepayment/reinvestment (CMB program) or prepayment (IMPP) risk. Prepayment/reinvestment risk is the risk that NHA MBS may experience varying degrees of prepayment throughout the term and these prepayments must be reinvested immediately. Prepayment risk is the risk that those varying degrees of prepayment may reduce the NHA MBS holder's future interest income. These risks are slightly different under the two programs because under the CMB program, principal on the liabilities is due at maturity, hence the need to reinvest prepayments, whereas under the IMPP principal on the liabilities is due over time.

To mitigate these CMB program and IMPP risks, we enter into swap agreements with approved financial institution counterparties, which transfer these risks to them. Under the CMB program, we pay all interest received from the underlying NHA MBS and reinvestment assets to the swap counterparties in exchange for an amount equal to the CMB coupon payments. Under the IMPP, we pay the effective interest received on the underlying NHA MBS less administration costs to the swap counterparties in exchange for an amount equal to the interest owed on the borrowings from the Government of Canada. As a result of these swap agreements, interest rate changes, prepayments/reinvestments and prepayments related to the CMB program and IMPP have no net impact on the consolidated statement of income and comprehensive income.

Currency risk

Currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. We are exposed to currency risk from our holdings in foreign currency denominated investment securities. Our internal policies limit the amount of foreign currency investments and require full economic hedging of currency risk. We held \$4,393 million in FVOCI debt securities denominated in U.S. dollars as at 31 December 2021 (2020 - \$4,347 million), and \$40 million in FVTPL debt securities denominated in U.S. dollars as at 31 December 2021 (2020 - nil).

Our strategy to fully hedge currency risk is to continuously enter into a series of short-term foreign currency forward contracts that have terms less than one year. Under these contracts, we exchange U.S. dollars for Canadian dollars at an exchange rate fixed at the outset of the contract for settlement at a future predetermined date. Given the short terms of the forward contracts, full hedging of currency risk over the life of the foreign-denominated debt securities will require continued application of our strategy in the future. The exposures presented in the Value at Risk table below reflect the mitigating effect of the hedging instruments. Currency risk was assessed as immaterial as at 31 December 2021 (2020 - immaterial), after accounting for derivatives.

Other price risk

Other price risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices, other than those giving rise to interest rate and currency risk. We are exposed to other price risk through fluctuations in prices of equity investments held by the Mortgage Insurance Activity. The fair value of these investments as at 31 December 2021 is \$79 million (2020 – \$81 million). We limit our exposure to equity investments by using tolerance ranges exposure measures.

Sensitivity analyses

Value at risk (VaR)

Market risk for investment securities in the Mortgage Insurance and Mortgage Funding Activities is evaluated through the use of VaR models. VaR is a statistical technique used to measure the maximum potential loss of an investment portfolio over a specified holding period with a given level of confidence. The VaR for the Mortgage Insurance and Mortgage Funding Activities as at 31 December, calculated with 95% confidence over a 22 business day holding period, is outlined

in the table below. VaR is presented separately for individual market risk factors and for the total portfolio. The effect of diversification results from the fact that market risks are not perfectly correlated and, consequently, there is a benefit from investment diversification. The VaR figures are based on one year of historical prices and correlations of bond and equity markets and 26 weeks of volatility.

| (in millions) | 2021 | 2020 |
|--|------|------|
| Investment securities: | | |
| Interest rate risk on debt instruments | | |
| CAD-denominated securities | 138 | 156 |
| USD-denominated securities | 53 | 75 |
| Effect of diversification | (11) | (28) |
| Total VaR | 180 | 203 |

Interest rate sensitivity

Market risk for the Assisted Housing Activity portfolios of loans, investments, borrowings and swaps is evaluated by measuring their sensitivity to changes in interest rates.

For the Assisted Housing Activity's financial instruments designated at FVTPL and derivatives, we assessed the impact of a 200 bps shift in interest rates as immaterial as at 31 December 2021 after accounting for derivatives.

The Assisted Housing Activity's investments, loans and borrowings measured at amortized cost are also exposed to interest rate risk. The net impact of a shift in interest rates on their fair value is presented below.

| | 20 Interest | 21 rate shift | 2020 Interest rate shift | | |
|--|----------------|------------------|-----------------------------|----------|--|
| (in millions) | -200 bps | +200 bps | -200 bps | +200 bps | |
| Increase (decrease) in fair value of net assets ¹ | (616) | 517 | (306) | 356 | |

¹ The changes in fair value of net assets resulting from interest rate shifts presented in this table would not be recognized in comprehensive income as the underlying financial instruments are measured at amortized cost.

19. Credit Risk

Credit risk is the potential for financial loss arising from failure of a borrower or an institutional counterparty to fulfill its contractual obligations. We are exposed to credit risk from various sources including borrower default through mortgage insurance contracts and institutional counterparty credit risk arising from financial guarantees under the NHA MBS and CMB programs, lending arrangements, fixed-income investments and derivative transactions.

A detailed breakdown of credit risk is presented below.

Maximum exposure to credit risk

| (in billions) | 2021 | 2020 |
|---|------|------|
| Mortgage insurance: insurance-in-force (Note 7) | 401 | 431 |
| TPGs: guarantees-in-force (Note 8) ¹ | 461 | 489 |

¹ Exposure includes underlying instruments which are also insured by CMHC or other mortgage insurers.

For all financial assets other than guarantees or derivatives, the maximum exposure to credit risk is the carrying amount. For derivatives, the maximum exposure to credit risk is indicated in Note 16.

Credit risk associated with mortgage insurance is managed through prudent product design, underwriting and default management practices, and the establishment of adequate capital reserves as described in Notes 7 and 10.

Credit risk associated with TPGs is managed through due diligence in approving NHA MBS Issuers, ongoing monitoring of Issuer credit quality and program compliance, and the requirement that all mortgages supporting the NHA MBS be insured against borrower default. We have further mitigated this risk by having been assigned all rights, title and interest in the underlying mortgages so that we have access to principal and interest payments in the event of issuer default.

Credit risk associated with loans in the Assisted Housing Activity is in part mitigated through measures that include loan guarantees from other government entities as described in Note 14. We are assured collection of principal and accrued interest on 99% of our loans.

Under the CMB program and the IMPP, loans represent amounts due from Canadian financial institutions as a result of the sale of their beneficial interest in NHA MBS securities to us. The loans are collateralized by the NHA MBS, and associated reinvestment securities under the CMB program only, acquired in the transactions. The collateral, which is rated R-1 (high) or AAA by at least two rating agencies, is held in our name and represents the sole source of principal repayments for the loans.

Under the CMB program and the IMPP, we are exposed to credit-related counterparty risk in the event of default of swap counterparties. This risk is mitigated by transacting with highly rated swap counterparties and collateralization requirements based on credit ratings. All swap counterparties must have a minimum credit rating of BBB+ (high) (CMB program) or A- (IMPP), or their equivalents, by at least two rating agencies.

The fair value of total loan collateral held under the CMB program was \$263,047 million, 100.9% of loan carrying value, as at 31 December 2021 (2020 – \$269,253 million, 104.0% of loan carrying value).

The fair value of total loan collateral held under the IMPP was \$4,225 million, 99.8% of loan carrying value, as at 31 December 2021 (2020 – \$5,352 million, 102.0% of loan carrying value).

We manage credit risk associated with fixed-income investments and derivatives through policies which include minimum counterparty credit ratings and investment portfolio diversification limits by issuer, credit rating, term and by industry sector, and through legal agreements and collateralization requirements for derivatives.

Concentration risk

Concentration risk arises from holdings of financial instruments issued by entities that operate in the same sector or geographic area or engage in similar activities such that they may be affected similarly by changes in economic or other conditions.

The following table presents the concentration of credit risk by sector and geographic region of our investment securities and derivative transactions:

| (in millions, unless otherwise indicated) | 2021 | | 2020 | |
|---|--------|--------|--------|--------|
| By sector: ² | | | | |
| Federal | 9,632 | 39.3% | 13,112 | 48.2% |
| Provincial | 4,341 | 17.7% | 3,997 | 14.7% |
| Financial | 4,202 | 17.1% | 4,299 | 15.8% |
| Industrial | 1,132 | 4.6% | 1,039 | 3.8% |
| Supranationals | 968 | 4.0% | 528 | 1.9% |
| Energy | 671 | 2.7% | 722 | 2.7% |
| Technology | 597 | 2.4% | 618 | 2.3% |
| Communications | 589 | 2.4% | 573 | 2.1% |
| Consumer goods | 565 | 2.3% | 648 | 2.4% |
| Other | 1,849 | 7.5% | 1,661 | 6.1% |
| Total ¹ | 24,546 | 100.0% | 27,197 | 100.0% |
| By geographic region: ² | | | | |
| Canada | 17,597 | 71.6% | 21,032 | 77.3% |
| U.S. | 4,510 | 18.4% | 4,221 | 15.5% |
| Europe | 1,031 | 4.2% | 895 | 3.3% |
| Asia and Pacific | 876 | 3.6% | 702 | 2.6% |
| Other | 532 | 2.2% | 347 | 1.3% |
| Total ¹ | 24,546 | 100.0% | 27,197 | 100.0% |

¹ Total comprised of cash equivalents of \$1,427 million (2020 – \$2,160 million), investment securities of \$23,088 million (2020 - \$24,920 million) and derivatives with a positive fair value, net of collateral, of \$31 million (2020 - \$117 million).

