2022

annual financial report



Homeownership
Rental Housing
Business Lending
Community Partnerships



colorado housing and finance authority

COLORADO HOUSING AND FINANCE AUTHORITY – Annual Financial Report

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executive letter (unaudited)

Message from Cris White Executive Director and CEO March 23, 2023

Throughout 2022, Colorado Housing and Finance Authority (CHFA or the Authority) fulfilled its mission despite continued economic challenges and by working to see dynamic possibilities become realities. The ongoing effects of the pandemic and rising interest rates affected CHFA's customers and industry. However, CHFA's resiliency persevered, and we made many strides in serving Colorado. During the past year, CHFA invested a total of \$2.7 billion to support:

- 6,592 Colorado households achieve their dreams of homeownership with CHFA home finance products;
- More than 7,200 affordable apartments be developed or preserved with CHFA multifamily lending and/or Housing Tax Credits;
- 599 businesses and nonprofits access capital, which combined support 4,212 jobs; and
- 407 nonprofit organizations grow their capacity to meet local needs through grants, sponsorships, donations, or volunteerism.

In addition, the rollout of more than \$400 million in federal American Rescue Plan Act (ARPA) funds occurred in 2022, and I was honored to serve on the Affordable Housing Transformational Task Force on behalf of CHFA, which helped shape how these funds would be allocated. Outcomes included programs to provide mortgage assistance to homeowners in hardship, and \$25 million allocated to CHFA's Middle Income Access Program to support affordable rental housing. Additionally, the first permanent, dedicated statewide fund for affordable housing, Proposition 123, was approved by the voters in November. This capital source will be key to addressing critical housing needs. CHFA is honored to have been selected by the Colorado Office of Economic Development and International Trade (OEDIT) to serve as their Contract Administrator to manage a portion of the funds.

Also significant in 2022 were CHFA's outreach efforts to engage and learn from community. Notably, CHFA's engagement with the Black and African American community led to the creation of a roadmap to help expand access to homeownership and bridge the homeownership gap over time.

This past year, CHFA invested, grew programs, and laid groundwork towards making a lasting impact across Colorado in 2023 and the years ahead. We continue to move our vision forward to ensure that everyone in Colorado has the opportunity for housing stability and economic prosperity.

Cris A. White

Executive Director and CEO

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independent auditor's report



RSM US LLP

Independent Auditor's Report

Board of Directors
Colorado Housing and Finance Authority

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of the Colorado Housing and Finance Authority (Authority) as of and for the years ended December 31, 2022 and 2021, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the respective financial position of the Authority as of December 31, 2022 and 2021, and the respective changes in financial position and cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards* (Government Auditing Standards), issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the Authority and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Authority's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. 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. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and Government Auditing Standards, we

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to
 fraud or error, and design and perform audit procedures responsive to those risks. Such procedures
 include examining, on a test basis, evidence regarding the amounts and disclosures in the financial
 statements.
- 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 Authority's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that
 raise substantial doubt about the Authority's ability to continue as a going concern for a reasonable
 period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control–related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and the schedules of selected pension and other postemployment benefit information, as listed in the table of contents, be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic or historical context. We have applied certain limited procedures to the required supplementary information in accordance with GAAS, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Authority's basic financial statements. The accompanying supplementary information, as listed in the table of contents, is presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with GAAS. In our opinion, the accompanying supplementary information, as listed in the table of contents, is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Information

Management is responsible for the other information included in the annual financial report. The other information comprises the executive letter but does not include the basic financial statements and our auditor's report thereon. Our opinions on the basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated March 23, 2023, on our consideration of the Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Authority's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Authority's internal control over financial reporting and compliance.

RSM US LLP

Denver, Colorado March 23, 2023



management's discussion and analysis (unaudited)



Management's Discussion and Analysis (unaudited)

This section of the Colorado Housing and Finance Authority's (the Authority) annual financial report presents management's discussion and analysis of the financial position and results of operations as of and for the years ended December 31, 2022 and 2021. This information is being presented to provide additional information regarding the activities of the Authority and to meet the disclosure requirements of Government Accounting Standards Board (GASB).

The Authority is a body corporate and political subdivision of the State of Colorado (the State), that finances affordable housing, business and economic growth opportunities for residents and businesses of Colorado. Its dual mission is to increase the availability of affordable, decent and accessible housing for lower- and moderate-income Coloradans, and to strengthen the state's economy by providing financial assistance to businesses.