² We added the Supranationals sector in the current year. To ensure comparability, we also disclosed the prior year comparative of \$528 million, which we had previously included in Other. Also, to be consistent with the current year presentation of sectors, we decreased and increased the comparatives for Energy and Other, respectively, by \$151 million. Furthermore, we added the Europe and Asia and Pacific geographic regions in the current year. To ensure comparability, we also disclosed the prior year comparatives of \$895 million and \$702 million, respectively, which we had previously included in Other, and we adjusted the comparatives for all regions to better reflect the location of the headquarters of issuer entities. Specifically, we reduced the comparative for Canada by \$1,332 million and increased the comparatives for U.S. by \$238 million and Europe, Asia and Pacific, and Other in total by \$1,094 million.

Credit quality

The following table presents the credit quality of our cash equivalents and investment securities based on our internal credit rating system. Amounts in the table represent gross carrying amounts.

| | | | | | | Credit | Rating ¹ | | | | | |
|------------------------------------|-------|---------------|----------|-----------------|--------------------|--------|---------------------|---------------|---------|-----------------|--------------------|--------|
| | | | 2 | 021 | | | | | 2 | 020 | | |
| (in millions) | AAA | AA- to AA+ | A- to A+ | BBB- to BBB+ | Lower than BBB- | Total | AAA | AA- to AA+ | A-to A+ | BBB- to BBB+ | Lower than BBB- | Total |
| Cash equivalents | 378 | 465 | 584 | - | - | 1,427 | 988 | 323 | 849 | _ | - | 2,160 |
| Investment securities ² | | | | | | | | | | | | |
| FVTPL | 60 | 25 | 125 | - | - | 210 | 119 | 102 | 97 | - | - | 318 |
| FVOCI | 9,592 | 3,640 | 4,102 | 2,553 | 95 | 19,982 | 12,913 | 3,779 | 3,920 | 2,397 | 85 | 23,094 |
| Amortized cost | 1,412 | 530 | 875 | - | - | 2,817 | 445 | 391 | 591 | _ | - | 1,427 |

¹ The internal credit ratings are based upon internal assessments of the counterparty creditworthiness. These ratings correspond to those provided by the credit rating agencies except in cases where stand-alone ratings exist. A counterparty internal credit rating cannot be higher than the highest stand-alone rating from any of the agencies. A stand-alone rating removes the assumption of government support from the rating.

Derivatives

We limit the credit risk associated with interest rate swaps and foreign currency forward contracts by dealing with counterparties whose credit ratings are in accordance with our Enterprise Risk Management Policies; through the use of International Swaps Derivatives Association (ISDA) master agreements for derivatives; and, where appropriate, through the use of ratings-based collateral thresholds in the Credit Support Annexes (CSA).

ISDA is a master agreement that sets out standard terms that apply to all transactions we entered with the counterparty. The ISDA outlines procedures and calculations of termination costs in the event of default by either party. The ISDA master agreements give us a legally enforceable right to settle all transactions covered by the agreement with the same counterparty on a net basis in the event of default. All derivative counterparties must have a minimum credit rating of A-, or its equivalent, from at least two rating agencies.

The CSA document, included in the ISDA master agreements, regulates the collateral requirements of derivative transactions and the terms under which collateral is transferred to mitigate credit risk. The CSA gives us the right, in the event of default, to liquidate collateral held and apply proceeds received from liquidation against amounts due from the counterparty. Collateral held to offset mark-to-market exposures is not used for any other purpose than to offset such exposure.

For FTHBI derivatives, there is minimal credit risk as the counterparty is the Government of Canada, which carries a AAA credit rating.

Securities purchased under resale agreements

By their nature, these balances have low credit risk given their short terms and are secured by the underlying securities purchased under the agreements and any incremental margin obtained from counterparties.

These transactions are subject to Global Master Repurchase Agreements, which set out the standard terms of all repurchase agreements transacted with each counterparty. These agreements give us a legally enforceable right to settle all repurchase transactions with the same counterparty on a net basis in the event of default. These agreements also provide for the posting of margin by the counterparty when our exposure to that entity exceeds a certain ratings-based threshold. Securities held as eligible margin include debt obligations issued by or guaranteed by the Government, including Crown corporations and CHT. Margin securities should not be used for any other purpose than to offset such exposure. In the event of counterparty default, we have the right to liquidate these securities. We did not hold any margin securities at 31 December 2021 (2020 - nil).

² Includes fixed-income investments and preferred equity only.

Netting arrangements and offsetting of financial assets and financial liabilities

The following tables present the potential effects of the netting arrangements described above.

Financial assets

| | (i) | (ii) | (iii) = (i) - (ii) | | (iv) | (v) = (iii) - (iv) | |
|---|-----------------------------------|---------------------|--|------------------------------------|---|--------------------|--|
| | | Gross amount offset | mount offset Net amount of assets | | Gross amount not offset in the consolidated balance sheet | | |
| (in millions) | Gross amount of recognized assets | in the consolidated | presented in the consolidated balance sheet ¹ | Financial instruments ² | Financial collateral received ³ | Net amount | |
| 2021 | | | | | | | |
| Derivatives ¹ | 33 | - | 33 | (7) | - | 26 | |
| Total | 33 | - | 33 | (7) | - | 26 | |
| 2020 | | | | | | | |
| Derivatives ¹ | 121 | - | 121 | (4) | - | 117 | |
| Securities purchased under repurchase agreements ¹ | 174 | - | 174 | - | (174) | - | |
| Total | 295 | - | 295 | (4) | (174) | 117 | |

¹ Derivatives are carried at fair value. Securities purchased under resale agreements are carried at amortized cost.

Derivative assets, as presented in the above table, are reconciled to the consolidated balance sheet as follows:

| (in millions) | 2021 | 2020 |
|--|------|------|
| Derivative assets presented in offsetting table | 33 | 121 |
| Less: Accrued interest receivable presented separately in consolidated balance sheet | (2) | (4) |
| Derivative asset balance presented in the consolidated balance sheet | 31 | 117 |

² Gross amounts of financial instruments not offset in the consolidated balance sheet refers to amounts recorded to derivative liabilities and securities sold under repurchase agreements where we have a legally enforceable right to offset against amounts recorded to derivative assets and securities purchased under resale agreements, on a counterparty-by-counterparty basis, in the event of default of the counterparty.

³ We have the right, in the event of default, to liquidate and apply financial collateral held against amounts due from counterparties. For derivatives, these amounts represent the fair value of collateral posted by swap counterparties to us. For securities purchased under resale agreements, these amounts represent fair value of margin posted by counterparties and of securities we purchased with the commitment to resell to the counterparty at a future date.

Financial liabilities

| | (i) | (ii) | (iii) = (i) - (ii) | (| (v) = (iii) - (iv) | |
|--------------------------|--|---|--|--------------|--|------------|
| (in millions) | Gross amount of recognized liabilities | Gross amount offset in the consolidated balance sheet | Net amount of liabilities presented in the consolidated balance sheet ¹ | consolidated | not offset in the balance sheet Financial collateral pledged ³ | Net amount |
| 2021 | | | | ' | ' | |
| Derivatives ¹ | 50 | - | 50 | (7) | - | 43 |
| 2020 | | | | | | |
| Derivatives ¹ | 9 | - | 9 | (4) | - | 5 |

¹ Derivatives are carried at fair value.

Derivative liabilities, as presented in the above table, are reconciled to the consolidated balance sheet as follows:

| (in millions) | 2021 | 2020 |
|---|------|------|
| Derivative liabilities presented in offsetting table | 50 | 9 |
| Less: Accrued interest payable presented separately in consolidated balance sheet | - | (1) |
| Derivative liabilities balance presented in the consolidated balance sheet | 50 | 8 |

20. Liquidity Risk

Liquidity risk is the risk that we will encounter difficulty in meeting obligations associated with financial liabilities. Liquidity risk comprises both funding liquidity risk, which is the risk that we will be unable to meet our payment obligations when required due to an inability to borrow or realize on overdraft facilities, and market liquidity risk, which is the risk that we are not able to unwind or offset a particular position without incurring losses because of inadequate market depth or market disruption.

The principal financial obligations exposing us to liquidity risk include, but are not limited to:

- the payment of claims incurred by the Mortgage Insurance Activity;
- the need to fulfill the TPGs we have issued if sufficient funds are not available for the payment of principal or interest on NHA MBS or CMB by Approved Issuers or CHT, respectively; and
- payments required by borrowings and derivatives.

² Gross amounts of financial instruments not offset in the consolidated balance sheet refers to amounts recorded to derivative assets and securities purchased under resale agreements where we have a legally enforceable right to offset against amounts recorded to derivative liabilities and securities sold under repurchase agreements, on a counterparty-by-counterparty basis, in the event of default of the counterparty.

³ Represents the fair value of securities we sold to counterparties with our commitment to repurchase from the counterparty at a future date, net of the fair value of any margin posted by our counterparties.

We have a liquidity risk policy, which includes appropriate limits and other mitigants to ensure sufficient resources to meet current and projected cash requirements.

The Mortgage Insurance and Mortgage Funding Activities' investment portfolios are managed to ensure that there is sufficient cash flow to meet projected claims. Sources of liquidity include: fees, premiums, investment income and proceeds from sales and maturities of investments.

Within the NHA MBS and CMB programs, liquidity risk refers to the risk that we may not be able to provide the funding required, in a timely fashion, to satisfy a call on our TPG obligations. As guarantor, we are exposed to the risk of NHA MBS issuer default, CMB program repo and swap counterparty default, impairment of eligible CMB program collateral securities and system or other operational failures. With respect to our TPGs, our policy is to maintain sufficient liquidity to cover the largest exposure to a single counterparty on a given payment date. Cash, short-term investments and investment securities held in any of our activities can be utilized to satisfy a call on the TPGs. Additional liquidity sources in the event of an immediate need to fulfill the TPGs include overdraft facilities and a \$350 million (2020 – \$350 million) line of credit with the Central Paying Agent. The Central Paying Agent acts on CHT's behalf to carry out certain payment functions in the CMB program, including collection of monthly payments on NHA MBS purchased and administration and reporting of cash flows. Other policies in place to mitigate liquidity risk include ensuring high credit quality investments as permitted by the CHT trust agreements and swap counterparties and the establishment of maturity monitoring guidelines.

The Assisted Housing Activity investment portfolio is managed to ensure that there is sufficient cash flow to meet funding needs in case of contingencies causing operational disruptions, unanticipated needs, and to facilitate use of the CBP. As described in Note 18, for our DL loan portfolios, we either use derivatives to manage mismatches in the timing of cash flows or our asset/liability management strategy to match our future cash inflows with future obligations. Further sources of liquidity associated with our Assisted Housing Activity include overdraft facilities and cash and short-term investments in marketable securities. For any additional liquidity requirements, we can access the CBP upon Department of Finance approval as per our borrowing authorities as disclosed in Note 15.

At 31 December 2021, we had \$300 million (2020 – \$300 million) of overnight overdraft facilities available with our banker, under which we had drawn \$4 million (2020 - nil).

We also mitigate liquidity risk through the use of ISDA master netting agreements that reduce the amount of cash required to satisfy derivative obligations.

Maturity analysis

The following table presents the expected payout pattern of our financial liabilities, including accrued interest; this table therefore cannot be reconciled to the consolidated balance sheet.

| (in millions) | Within 1 month | 1 to 3 months | 3 to 12 months | 1 to 5 years | Over 5 years | Total 2021 | Total 2020 |
|---|----------------|---------------|----------------|--------------|--------------|------------|------------|
| Accounts payable and other liabilities | 45 | 120 | 95 | 162 | 4 | 426 | 621 |
| Derivatives | 18 | - | - | - | 32 | 50 | 8 |
| Provision for claims | 22 | 39 | 162 | 74 | 13 | 310 | 735 |
| Borrowings – designated at FVTPL ¹ | - | 20 | 69 | 400 | - | 489 | 1,168 |
| Borrowings – amortized cost ¹ | 378 | 13,032 | 37,253 | 174,130 | 70,476 | 295,269 | 290,524 |
| Total | 463 | 13,211 | 37,579 | 174,766 | 70,525 | 296,544 | 293,056 |

¹ In the prior year financial statements, we disclosed Borrowings – designated at FVTPL of \$1,806 million and Borrowings – amortized cost of \$289,886 million. Due to a more thorough analysis performed in the current year, we have reclassified \$638 million of Borrowings – designated at FVTPL to Borrowings – amortized cost to conform with current year presentation.

Commitments related to loans and financial guarantees are disclosed in Note 14 and Note 8, respectively.

21. Accounts Receivable and Other Assets

The following table presents the composition of accounts receivable and other assets.

| (in millions) | 2021 | 2020 |
|-------------------------------------|-------|------|
| Deferred Government of Canada fees | 325 | 311 |
| Deferred acquisition costs (Note 7) | 197 | 200 |
| Property and equipment ¹ | 131 | 73 |
| Intangible assets ¹ | 120 | 125 |
| Income taxes receivable | 64 | 9 |
| Net estimated borrower recoveries | 56 | 66 |
| Accounts Receivable | 49 | 46 |
| Non-current assets held for sale | 46 | 35 |
| Right-of-use assets | 19 | 34 |
| Other | 28 | 32 |
| Total | 1,035 | 931 |

¹ In the current year, we changed our presentation to show intangible assets separately from property and equipment. To ensure comparability, we have revised the previously stated balance of property and equipment of \$198 million by removing the \$125 million of intangible assets

22. Investment Property

The following table presents the changes in the investment property balance. Disclosures related to the determination of fair value of investment property are included in Note 11.

| | | 2021 | | | 2020 | |
|--|-----------------------|---------------------|-------|-----------------------|---------------------|-------|
| (in millions) | Mortgage Insurance | Assisted Housing | Total | Mortgage Insurance | Assisted Housing | Total |
| Balance at beginning of year | - | 281 | 281 | 9 | 267 | 276 |
| Additions | - | 2 | 2 | - | - | - |
| Disposals | - | - | - | (11) | (2) | (13) |
| Net unrealized gains (losses) in net income ¹ | - | 31 | 31 | 2 | 16 | 18 |
| Balance at end of year | - | 314 | 314 | - | 281 | 281 |

¹ Included in other income.

23. Accounts Payable and Other Liabilities

The following table presents the composition of accounts payable and other liabilities.

| (in millions) | 2021 | 2020 |
|--|------|------|
| Accrued housing programs expenses | 224 | 275 |
| Affordable Rental Housing Innovation Fund deferred funding | 114 | 61 |
| Accounts payable and accrued liabilities | 108 | 120 |
| Government of Canada Fees | 93 | 124 |
| Other miscellaneous liabilities | 75 | 106 |
| Lease liabilities | 23 | 37 |
| Self-Insured Provision | 13 | 29 |
| Total | 650 | 752 |

24. Pension and Other Post-Employment **Benefits**

Defined benefit plans

The defined benefit plans include the defined benefit Pension Plan and Supplemental Plan as well as the other non-pension post-employment defined benefit plans.

On 1 January 2018, all eligible members were transferred to a new modified defined benefit pension plan. All pension plan modifications applied to service following the implementation date. All benefits earned by employees under the existing plans prior to the implementation date remained unchanged. Our defined benefit Pension Plan requires contributions to be made to a separately administered fund (Pension Fund) whereas the defined benefit Supplemental Plan and the other non-pension post-employment defined benefits are unfunded and we pay the benefits directly.

Pursuant to a trust agreement we entered into with the Pension Fund Trustees (the Trustees), they are responsible for the management and administration of the Pension Fund. There are eight Trustees, including our President, one member of our Board of Directors, three members of Senior Management and three Pension Council members (a combination of current and retired employees). The Trustees set investment policies and objectives within the context of the investment philosophy and Risk Appetite Framework established by the Board of Directors and periodically review these policies. The Pension Fund's Investment Committee assists the Trustees in the investment management of the defined benefit Pension Plan.

The Pension Fund's strategic asset allocation policy is based on the principle of diversification of investments among various asset classes relative to the liabilities of the defined benefit Pension Plan. In 2021, the Board of Directors approved a new asset allocation policy, which we expect to fully adhere to by 2026. The strategic asset allocation under the new policy is 37% public equity, 29% fixed income, 21% real assets, 5% private equity, and 3% private debt and 5% US dollar-denominated emerging market debt, on a net asset basis. The policy includes permissible ranges 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.

The Pension Fund's investments are subject to credit, liquidity and market risks. The most significant of these risks is asset volatility due to market conditions. 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 are conditional in accordance with the Pension Plan rules and upon approval from the Board of Directors. As such, liabilities that are adjusted to CPI are subject to interest rate risks, inflation risk and changes in the life expectancy of the plan members. The most significant risk is interest rate risk as the present value of the liabilities is calculated using a discount rate set with reference to Canadian AA-rated corporate bond yields. If the Pension Fund assets underperform this yield, the funded position of the defined benefit Pension Plan decreases. Financial risks are managed primarily through the diversification of assets and prudent investment strategies.

The actuarial valuation on a going concern basis of our defined benefit component of the Pension Plan reports a surplus as at 31 December 2021. As a result, we are not required to make going concern special payments. The valuation on a solvency basis, which assumes that the plan is wound up at the valuation date, reports a decrease in the deficit as at 31 December 2021 and we do not expect to make solvency special payments in 2022.

We continue to make full normal contributions and to monitor the defined benefit Pension Plan. The next actuarial valuation will be undertaken at 31 December 2022, with the results reported in the 2022 consolidated financial statements.

The defined benefit obligation relating to the defined benefit plans is funded as follows:

| | Pen benefi | | Other post-employment benefit plans | | |
|----------------------------|---------------|-------|-------------------------------------|------|--|
| (in millions) | 2021 | 2020 | 2021 | 2020 | |
| Wholly or partially funded | 2,631 | 2,709 | - | - | |
| Wholly unfunded | 104 | 111 | 126 | 138 | |
| Defined benefit obligation | 2,735 | 2,820 | 126 | 138 | |

Defined benefit pension and other post-employment benefit plans

The following tables present information about the defined benefit plans.

Pension expense included in net income

| | | | | | | | | | - |
|---|---------------|----------------------|-------------------------------|--|------------------|---|--------------------------|----------------------|----------------|
| 2021 (in millions) | 1 Jan 2021 | Current service cost | Interest cost/ (income) | Sub-total included in net income | Benefits paid | Remeasurements of the net defined benefit plans incl. in OCI ¹ | Employees' contributions | CMHC's contributions | 31 Dec 2021 |
| Pension benefit plans | | | | | | | | | |
| Defined benefit obligation | 2,820 | 60 | 72 | 132 | (102) | (139) | 24 | - | 2,735 |
| Fair value of plan assets | (2,409) | - | (60) | (60) | 102 | (152) | (24) | (68) | (2,611) |
| Pension benefit plans liability | 411 | 60 | 12 | 72 | - | (291) | - | (68) | 124 |
| Other post-employment benefit plans | | | | | | | | | |
| Defined benefit obligation | 138 | 1 | 4 | 5 | (4) | (13) | - | - | 126 |
| Fair value of plan assets | - | - | - | - | 4 | - | - | (4) | - |
| Other post-employment benefit plans liability | 138 | 1 | 4 | 5 | - | (13) | - | (4) | 126 |
| Defined benefit plans liability | 549 | 61 | 16 | 77 | - | (304) | - | (72) | 250 |

¹ The detailed breakdown of remeasurement gains and losses on defined benefit plans included in OCI is found in additional tables below.