Established by the Colorado General Assembly in 1973, the Authority raises funds through the public and private sale of bonds and notes, which are not obligations of the State. As a self-sustaining organization, the Authority's operating revenues come from loan and investment income, program administration fees, loan servicing fees and gains on sales of loans. The Authority receives no tax appropriations, and its net revenues are reinvested in its programs and used to support bond ratings.

The Authority participates in the Government National Mortgage Association (Ginnie Mae) Mortgage Backed Securities (MBS) Programs. Through the MBS Programs, Ginnie Mae guarantees securities that are issued by the Authority and that are backed by pools of mortgage loans. Ginnie Mae securities, which can be held or sold, carry the full faith and credit guaranty of the United States government. Holders of the securities receive a "pass-through" of the principal and interest payments on a pool of mortgage loans, less amounts required to cover servicing costs and Ginnie Mae guaranty fees. The Ginnie Mae guaranty ensures that the holder of the security issued by the Authority receives the timely payment of scheduled monthly principal and any unscheduled recoveries of principal on the underlying mortgage loans, plus interest at the rate provided for in the securities. All loans pooled under the Ginnie Mae MBS Programs are either insured by the Federal Housing Administration (FHA) or are guaranteed by the United States Department of Agriculture (USDA) Rural Development or the Veterans Administration.

The Authority also participates in the Federal National Mortgage Association (Fannie Mae) MBS and Whole Loan Commitment Programs. Fannie Mae is a government-sponsored enterprise with a public mission to provide stability in, and to increase the liquidity of, the residential mortgage market for homebuyers. The Authority is a Fannie Mae Seller/Servicer, either selling whole loans to Fannie Mae for cash or swapping pooled loans for MBS issued by Fannie Mae, which securities can be held or sold.

The Authority also participates in the Federal Home Loan Mortgage Corporation (Freddie Mac) Whole Loan Commitment Program. Freddie Mac is a government-sponsored enterprise with a public mission to provide liquidity, stability and affordability to the nation's housing market. The Authority is a Freddie Mac Seller/Servicer, selling whole loans to Freddie Mac for cash.

Overview of the Financial Statements

The basic financial statements consist of the Statement of Net Position, the Statement of Revenues, Expenses and Changes in Net Position, the Statement of Cash Flows and the notes thereto. The Authority follows enterprise fund accounting, whereby changes in net position are reported as soon as the underlying event giving rise to the change occurs regardless of the timing of related cash flows. The financial statements offer information about the Authority's activities and operations.

The Statement of Net Position includes all of the Authority's assets and liabilities, presented in order of liquidity, along with deferred outflows and deferred inflows. The resulting net position presented in these statements is displayed as invested in capital assets, restricted or unrestricted. Net position is restricted when its use is subject to external limits such as bond indentures, legal agreements or statutes. Net position is unrestricted when there are no external limits on its use. The unrestricted net position is, however, formally designated for specific purposes by the Authority's Board of Directors each year.

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Management's Discussion and Analysis (unaudited)

All of the Authority's current year revenues and expenses are recorded in the Statement of Revenues, Expenses and Changes in Net Position. This statement measures the activities of the Authority's operations over the past year and presents the resulting change in net position.

The final required financial statement is the Statement of Cash Flows. The primary purpose of this statement is to provide information about the Authority's cash receipts and cash payments during the reporting period. This statement reports cash receipts, cash payments and net changes in cash resulting from operating, noncapital financing, capital and related financing and investing activities. The statement provides information regarding the sources and uses of cash and the change in the cash balance during the reporting period.

The notes to basic financial statements provide additional information that is essential for a full understanding of the information provided in the financial statements.

Required and other supplementary information is presented following the notes to basic financial statements to provide selected pension and other post employment benefit (OPEB) information and other supplemental information, such as combining schedules for the Authority's programs. These programs are explained in greater detail below.

Programs

General Programs – Insured and uninsured single family and multifamily loans have been made by the Authority using funds in its General Fund designated as the Community Impact Fund (CIF). Within the CIF resides the Authority's Housing Opportunity Fund (HOF Program). Under the HOF Program, the Authority makes fixed interest rate loans and provides interest rate subsidies to nonprofit and for profit developers in support of rental housing facilities targeted to support affordable rental housing. The Authority also makes loans to support its single family program, including down payment assistance loans, within the fund. All HOF loans must conform to standard Authority due diligence processes and underwriting criteria, unless waived in accordance with the Authority's standard process, and are secured by either first or second mortgages on real estate. Loan terms on HOF loans may range up to 40 years.