Pension expense included in net income

| 1 Jan 2020 | Current service cost | Interest cost/ (income) | Sub-total included in net income | Benefits paid | Remeasurements of the net defined benefit plans incl. in OCI ¹ | Employees' contributions | CMHC's contributions | 31 Dec 2020 |
|---------------|-------------------------------------|--|--|--|---|---|--|--|
| | | | | | | | | |
| 2,579 | 45 | 78 | 123 | (99) | 197 | 20 | - | 2,820 |
| (2,259) | - | (66) | (66) | 99 | (137) | (20) | (26) | (2,409) |
| 320 | 45 | 12 | 57 | - | 60 | - | (26) | 411 |
| | | | | | | | | |
| 129 | 1 | 4 | 5 | (4) | 8 | - | - | 138 |
| - | - | - | - | 4 | - | - | (4) | - |
| 129 | 1 | 4 | 5 | - | 8 | - | (4) | 138 |
| 449 | 46 | 16 | 62 | - | 68 | - | (30) | 549 |
| | 2,579 (2,259) 320 129 - | 2,579 45 (2,259) - 320 45 129 1 - 129 1 | 1 Jan 2020 Current service cost vervice cost (income) 2,579 45 78 (2,259) - (66) 320 45 12 129 1 4 - - - 129 1 4 - - - 129 1 4 | 1 Jan 2020 Current service cost cost/ (income) included in net income 2,579 45 78 123 (2,259) - (66) (66) 320 45 12 57 129 1 4 5 - - - - 129 1 4 5 129 1 4 5 | 1 Jan 2020 Current service cost (income) cost/ (income) included in net income Benefits paid 2,579 45 78 123 (99) (2,259) - (66) (66) 99 320 45 12 57 - 129 1 4 5 (4) - - - 4 129 1 4 5 - 129 1 4 5 - | 1 Jan 2020 Current service cost cost/ (income) included in net income Benefits paid net defined benefit plans incl. in OCI¹ 2,579 45 78 123 (99) 197 (2,259) - (66) (66) 99 (137) 320 45 12 57 - 60 129 1 4 5 (4) 8 - - - 4 - 129 1 4 5 - 8 129 1 4 5 - 8 - - - - 8 - - - 8 - 8 | 1 Jan 2020 Current service cost cost/ (income) included in net income Benefits paid net defined benefit plans incl. in OCI¹ Employees' contributions 2,579 45 78 123 (99) 197 20 (2,259) - (66) (66) 99 (137) (20) 320 45 12 57 - 60 - 129 1 4 5 (4) 8 - - - - 4 - - 129 1 4 5 - 8 - 129 1 4 5 - 8 - | 1 Jan 2020 Current service cost cost/ (income) included in net income Benefits plans incl. in OCI¹ net defined benefit plans incl. in OCI¹ Employees' contributions CMHC's contributions 2,579 45 78 123 (99) 197 20 - (2,259) - (66) (66) 99 (137) (20) (26) 320 45 12 57 - 60 - (26) 129 1 4 5 (4) 8 - - (4) 129 1 4 5 - 8 - (4) |

¹ The detailed breakdown of remeasurement gains and losses on defined benefit plans included in OCI is found in additional tables below.

The following table presents further detailed information on the various sources of remeasurement in OCI included in the prior table.

| | | Remeasurement | (gains)/losses included in C | DCI | | | | |
|-------------------------------------|---|--|---|--|--------------------------|--|--|--|
| (in millions) | Return on plan assets (excluding interest income) | Actuarial changes arising from changes in demographic assumptions | Actuarial changes arising from changes in financial assumptions | Actuarial changes arising from plan experience | Total included in OCI | | | |
| Year ended 31 December 2021 | | | | | | | | |
| Pension benefit plans | | | | | | | | |
| Defined benefit obligation | - | - | (173) | 34 | (139) | | | |
| Fair value of plan assets | (152) | - | - | - | (152) | | | |
| Pension benefit plans liability | (152) | - | (173) | 34 | (291) | | | |
| Other post-employment benefit plans | | | | | | | | |
| Defined benefit obligation | - | (1) | (12) | - | (13) | | | |
| Defined benefit plans liability | (152) | (1) | (185) | 34 | (304) | | | |
| Year ended 31 December 2020 | | | | | | | | |
| Pension benefit plans | | | | | | | | |
| Defined benefit obligation | - | (6) | 229 | (26) | 197 | | | |
| Fair value of plan assets | (137) | - | - | - | (137) | | | |
| Pension benefit plans liability | (137) | (6) | 229 | (26) | 60 | | | |
| Other post-employment benefit plans | | | | | | | | |
| Defined benefit obligation | - | (3) | 12 | (1) | 8 | | | |
| Defined benefit plans liability | (137) | (9) | 241 | (27) | 68 | | | |

The remeasurement of plan assets is the difference between the actual rate of return on the defined benefit pension plan assets and the discount rate used to measure the obligation. The actual return on plan assets was \$212 million (2020 – \$203 million).

The following table presents information on the fair value of the plan assets.

| | 2021 | | | 2020 | | | | |
|---|--------|----------|-------|---------|--------|----------|-------|---------|
| (in millions, unless otherwise indicated) | Quoted | Unquoted | Total | % | Quoted | Unquoted | Total | % |
| Cash | 5 | - | 5 | 0.2% | 5 | - | 5 | 0.2% |
| Short-term investments ¹ | - | 32 | 32 | 1.2% | 16 | 52 | 68 | 2.8% |
| Bonds and debentures ² | | | | | | | | |
| Securities issued or guaranteed by the Government of Canada | 273 | 30 | 303 | 11.6% | 279 | 1 | 280 | 11.6% |
| Provinces/municipalities | 638 | 74 | 712 | 27.3% | 782 | 55 | 837 | 34.7% |
| Corporate/other entities | 2 | 33 | 35 | 1.4% | - | 36 | 36 | 1.5% |
| Equities | | | | | | | | |
| Canadian equities | 554 | - | 554 | 21.2% | 445 | - | 445 | 18.5% |
| Foreign equities | 594 | - | 594 | 22.7% | 520 | - | 520 | 21.6% |
| Infrastructure | - | 130 | 130 | 5.0% | - | 112 | 112 | 4.6% |
| Other real assets | - | 18 | 18 | 0.7% | - | 12 | 12 | 0.5% |
| Real return securities ³ | 28 | 286 | 314 | 12.0% | 302 | 9 | 311 | 12.9% |
| Real estate, net of mortgages payable | - | 291 | 291 | 11.2% | - | 276 | 276 | 11.5% |
| Securities sold under repurchase agreements | - | (375) | (375) | (14.4)% | - | (490) | (490) | (20.3)% |
| Other liabilities net of non-investment assets | - | (2) | (2) | (0.1)% | - | (3) | (3) | (0.1)% |
| Total | 2,094 | 517 | 2,611 | 100% | 2,349 | 60 | 2,409 | 100% |

¹ Includes \$27 million or 1.1% (2020 – \$19 million or 0.8%) of investments made in securities issued or guaranteed by related parties.

² Includes \$72 million or 2.8% (2020 – \$73 million or 3.0%) of investments made in securities we guaranteed (CMB) and \$231 million or 8.8% (2020 – \$207 million or 8.6%) of investments made in securities issued or guaranteed by related parties.

³ Includes \$310 million or 11.8% (2020 – \$306 million or 12.7%) of investments made in securities issued or guaranteed by related parties.

Assumptions

The assets and obligation of the defined benefits were measured for accounting purposes as at 31 December 2021 with the following assumptions.

| | Pension be | nefit plans | Other post-employment benefit plans | | |
|--|--------------------------------|--------------------------------|-------------------------------------|----------|--|
| | 2021 | 2020 | 2021 | 2020 | |
| Defined benefit obligation | | | | | |
| Discount rate | 3.0% | 2.6% | 3.0% | 2.6% | |
| Rate of compensation increase | 3.3% | 3.3% | 3.3% | 3.3% | |
| Inflation rate | 2.0% | 2.0% | 2.0% | 2.0% | |
| Benefit costs | | | | | |
| Discount rate | 2.6% | 3.1% | 2.6% | 3.1% | |
| Rate of compensation increase | 3.3% | 3.3% | 3.3% | 3.3% | |
| Inflation rate | 2.0% | 2.0% | 2.0% | 2.0% | |
| Assumed medical cost trend | | | | | |
| Initial medical cost trend rate | - | - | 4.8% | 5.4% | |
| Medical cost trend rate declines to ¹ | - | - | 4.0% | 4.0% | |
| Year that the rate reaches the ultimate trend rate | - | - | 2040 | 2040 | |
| Life expectancy of plan members at age 65 | | | | | |
| Male | Defined Benefit Plan: 23 years | Defined Benefit Plan: 23 years | 23 years | 23 years | |
| | Supplemental Plan: 24 years | Supplemental Plan: 24 years | | | |
| Female | Defined Benefit Plan: 25 years | Defined Benefit Plan: 25 years | 25 years | 25 years | |
| | Supplemental Plan: 26 years | Supplemental Plan: 26 years | | | |

¹ Average decrease per year of 0.04% (2020 – 0.1%).

The discount rates are determined by reference to Canadian AA-rated corporate bonds with terms to maturity approximating the duration of the defined benefit obligation. The weighted average duration of the defined pension benefit obligation is 17 years (2020 – 16.5 years).

The mortality assumptions used are derived from standard tables published by the Canadian Institute of Actuaries (2014 Public Sector Mortality Table).

Sensitivity

The following table shows the impact of changes in the assumptions as at 31 December 2021.

| (in millions) | Increase (decrease) in defined benefit obligation | Increase (decrease) in net benefit costs recognized in operating expenses in 2022 |
|---|--|--|
| 50 bps increase/decrease in discount rate | (219)/249 | (15)/15 |
| 50 bps increase/decrease in rate of compensation increase | 30/(28) | 5/(4) |
| 10 bps increase/decrease in inflation rate | 35/(34) | 2/(2) |
| 100 bps increase/decrease in health care cost trend rates | 8/(7) | - |
| One year increase in life expectancy of plan members | 97 | 5 |

The above sensitivity analyses are based on a change in one assumption while holding all other assumptions constant. In practice, this is unlikely to occur and changes in some of the assumptions might be correlated. The method and types of assumptions used in preparing the sensitivity analyses have not changed from the previous year.

Cash flows

In 2022, we expect to make contributions to the defined benefit plans of approximately \$28 million.

25. Income Taxes

The following table presents the components of income tax.

| (in millions) | 2021 | 2020 |
|--|-------|------|
| Current income tax expense | 610 | 507 |
| Deferred income tax relating to origination and reversal of temporary differences | 27 | 47 |
| Total income tax expense included in net income | 637 | 554 |
| Income tax expense (recovery) on other comprehensive loss | | |
| Net unrealized gains (losses) from FVOCI financial instruments | (116) | 184 |
| Reclassification of prior years' net unrealized gains realized in the period in net income | (43) | (70) |
| Remeasurement gains (losses) on defined benefit plans | 37 | (8) |
| Total income tax recovery included in other comprehensive loss | (122) | 106 |
| Total | 515 | 660 |

The following is a reconciliation of the statutory tax rate to the effective tax rate.

| (in millions, unless otherwise indicated) | 2021 | 2020 |
|---|-------|-------|
| Income before income taxes | 2,561 | 2,216 |
| Statutory tax rate | 25% | 25% |
| Income taxes computed at statutory tax rate | 640 | 554 |
| Permanent differences | (3) | - |
| Income tax expense | 637 | 554 |
| Effective tax rate | 25% | 25% |

The statutory tax rate of 25% is comprised of the federal income tax rate of 38% less the general rate reduction of 13%.

The following tables present the tax-effected temporary differences, which result in deferred income tax assets and liabilities.

| (in millions) | 2020 | Change through consolidated net income | Change through consolidated OCI | Change through consolidated equity | 2021 |
|--|-------|--|---------------------------------|------------------------------------|-------|
| Deferred income tax assets | | | | | |
| Fair value of financial instruments | (101) | (4) | 52 | - | (53) |
| Post-employment benefits | 82 | 1 | (37) | - | 46 |
| Net realized losses on borrowings | 29 | (6) | - | - | 23 |
| Total deferred income tax assets | 10 | (9) | 15 | - | 16 |
| Deferred income tax liabilities | | | | | |
| Provision for claims ¹ | (142) | (12) | - | - | (154) |
| Fair value of investment properties | (65) | (6) | - | - | (71) |
| Other | (35) | - | - | (3) | (38) |
| Total deferred income tax liabilities | (242) | (18) | - | (3) | (263) |
| Net deferred income tax assets (liabilities) | (232) | (27) | 15 | (3) | (247) |

¹ The provision for claims includes the portion that is self-insured.

| (in millions) | 2019 | Change through consolidated net income | Change through consolidated OCI | Change through consolidated equity | 2020 |
|--|-------|--|---------------------------------|------------------------------------|-------|
| Deferred income tax assets | | | | · | |
| Fair value of financial instruments | (17) | (26) | (58) | - | (101) |
| Post-employment benefits | 70 | 4 | 8 | - | 82 |
| Net realized losses on borrowings | 30 | (1) | - | - | 29 |
| Total deferred income tax assets | 83 | (23) | (50) | - | 10 |
| Deferred income tax liabilities | | | | | |
| Provision for claims ¹ | (137) | (5) | - | - | (142) |
| Fair value of investment properties | (61) | (4) | - | - | (65) |
| Other | (14) | (15) | - | (6) | (35) |
| Total deferred income tax liabilities | (212) | (24) | - | (6) | (242) |
| Net deferred income tax assets (liabilities) | (129) | (47) | (50) | (6) | (232) |

¹ The provision for claims includes the portion that is self-insured.

The deferred income tax assets have been recognized in full as it is probable that taxable profit will be available against which the deductible temporary differences can be utilized.

26. Related Party Transactions

Our related parties include the Government and its departments, agencies and Crown corporations (in terms of common ownership), key management personnel and their close family members, and the Pension Plan.

All material related party transactions and outstanding balances not disclosed elsewhere are disclosed below.

Transactions or balances between the entities that have been eliminated on consolidation are not reported.

Government of Canada and its departments, agencies and Crown corporations

The following tables summarize income earned and receivable, the total amount invested in instruments issued or guaranteed by the Government and government fees.

| (in millions) | 2021 | 2020 |
|--|-------|--------|
| Income earned and receivable | | |
| Investment income – cash equivalents | 1 | 3 |
| Investment income – investment securities | 80 | 130 |
| Interest receivable – investment securities ¹ | 19 | 36 |
| Government issued | | |
| Cash equivalents | 378 | 976 |
| Investment securities | 8,835 | 11,862 |
| Government of Canada fees | | |
| Mortgage Funding – expense | 31 | 29 |
| Mortgage Insurance – expense | 48 | 44 |
| Mortgage Funding – payable | 30 | 40 |
| Mortgage Insurance – payable | 63 | 84 |

¹ Included in accrued interest receivable.

Key management personnel

The following table presents the compensation of key management personnel, defined as those persons having authority and responsibility for planning, directing and controlling our activities. This includes the Board of Directors and members of the Executive Committee.

| | | 2021 | | 2020 | | | |
|--------------------------|-----------------------|------------------------|-------|--------------------|------------------------|-------|--|
| (in thousands) | Board of Directors | Executive Committee | Total | Board of Directors | Executive Committee | Total | |
| Short-term benefits | 120 | 4,930 | 5,050 | 159 | 4,368 | 4,527 | |
| Post-employment benefits | - | 1,137 | 1,137 | - | 1,082 | 1,082 | |
| Total | 120 | 6,067 | 6,187 | 159 | 5,450 | 5,609 | |

Receivable balances outstanding with members of key management personnel as at 31 December 2021 are nil (2020 - nil).

Pension plan

The following table summarizes interest expense we incurred and operating expenses we recovered from the Pension Plan.

| (in millions) | 2021 | 2020 |
|---|------|------|
| Interest expense – paid to the Pension Plan for its holdings of CMB ¹ | 1 | 1 |
| Operating expense recoveries – paid by the Pension Plan for our administration services | 4 | 5 |

¹ See Note 24 for additional information on holdings of CMB by the Pension Plan.

Receivable balances outstanding from the Pension Plan as at 31 December 2021 are \$2 million (2020 - \$2 million).

27. Commitments and Contingent Liabilities

Letters of credit

We have \$111 million (2020 – \$121 million) in letters of credit outstanding, which secure benefits accrued up to 31 December 2021 under the Supplemental Plan.

Other financial obligations

Total estimated remaining contractual financial obligations are as follows based on minimum commitment:

| (in millions) | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 and thereafter |
|-------------------------------|-------|-------|-------|------|------|---------------------|
| Housing programs ¹ | 1,851 | 1,190 | 1,075 | 927 | 823 | 2,426 |
| Other contractual obligations | 86 | 37 | 3 | 3 | 3 | 10 |
| Total | 1,937 | 1,227 | 1,078 | 930 | 826 | 2,436 |

¹ Total remaining contractual financial obligations for housing programs extend for periods up to 25 years (2020 – 25 years).

Legal claims

There are legal claims of \$4 million (2020 – \$3 million) against us. Due to the uncertainty of the outcome of these claims, no provision for loss has been recorded. We do not expect the ultimate resolution of any of the proceedings to which we are party to have a significant adverse effect on our financial position.

28. Operating Expenses

The following table presents the composition of operating expenses

| (in millions) | 2021 | 2020¹ |
|---|------|-------|
| Personnel costs | 360 | 321 |
| Information and technology costs | 118 | 125 |
| Amortization of Government of Canada fees | 79 | 73 |
| Professional services | 64 | 168 |
| Depreciation, amortization and impairment of property and equipment and intangible assets | 54 | 53 |
| Other administrative goods and services | 18 | 27 |
| Total operating expenses | 693 | 767 |

¹ We revised the line items we disclose for operating expenses to present them by nature.

29. Current and Non-Current Assets and Liabilities

The following table presents assets and liabilities we expect to recover or settle within 12 months of the balance sheet date.

| (in millions) | | 2021 | | | 2020 | | |
|---|---------------|--------------|---------|---------------|--------------|---------|--|
| | Within 1 year | After 1 year | Total | Within 1 year | After 1 year | Total | |
| Assets | | | | | | | |
| Cash and cash equivalents | 1,525 | - | 1,525 | 2,301 | - | 2,301 | |
| Securities purchased under resale agreements | - | - | - | 174 | - | 174 | |
| Accrued interest receivable | 720 | - | 720 | 714 | - | 714 | |
| Investment securities: | | | | | | | |
| Fair value through profit or loss | 135 | 154 | 289 | 258 | 141 | 399 | |
| Fair value through other comprehensive income | 2,696 | 17,286 | 19,982 | 3,512 | 19,582 | 23,094 | |
| Amortized cost | 958 | 1,859 | 2,817 | 772 | 655 | 1,427 | |
| Derivatives | 23 | 8 | 31 | 95 | 22 | 117 | |
| Due from the Government of Canada | 208 | 155 | 363 | 183 | 156 | 339 | |
| Loans: | | | | | | | |
| Fair value through profit or loss | 49 | 451 | 500 | 329 | 414 | 743 | |
| Amortized cost | 45,283 | 227,498 | 272,781 | 38,752 | 231,698 | 270,450 | |
| Accounts receivable and other assets | 309 | 726 | 1,035 | 274 | 657 | 931 | |
| Investment property | - | 314 | 314 | - | 281 | 281 | |
| | 51,906 | 248,451 | 300,357 | 47,364 | 253,606 | 300,970 | |
| Liabilities | | | | | | | |
| Accounts payable and other liabilities | 487 | 163 | 650 | 539 | 213 | 752 | |
| Accrued interest payable | 612 | - | 612 | 573 | - | 573 | |
| Derivatives | 18 | 32 | 50 | 2 | 6 | 8 | |
| Provision for claims | 223 | 87 | 310 | 629 | 106 | 735 | |
| Borrowings: | | | | | | | |
| Fair value through profit or loss | 81 | 394 | 475 | 666 | 490 | 1,156 | |
| Amortized cost | 45,831 | 230,038 | 275,869 | 39,215 | 233,154 | 272,369 | |
| Defined benefit plans liability | 108 | 142 | 250 | 107 | 442 | 549 | |
| Unearned premiums and fees | 1,979 | 6,705 | 8,684 | 1,941 | 6,080 | 8,021 | |
| Deferred income tax liabilities | - | 247 | 247 | - | 232 | 232 | |
| | 49,339 | 237,808 | 287,147 | 43,672 | 240,723 | 284,395 | |
| Net | 2,567 | 10,643 | 13,210 | 3,692 | 12,883 | 16,575 | |