Single Family Programs – Under its Single Family Mortgage Programs, the Authority may purchase mortgage loans for single-family residential dwellings from qualified originating mortgage lenders, or may, under certain programs, provide loans directly to individual borrowers. The Authority presently acquires mortgage loans under its Non-Qualified Single Family Mortgage Program (tax exempt). Loans made under the qualified program are subject to certain income and purchase price limitations. The Authority permits eligible borrowers under its Non-Qualified Single Family Mortgage Program to meet certain income limits which are generally somewhat higher than the limits permitted for a Qualified Single Family Mortgage Program. There is no limit imposed by the Authority on prior home ownership or limit on the purchase price of a residence which may be acquired with the proceeds of a loan under the Non-Qualified Single Family Mortgage Program, although all such mortgage loans must meet any applicable loan limit.

Multifamily Lending Programs – The Multifamily Lending Programs provide financing to sponsors of affordable rental housing developments. Financing options include construction to permanent loans, permanent-only loans, acquisition loans, acquisition/rehabilitation loans and, in certain circumstances, refinancing of existing debt. Other financing structures may be considered, based upon the property characteristics and sub-market due diligence, as well as the demonstrated experience and financial capacity of the sponsor. The mortgages originated under the multifamily loan programs include a combination of insured and uninsured mortgages. The Authority is a Tier I lender under FHA's Section 542(c) of the Housing and Community Development Act of 1992, as amended, which provides insurance on multifamily loans and is a credit enhancement mechanism available only to qualified housing and finance agencies acting as the mortgage lender.

Business Finance Programs – The Authority originates uninsured loans as part of its direct business loan programs, including the Direct Loan Program, the Non-Profit Real Estate Loan Program, the U.S. Small Business Administration 504



Management's Discussion and Analysis (unaudited)

Program, the Rural Loan Program, the Rural Development Loan Program and the RENEW Program. These business loans must meet certain economic development or job creation/retention objectives and are made to Colorado businesses to provide long-term, fixed rate financing for real estate and equipment. The uninsured direct business loans are generally secured by a first lien on the assets financed, are made in amounts up to 90% of the lesser of cost or appraised value of the collateral, are fully amortizing over terms of up to thirty years for real estate loans and seven years for equipment, and generally require guarantees from principals of the business having a 20% or greater ownership interest. A guaranty is also required from the operating company if different from the borrower. Some of the Authority's small business loans may carry credit enhancement by an agency or instrumentality of the United States under an insurance program requiring payment of not less than 50% of the principal amount of such mortgage in the event of default. Direct small business loans insured to date have utilized the USDA Rural Development guarantee programs.



Management's Discussion and Analysis (unaudited)

Financial Highlights

The following financial highlights section refers to the Authority's consolidated financial statements. The reader of this management's discussion and analysis section is encouraged to also review the Authority's combining schedules within the supplementary information section of this 2022 financial report.

Condensed Summary of Net Position

(in thousands of dollars)

As of December 31,	2022	2021	2020
Assets			
Cash	\$ 173,618	\$ 316,907	\$ 299,172
Investments	2,010,447	1,878,657	1,811,438
Loans receivable, net	1,330,673	1,204,249	1,115,260
Loans receivable held for sale	95,836	224,422	231,084
Capital assets, net	11,931	12,539	12,603
Derivative instruments	69,029	-	-
Other assets	144,110	102,754	82,997
Total assets	3,835,644	3,739,528	3,552,554
Deferred outflows of resources			
Accumulated increase in fair value of hedging derivatives	24,513	80,250	116,075
Pension and OPEB contributions and investment earnings	3,328	4,893	3,278
Refundings of debt	896	952	1,174
Total deferred outflows of resources	28,737	86,095	120,527
Liabilities			
Bonds, notes payable and short-term debt	2,856,096	2,617,483	2,500,172
Derivative instruments and related borrowings	3,680	71,602	125,965
Net pension and OPEB liability - proportionate share	(463)	14,675	19,777
Other liabilities	200,109	281,268	270,899
Total liabilities	3,059,422	2,985,028	2,916,813
Deferred inflows of resources			
Accumulated decrease in fair value of hedging derivatives	88,555	13,124	2,981
Pension and OPEB investment differences	15,254	11,785	6,855
Total deferred inflows of resources	103,809	24,909	9,836
Net position			
Investment in capital assets, net of related debt	2,138	2,400	2,132
Restricted by grants	6,283	2,361	11,065
Restricted primarily by bond indentures	39,415	224,764	243,622
Unrestricted	653,314	586,161	489,613
Total net position	\$ 701,150	\$ 815,686	\$ 746,432