30. Comparative Figures

We have reclassified certain comparative information as follows in the consolidated statement of cash flows:

- We previously presented property and equipment and intangible asset acquisitions as cash flows from operating activities, but now present them as cash flows from investing activities.
- Within operating activities, we have reclassified comparative information in accounts receivable and other assets and accounts payable and other liabilities, and we now present depreciation, amortization and impairment in a separate line, to better reflect the nature of our property and equipment and intangible asset transactions.
- We have reclassified comparative information for borrowings issuances and investment securities purchases to remove primary market purchases of CMBs. We have made a corresponding reclassification to issuances and eliminations in Note 15.

31. Subsequent Event

On 24 March 2022, we declared dividends of \$995 million, which we expect to pay no later than 30 April 2022.

2021 Annual Report

CORPORATE GOVERNANCE

Legislative framework

Incorporated under the CMHC Act, the company is accountable to Parliament through the Minister responsible for CMHC, currently the Minister of Housing and Diversity and Inclusion. Our legislative framework includes the CMHC Act, the *National Housing Act*, the *National Housing Strategy Act* and the *Financial Administration Act*.

Board of Directors

The Board of Directors is responsible for managing our affairs and the conduct of our business in accordance with applicable legislation and the governing bylaws. As steward of the company, the Board:

- sets strategic direction in support of government policies and priorities;
- ensures the integrity and adequacy of company policies, information systems and management practices;
- ensures that principal risks are identified and managed;
- evaluates and monitors the company's performance and results; and
- has a duty to:
 - protect the short- and long-term interests of the company;
 - safeguard CMHC's assets; and
 - be prudent and professional in fulfilling its duties.

The Board consists of the Chair, the President and Chief Executive Officer, the Deputy Minister to the Minister responsible for CMHC, the Deputy Minister of Finance and eight other directors appointed by the Minister with the approval of the Governor in Council. The Board committees include (mandates are available on our website cmhc.ca):

AuditRisk Management

Corporate Governance
 Affordable Housing
 Pension Fund Trustees

Human Resources
 Executive Committee

The Board meets a minimum of five times per year and holds an annual public meeting.

To understand the diversity of housing needs of people living in Canada, the Board usually conducts its meetings and meets with community representatives and housing proponents from across Canada. Due to COVID-19, the Board conducted all meetings virtually.

As part of continuous performance enhancement and ongoing development and education, the Board undergoes regular assessments, periodically alternating between a self-assessment and an overall assessment administered by a third party. The latter examines the functioning and performance of the Board as a whole in comparison to best practices, and the boards of other Crown Corporations and financial institutions.

2021 Annual Report CORPORATE GOVERNANCE 145

Board of Directors

As of 31 December 2021



Derek Ballantyne
Chair of the Board of Directors
(29 April 2018 – 28 April 2023)
CEO of Encasa Financial Inc.,
Toronto



Janice Abbott
Chair of the Affordable
Housing Committee
(14 December 2020 –
13 December 2023*)
CEO of Atira Women's
Resource Society, White Rock



Navjeet (Bob) Dhillon (5 February 2015 – 4 February 2019; continues in office until an appointment is made) President, CEO & founder of Mainstreet Equity Corporation



Graham Flack (outgoing member) Deputy Minister, Employment and Social Development Canada (9 October 2018 – 25 October 2021)



Kelly Gillis
Deputy Minister of Infrastructure
and Communities
(effective 26 October 2021)



Anne Giardini
Chair of the Corporate Governance and Nominating Committee,
Chair of the Pension Fund Trustees
(2 January 2018 – 1 January 2022)
Formerly served as Chancellor, Simon Fraser University, and as President of Weyerhaeuser Company Limited, Vancouver



André Hébert
Chair of the Risk
Management Committee
(27 February 2019 – 26 February 2023)
Head of Technology, Air Canada
Vacations, Montreal



Gordon Laing
Chair of the Audit Committee
(12 December 2018 – 11 December 2022)
President and CEO of Southwest
Properties Limited, Halifax



Linda Morris
Chair of the Human Resources Committee (14 December 2017 – 13 December 2021; continues in office until an appointment is made)
Formerly served as Senior Vice-President of Business Development, Member and Community Engagement at Vancity, Vancouver



Michael Sabia
Deputy Minister,
Department of Finance
(effective 14 December 2020)



(outgoing member)
Vice-Chair of the Board of Directors and Chair of the Risk Management Committee (30 January 2018 – 29 January 2021*)
Director of Teranet Inc., Toronto; formerly served in various senior management positions at Toronto Dominion Bank/TD Canada Trust



Evan SiddallOutgoing President and
Chief Executive Officer
(1 January 2014 – 5 April 2021)



Romy Bowers Incoming President and Chief Executive Officer (effective 6 April 2021)



2 vacant Director Positions

Bruce Shirreff

2021 Annual Report BOARD OF DIRECTORS 146

^{*} second term

Compensation and Attendance Record

| Member | Compensation (\$) | Committee Member Attendance | | | | | | | | |
|-----------------------------|-------------------|-----------------------------|---------------------------|-------|--------------------|--------------------|-----------------------|--------------------------|--|--|
| | | Board of Directors | Governance and Nominating | Audit | Human Resources | Risk Management | Affordable Housing | Pension Fund Trustees | | |
| Derek Ballantyne | 31,228 | 7/7 | 4/4 | - | - | - | - | - | | |
| Janice Abbott | 14,950 | 7/7 | 4/4 | - | - | - | 3/3 | - | | |
| Romy Bowers ¹ | N/A | 5/7 | - | - | - | - | - | 3/4 | | |
| Navjeet (Bob) Dhillon | 12,950 | 7/7 | - | - | 2/2 | - | 2/3 | - | | |
| Graham Flack* | N/A | 5/7 | 2/4 | - | - | - | 1/3 | - | | |
| Anne Giardini | 15,950 | 7/7 | 4/4 | 5/5 | - | - | - | 4/4 | | |
| André Hébert | 14,700 | 7/7 | - | - | - | 4/4 | 3/3 | - | | |
| Gordon Laing | 13,950 | 6/7 | - | 5/5 | - | 3/4 | - | - | | |
| Linda Morris | 14,700 | 7/7 | - | - | 2/2 | 4/4 | - | - | | |
| Michael Sabia* | N/A | 6/7 | - | 4/5 | - | 4/4 | - | - | | |
| Kelly Gillis | N/A | 1/7 | 1/4 | - | - | - | 1/3 | - | | |
| Evan Siddall ³ | N/A | 2/7 | - | - | - | - | - | 1/2 | | |
| Bruce Shirreff ² | 1,080 | 1/7 | 0/2 | - | 0/1 | 0/2 | - | - | | |

^{*} Participation by member or delegate

2021 Annual Report BOARD OF DIRECTORS 147

¹ incoming President effective 6 April 2021

² term ended 29 January 2021

³ outgoing President effective 5 April 2021

Executive Committee

The Executive Committee consists of the Chief Executive Officer's direct reports and has ultimate responsibility for strategic direction and risk management. Meet the team as of 31 December 2021:



Romy Bowers
President and
Chief Executive Officer



Kathleen Devenny Chief Risk Officer



Nadine Leblanc Senior Vice-President, Policy



Paul Mason Senior Vice-President, Client Solutions

Romy joined CMHC in 2015 and was appointed President and Chief Executive Officer in April 2021. She believes CMHC can be a catalyst for solving housing affordability challenges and a leader in building a housing system that is equitable and free of systemic racism. Prior to being appointed President, Romy served as CMHC's Chief Risk Officer, Chief Commercial Officer and, most recently, Senior Vice-President of Client Solutions, where she led a team that brings together the expertise of CMHC's commercial and assisted housing businesses to better understand the housing needs of people in Canada and develop new clientfocused products and services to meet those needs.

Kathleen has taken on the role of CMHC's Chief Risk Officer at a pivotal time, as CMHC's risk management capabilities and systems have matured after a decade of building new tools and a strong risk culture. These tools are now being put into practice across business lines so the company can take calculated risks to reach its 2030 aspiration.

Nadine leads Canada's foremost team of experts and researchers responsible for accelerating housing affordability in Canada through evidence-based policy, research and analytics. With the National Housing Strategy being rolled out, the Policy Sector is focusing on developing game-changing ideas that will help ensure that we reach our aspiration. Nadine joined CMHC in 2008 as part of the Finance team leading the development of major programs in response to the global financial crisis.