Management's Discussion and Analysis (unaudited)

Statement of Net Position

Total investments comprised 52.4% of the Authority's total assets, and represent the Authority's largest asset class. Total investments as of December 31, 2022 were \$2.0 billion, an increase of \$131.8 million, or 7.0%, compared to the amount outstanding as of December 31, 2021. This increase was primarily the result of the Authority retaining MBS as investments on its balance sheet, as opposed to selling these in the secondary market at a premium. These MBS were pledged as collateral for bonds issued by the Authority during the year.

In 2021, investments increased \$67.2 million, or 3.7%, when compared to 2020. Similar to 2022, this increase was primarily the result of the Authority retaining MBS as investments on its balance sheet, as opposed to selling these in the secondary market at a premium and were pledged as collateral for bonds issued by the Authority during the year.

Total loans receivable, including loans held for sale, net of allowances for loan losses, comprised 37.2% of the Authority's total assets. These loan balances as of December 31, 2022 were \$1.4 billion; a decrease of \$2.2 million, or 0.2%, compared to the amount outstanding as of December 31, 2021. During 2022, the Authority continued to sell the majority of its single family loan production through four vehicles: sales of Ginnie Mae and Fannie Mae mortgage backed securities or by direct sale to Fannie Mae or Freddie Mac. During 2022, \$2.1 billion in loans were sold in the to-be-announced (TBA) market through the issuance and sale of Ginnie Mae securities, of which \$397.0 million were placed into taxable and tax-exempt MBS-backed bond structures. Loans totaling \$296.4 million were either pooled and swapped for Fannie Mae mortgage backed securities and sold for a premium, or sold directly to Fannie Mae. Additionally, \$83.3 million in loans were sold directly to Freddie Mac.

In 2021, net loans receivable increased by \$82.3 million, or 6.1%, when compared to 2020. This increase over the prior year was primarily the result of the increased demand for the Authority's down payment assistance (DPA) in the form of second mortgages.

While it has been the Authority's practice to pool loans into mortgage backed securities and either sell them in the secondary market for a gain or retain and pledge them as collateral for bonds, the Authority continued the practice of purchasing and retaining the mortgage servicing rights (MSRs) to these loans. Additionally, the Authority continued the practice of servicing the whole loans it retains in its loan portfolio. The loans serviced by the Authority include both single family and commercial loans.

Servicing Portfolio (gross, in thousands)	2022	2021	2020
GNMA- securities sold	\$ 7,231,151	\$ 6,282,595	\$ 5,945,295
FNMA-loans and securities sold	1,235,411	1,111,951	1,315,224
FHLMC - loans sold	232,089	178,622	211,333
Balance sheet loans (single family/multifamily/business finance)	1,436,925	1,439,480	1,355,023
Total Servicing Portfolio	\$ 10,135,576	\$ 9,012,648	\$ 8,826,875

The delinquency ratios represented in the following tables are calculated using industry best practices and are reported on the Authority's entire servicing portfolio, including loans that were sold and the mortgage servicing rights retained, as well as loans the Authority maintains as assets on its balance sheet. Investors looking for past due information on loans pledged as collateral for specific bond series of the Authority can find this information by visiting the Municipal Securities Rulemaking Board's EMMA website at https://emma.msrb.org/lssuerHomePage/State?state=CO.



Management's Discussion and Analysis (unaudited)

Delinquent unpaid principal balances within the loan portfolios decreased during 2022 when compared to the prior year due to loans formerly in forbearance being modified and brought current. Total single family past due loans decreased to 12.2% in 2022, from 13.7% in 2021. The Authority also observed a decrease in delinquencies in the business finance portfolio, there was no change in the multifamily loan program.