As Senior Vice-President of Client Solutions, Paul leads a team that brings together the expertise of CMHC's commercial and assisted housing businesses to develop solutions that better meet the housing needs of people in Canada. Paul joined CMHC in 2016 as Chief Information Officer, leading a technology and business transformation aimed at giving employees the tools and physical environment to deliver their best on behalf of people in Canada.

2021 Annual Report EXECUTIVE COMMITTEE 148



Steve Mennill
Chief Climate Officer



Caroline Sanfaçon Senior Vice-President, Client Operations



Marie-Claude Tremblay Chief of Staff



Michel Tremblay
Chief Financial Officer and Senior
Vice-President, Corporate Services



Lisa WilliamsSenior Vice-President, Strategy

Steve was appointed as CMHC's first Chief Climate Officer in April 2020. He is leading the implementation of a robust climate change strategy that includes actions relating to mitigation and adaptation, while remaining rooted in the company's goal of housing affordability for all by 2030. Steve's 29 years of experience at CMHC and his expertise in urban planning and housing finance converge to make him a leader in Canadian housing.

As Senior Vice-President of Client Operations, Caroline's mandate is to make delivering housing affordability solutions easy. To that end, her team is focused on simplifying the customer experience, continuously improving operational efficiencies and advancing CMHC's operational agility. A strategic and innovative thinker. Caroline brings to her role over 20 years of experience in public and private real estate, including extensive experience in retail and commercial real estate credit risk and lending.

Marie-Claude brings 25 years of public sector experience to her role as Chief of Staff to the President. In addition to advising the President, she is responsible for CMHC's communications and marketing activities, corporate governance, parliamentary affairs and correspondence, briefings and the Access to Information and Privacy Program.

As Chief Financial Officer, Michel is responsible for the stewardship of CMHC's assets and works closely with his Executive Committee colleagues to support the rollout of housing policies and programs. In his dual role as Senior Vice-President, Corporate Services, he also leads teams that deliver support functions ranging from legal services and human resources to information technology and procurement. Michel joined CMHC in 2005 and was integral to the design of Canada's National Housing Strategy.

Lisa is responsible for leading the development of our company's strategy. She is also charged with leading some of its key drivers, including CMHC's Anti-Racism and Equity Program, reconciliation with Indigenous Peoples, innovation and developing an approach to building partnerships that will drive the impact we are seeking from our strategy. Through her 19 years of service at CMHC, Lisa has gained a strong understanding of our corporate strategy and the role of our various business lines in helping people in Canada meet their housing needs.

2021 Annual Report EXECUTIVE COMMITTEE 149

Management team

Sylvie Bourdon

General Counsel and Vice-President, People and Culture

Mark Chamie

Vice-President, Treasury and Investments

Andre Charbonneau

Deputy Chief Financial Officer

Holly Cooper

Vice-President, Indigenous Relations

Brett Dietrich

Vice-President, Credit Assessment and Underwriting (Multi-Unit)

Anik Génier

Vice-President, Policy Operations and Outreach

Pam Hine

Vice-President, Housing Solutions (Multi-Unit)

Steffan Jones

Vice-President, Homeowner Business Transformation

Amélie Lecompte

Chief Information Officer

Neil Levecque

Vice-President, Operations (Multi-Unit)

Francis Mensah

Deputy Chief Risk Officer

Marie-Anna Murat

Vice-President, Communications and Marketing

Stéphane Poulin

Vice-President, Data, Research and Insight

Patricia Roset-Zuppa

Vice-President, Policy Development

Carla Staresina

Vice-President, Risk Management, Strategy and Products

Debbie Stewart

Vice-President, Innovation and Partnerships

Positions to be filled

Vice-President, Audit and Evaluation; and Vice-President, Equity

2021 Annual Report MANAGEMENT TEAM 150

GLOSSARY

Non-IFRS financial measures

We use a number of financial measures to assess our performance. Some are not calculated in accordance with International Financial Reporting Standards (IFRS), are not defined by IFRS and do not have standardized meaning that would ensure consistency and comparability with other institutions.

Arrears rate: The ratio (expressed as a percentage) of all loans that are typically more than 90 days past due to the number of outstanding insured loans.

Borrower defaults: Defaults from the mortgage insurance business occur when a borrower has missed the equivalent of at least one payment as at the reporting date.

Capital available to capital required: Under the mortgage funding activity, the ratio (expressed as a percentage) of capital available to capital required where capital required is calculated by applying risk factors to asset and liability exposures using a framework developed in accordance with both regulatory and economic capital principles.

Capital available to minimum capital required: Under the mortgage insurance activity, the ratio (expressed as a percentage) of capital available to minimum capital required where capital available is calculated as total equity adjusted for assets with a capital requirement of 100% and minimum capital required is calculated by applying risk factors to investment asset and liability exposures in accordance with guidelines established by the Office of the Superintendent of Financial Institutions.

Combined ratio: This ratio is the combination of loss ratio and operating expense ratio.

Guarantees-in-force: The total guarantees related to the timely payment of principal and interest of *National Housing Act* Mortgage-Backed Securities for investors in securities issued by approved issuers on the basis of housing loans through the *National Housing Act* Mortgage-Backed Securities program and the Canada Mortgage Bonds issued by the Canada Housing Trust.

Insurance-in-force: The total amount of outstanding loan balances covered by mortgage insurance policies at a specific period in time.

Loss ratio: The ratio (expressed as a percentage) of the insurance claims incurred during the period to the premiums and fees earned in the period in the mortgage insurance activity.

Main estimates: The main estimates present the government's spending plans for each federal organization and provide items that will be included in an appropriation bill.

Minimum Capital Test (MCT): The minimum capital required calculated by applying risk factors to the mortgage insurance activity's assets and liabilities using a defined methodology prescribed by the Office of the Superintendent of Financial Institutions.

Mortgage Insurance Capital Adequacy Test (MICAT): The minimum capital required calculated by combining the January 2017 advisory on Capital Requirements for Federally Regulated Mortgage Insurers and the relevant portions of the 2018 Minimum Capital Test (MCT) for federally regulated property and casualty insurance companies.

Operating budget ratio: The ratio (expressed as a percentage) of operating budget expenses for all of CMHC's activities (excluding Canada Housing Trust) during the period to premiums, fees, guarantee and application fees received, net interest income from lending programs and normalized government funding.

2021 Annual Report GLOSSARY 151

Operating expense ratio: Mortgage insurance activity: the ratio (expressed as a percentage) of operating expenses during the period to premiums and fees earned during the period for the mortgage insurance activity. Mortgage funding activity: the ratio (expressed as a percentage) of operating expenses during the period, exclusive of those related to the administration of the covered bond legal framework, to guarantee fees earned during the period.

Return on equity: The annualized net income divided by the average of the beginning and ending equity for the period, used to highlight operating performance.

Return on required equity: The annualized net income, adjusted to remove investment income earned on capital in excess of capital required, divided by the average required capital for the period.

Severity ratio: The ratio (expressed as a percentage) of insurance claims to the original insured loan amount for the claims paid in the period.

Other glossary terms

Approved issuer: A business organization, which, having met the criteria established by CMHC, is approved to issue and administer guaranteed *National Housing Act* Mortgage-Backed Securities.

Approved lender: A lending institution designated as an approved lender by CMHC under the *National Housing Act*. Only approved lenders may qualify for CMHC loan insurance.

Canada Housing Trust: The Canada Housing Trust is a special purpose trust that acquires interests in eligible insured housing loans, such as *National Housing Act* Mortgage-Backed Securities, and issues Canada Mortgage Bonds. The Canada Housing Trust also purchases highly rated investments and undertakes certain related financial hedging activities. We consolidate the accounts of Canada Housing Trust with our mortgage funding activity. Canada Housing Trust's assets and liabilities are neither owned by nor held for our benefit. The beneficiaries of the trust, after payment of all obligations, are one or more charitable organizations.

Committed: Committed refers to funding earmarked to support the building or repair of units of whose formal project agreement is still subject to final approvals and conditions; as well as funding for which a formal loan agreement is duly executed and a binding agreement is reached to provide credit under pre-specified terms and conditions.

Core housing need: A household is said to be in "core housing need" if its housing falls below at least one of the adequacy, affordability or suitability standards and it would have to spend 30% or more of its total before-tax income to pay the median rent of alternative local housing that is acceptable (meets all three housing standards):

- 1. Adequate housing is reported by their residents as not requiring any major repairs.
- 2. Affordable housing has shelter costs equal to less than 30% of total before-tax household income.
- 3. Suitable housing has enough bedrooms for the size and composition of resident households according to National Occupancy Standard (NOS) requirements.

Federal Pathway: The Government of Canada has come together to create a plan for departments to support systemic change to address the tragedy of missing and murdered Indigenous women, girls (MMIWG) and Two Spirit, lesbian, gay, bisexual, transgender, queer, questioning, intersex and asexual (2SLGBTQQIA+) people. This plan is called the Federal Pathway to Address Missing and Murdered Indigenous Women, Girls and 2SLGBTQQIA+ People.

Financial commitment: Achieved once a formal loan agreement is duly executed and a binding agreement to provide credit under pre-specified terms and conditions is reached.

Forgivable loan: A loan granted by the government or an organization, which the lender is committed to forgive if certain conditions are met by the borrower.

GBA+: GBA+ is an analytical process that provides a rigorous method for assessing systemic inequalities, as well as a means to assess how diverse groups of women, men and gender diverse people may experience policies, programs and initiatives. The "plus" in GBA+ acknowledges that GBA+ is not just about differences between biological (sexes) and socio-cultural (genders). We all have multiple characteristics that intersect and contribute to who we are. GBA+ considers many other identity factors such as race, ethnicity, religion, age, and mental or physical disability, and how the interaction between these factors influences the way we might experience government policies and initiatives.

2021 Annual Report GLOSSARY 152

Using GBA+ involves taking a gender- and diversity-sensitive approach to our work. Considering all intersecting identity factors as part of GBA+, not only sex and gender, is a Government of Canada commitment.

Home retrofits for energy efficiency: When you do an energy-efficiency retrofit on your building, you upgrade its energy-consuming systems. Retrofitting may involve improving or replacing lighting fixtures, ventilation systems or windows and doors, or adding insulation where it makes economic sense. It also means including energy efficiency measures in all your renovation and repair activities.

Housing programs expenses: All activities funded by the government under Assisted Housing and Market Analysis and Research activities.

Lending programs: Under the National Housing Act, and in support of Canada's National Housing Strategy, we provide loans and contributions to federally subsidized social housing sponsors, First Nations, provinces, territories and municipalities as well as non-subsidized housing support loans. Our loan portfolio is comprised of a mix of renewable and non-renewable loans which may be on or off-reserve. Direct Lending is the current borrowing initiative we use to refinance our renewable loans as well as to finance new commitments on-reserve. These loans can be financed at lower interest rates due to our status as a federal Crown corporation. As such, we are able to lower the cost of government assistance required for social housing projects. Direct Lending is operated on a planned break-even basis.

Lived experience: A term used to describe experience and knowledge gained through direct, first-hand involvement in everyday situations, events and interactions as a result of personally experiencing housing need or homelessness.

Physical risk: Effect of uncertainties related to severe and frequent extreme weather events, as well as chronic changes to the environment due to climate change (e.g., temperature increase, sea level rise), on the achievement of our strategic results.

Remote: Remote refers to a community that is either a long distance from larger settlements (population centres) or lacks transportation links that are typical in more populated areas. A population centre is defined as an area with a population of at least 1,000 and a density of 400 or more people per square kilometre.

Rural area: Rural areas include all land lying outside population centres and the people living within those rural areas.

Solutions Labs: Solutions Labs provide funding and expert solution lab consultants to help solve complex housing problems using innovation methods and tools. The goal is to develop world-leading solutions to housing problems that can contribute to the National Housing Strategy's key priority areas. Teams with diverse experience and knowledge will outline and identify: the housing problem they wish to examine in the lab, their strategy to co-develop and test possible solutions, and a roadmap that communicates a clear path for solution uptake and replication.

Transition risk: Effect of uncertainties associated with efforts to move to a low-carbon economy including changes to current or future government policies, technological innovations and /or consumer and investor preferences and their impacts on the achievement of our strategic results.

United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP): The Declaration is a comprehensive statement addressing the human rights of Indigenous Peoples. It emphasizes the rights of Indigenous Peoples to live in dignity, to maintain and strengthen their own institutions, cultures and traditions, and to pursue their self-determined development, in keeping with their own needs and aspirations.

Vulnerable: People belonging, or perceived to belong, to groups that are in a disadvantaged position or marginalized are often referred to as groups that are made vulnerable. In the case of the National Housing Strategy, priority groups currently defined as vulnerable include survivors (especially women and children) fleeing domestic violence, seniors, Indigenous Peoples, people with disabilities, those dealing with mental health and addiction issues, veterans, LGBTQ2+, racialized groups, newcomers (including refugees), individuals and families experiencing homelessness, and young adults.

2021 Annual Report GLOSSARY 15:

PERFORMANCE MEASURES OVERVIEW

Government-backed funding

To ensure that we address prioritized housing needs and exceed NHS outcomes, we track the percentage of guarantees (*National Housing Act* Mortgage-Backed Securities and Canada Mortgage Bonds) issued to facilitate a secondary market for mortgages aligned to the housing outcomes linked to our strategy through the targeted guaranteed loans rate.

Client experience

In line with our client-centric focus, we have adopted industry standards for our service delivery. We measure our commitment to these service standards, as well as the likelihood of clients to recommend us to colleagues and peers through the net promoter score or NPS.

Innovation index

This index is composed of individual measures that measure our progress in four key areas: Commitment, Risk Mitigation, ROI, and Capability and Credibility. Elements of the index relate to our ability to prototype and experiment, the readiness of prototyped solutions to be introduced to market, as well as their impact on housing affordability once implemented.

Canadians with lived experience of housing need and/or homelessness

We have established a measure to monitor that program design improvements are informed by people with lived experience. Insight from people who know housing need and homelessness first-hand can support data and provide evidence that enables us to make decisions and take action in ways that lead to greater outcomes.

Underserved segments

The focus of the delivery of our mortgage insurance products is on those living in Canada who are part of an underserved or under-represented market. For 2021, this meant qualifying rental units (new construction and existing) approved as affordable across Canada. Our target was based on a year-over-year improvement of the number of units approved for mortgage loan insurance for underserved segments.

Average usability satisfaction rating

In 2021, we have established a target for the Average Usability Satisfaction Rating at 68 in line with the global standard average for the System Usability Scale. We continue to gather feedback through our surveys to improve our data platforms.

HISTORICAL INFORMATION

| | Actual | | | | | | |
|--|---------|---------|---------|---------|---------|--|--|
| (in millions, unless otherwise indicated) | 2021 | 2020 | 2019³ | 2018⁴ | 2017 | | |
| Consolidated Results | | | · | | | | |
| Total assets | 300,357 | 300,970 | 276,259 | 263,876 | 267,115 | | |
| Total liabilities | 287,147 | 284,395 | 261,646 | 248,995 | 249,374 | | |
| Total equity of Canada | 13,210 | 16,575 | 14,613 | 14,881 | 17,741 | | |
| Total revenues and government funding | 6,296 | 7,951 | 4,716 | 4,823 | 6,152 | | |
| Total expenses (including income taxes) | 4,372 | 6,289 | 3,136 | 3,406 | 4,349 | | |
| Net income | 1,924 | 1,662 | 1,580 | 1,417 | 1,803 | | |
| Operating budget ratio | 9.6% | 9.6% | 15.6% | 14.4% | 11.3% | | |
| Assisted Housing | | | | | | | |
| Government funding for housing programs | 3,668 | 4,892 | 2,039 | 2,336 | 3,229 | | |
| Net income (loss) | 91 | 68 | 42 | 26 | 80 | | |
| Total equity of Canada | 569 | 332 | 302 | 291 | 234 | | |
| Mortgage Insurance | | | | | | | |
| Insurance-in-force (\$B) | 401 | 431 | 429 | 448 | 480 | | |
| Total insured volumes ¹ | 56,525 | 76,845 | 50,465 | 47,733 | 53,569 | | |
| Premiums and fees received | 1,802 | 2,009 | 1,549 | 1,445 | 1,438 | | |
| Premiums and fees earned | 1,399 | 1,372 | 1,429 | 1,426 | 1,557 | | |
| Claims paid | 139 | 140 | 236 | 242 | 329 | | |
| Insurance claims expense | (317) | 472 | 191 | 210 | 147 | | |
| Net income | 1,285 | 1,062 | 1,096 | 1,008 | 1,404 | | |
| Arrears rate | 0.28% | 0.34% | 0.31% | 0.29% | 0.29% | | |
| Loss ratio | (22.7)% | 34.4% | 13.4% | 14.7% | 9.4% | | |
| Operating expense ratio | 23.2% | 22.7% | 21.8% | 22.3% | 20.4% | | |
| Combined ratio | 0.5% | 57.1% | 35.2% | 37.0% | 29.8% | | |
| Severity ratio | 31.7% | 30.5% | 31.1% | 31.9% | 32.2% | | |
| Return on equity | 10.3% | 8.4% | 9.1% | 7.4% | 8.3% | | |
| Return on required equity | 14.8% | 10.5% | 10.6% | 8.3% | 13.6% | | |
| Capital available to minimum capital required (% MICAT) ² | 213% | 234% | 195% | 168% | 184% | | |
| % Estimated outstanding Canadian residential mortgages with CMHC insurance coverage (\$) | 24.1% | 26.2% | 26.4% | 29.1% | 31.9% | | |
| Mortgage Funding | | | | | | | |
| Guarantees-in-force (\$B) | 461 | 489 | 493 | 488 | 477 | | |
| Annual securities guaranteed (\$B) | 184 | 225 | 174 | 167 | 167 | | |
| Guarantee and application fees received | 1,008 | 904 | 664 | 649 | 627 | | |
| Guarantee and application fees earned | 716 | 667 | 582 | 483 | 384 | | |
| Net income | 545 | 530 | 464 | 372 | 295 | | |
| Operating expense ratio | 8.2% | 8.3% | 9.3% | 9.5% | 10.8% | | |
| Return on equity | 24.6% | 20.4% | 19.4% | 15.3% | 13.4% | | |
| Capital available to capital required ⁵ | 279% | 349% | 190% | 209% | 135% | | |
| Return on required equity | 76.3% | 42.5% | 36.1% | 23.9% | 15.1% | | |
| % Estimated outstanding Canadian residential mortgages with CMHC securitization guarantee (\$) | 24.1% | 29.5% | 30.6% | 31.9% | 32.2% | | |

Actual

2021 Annual Report HISTORICAL INFORMATION 155

¹ Total insured volumes include portfolio substitutions.

 $^{^2}$ We implemented the Mortgage Insurer Capital Adequacy Test (MICAT) guideline in 2019. Prior years were prepared in accordance with the Minimum Capital Test (MCT).

³ We implemented IFRS 16 Leases in 2019. Prior years were prepared inaccordance with IAS 17 and related interpretations.

⁴ We implemented IFRS 9 and IFRS 15 Revenue from Contracts with Customers in 2018. Prior years were prepared in accordance with IAS 39 Financial Instruments: Recognition and Measurement and IAS 18 Revenue.

⁵ Prior to implementing the updated economic capital methodology for Mortgage Funding on 25 November 2020, this ratio was calculated using the Capital Floor methodology when determining required capital.



