Single Family Portfolio Delinquency	2022	2021	2020	2019	2018	2017	2016
Current	87.8%	86.3%	82.2%	90.1%	92.5%	91.3%	90.1%
30 Day	4.8%	3.5%	4.0%	5.2%	4.5%	4.9%	5.2%
60 Day	2.0%	1.5%	2.0%	1.9%	1.1%	1.4%	1.4%
90 Day	4.3%	8.3%	11.2%	1.7%	1.4%	1.3%	1.9%
Foreclosure	1.1%	0.4%	0.6%	1.1%	0.5%	1.1%	1.4%
Total past due	12.2%	13.7%	17.8%	9.9%	7.5%	8.7%	9.9%

Multifamily Portfolio Delinquency	2022	2021	2020	2019	2018	2017	2016
Current	100.0%	100.0%	99.6%	98.0%	99.4%	99.2%	98.9%
30 Day	0.0%	0.0%	0.4%	1.0%	0.5%	0.0%	1.1%
60 Day	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%
90 Day	0.0%	0.0%	0.0%	1.0%	0.1%	0.0%	0.0%
Foreclosure	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total past due	0.0%	0.0%	0.4%	2.0%	0.6%	0.8%	1.1%

Business Finance Portfolio Delinquency	2022	2021	2020	2019	2018	2017	2016
Current	99.8%	99.4%	97.0%	95.0%	86.7%	98.1%	98.3%
30 Day	0.0%	0.0%	3.0%	4.0%	13.3%	0.6%	1.1%
60 Day	0.2%	0.6%	0.0%	0.0%	0.0%	1.3%	0.6%
90 Day	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%
Foreclosure	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total past due	0.2%	0.6%	3.0%	5.0%	13.3%	1.9%	1.7%

During 2022, derivative instruments decreased \$135.9 million, or 203.2%, over prior year. The decrease was due to an increase in interest rates and resulted in the Authority reporting derivative instruments as a cumulative non-current asset compared to prior years, where the instruments have been valued and reported as a cumulative non-current liability.

Total deferred outflows as of December 31, 2022 were \$28.7 million, a decrease of \$57.4 million, or 66.6%, compared to the amount outstanding as of December 31, 2021. Deferred outflows for 2021 decreased \$34.4 million, or 28.6%, from those reported in 2020. These changes were primarily the result of changes in market interest rates.

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Management's Discussion and Analysis (unaudited)

As of December 31, 2022, bonds, notes payable and short-term debt were \$2.9 billion, an increase of \$238.6 million, or 9.1%, compared to the balance at December 31, 2021. This increase is the result of several 2022 single family bond issuances, the proceeds of which were used to finance mortgage loans for the single family program.

The Authority's debt transactions followed best execution analysis and were part of the Authority's annual plan of finance. Debt activity detail for 2022 occurred as follows:

- On February 23, 2022, the Authority issued \$125.0 million of taxable and tax-exempt Single Family Mortgage Class I and Class II 2022 Series ABC Bonds (Social Bonds) to fund the acquisition of single family loans securitized as Ginnie Mae MBS.
- On April 27, 2022, the Authority issued \$50.0 million of taxable Homeownership Class I 2022 Series AA Bonds to fund the acquisition of single family loans securitized as Ginnie Mae MBS.
- On May 25, 2022, the Authority issued \$75.0 million of taxable Single Family Mortgage Class I 2022 Series D Bonds to fund the acquisition of single family loans securitized as Ginnie Mae MBS.
- On August 17, 2022, the Authority issued \$50.0 million of taxable Homeownership Class I 2022 Series BB Bonds to fund the acquisition of single family loans securitized as Ginnie Mae MBS.
- On August 23, 2022, the Authority issued \$100.0 million of taxable and tax-exempt Single Family Mortgage Class I and Class II 2022 Series EFG Bonds (Social Bonds) to fund the acquisition of single family loans securitized as Ginnie Mae MBS.
- On November 29, 2022, the Authority issued \$150.0 million of taxable Single Family Mortgage Class I, II, and III 2022 Series HI Bonds to fund the acquisition of single family loans securitized as Ginnie Mae MBS.
- On December 15, 2022, the Authority issued \$100.0 million of taxable and tax-exempt Single Family Mortgage Class
 I and Class II 2022 Series JKL Bonds (Social Bonds) to fund the acquisition of single family loans securitized as
 Ginnie Mae MBS.

Additional information on the Authority's long-term debt can be found in note 6 of this report.

As of December 31, 2022, the net pension and OPEB liability was \$(0.5) million, a decrease of \$15.1 million, or 103.2%, compared to the balance at December 31, 2021. This decrease is the result of two factors: the automatic adjustment provision (AAP) increased both the employee and employer statutorily required contributions to the plan, as well as an AAP decrease in projected benefit payments, and the difference between projected and actual investment returns for the plan. Additional information on the Authority's retirement plan can be found in note 12 of this report.

During 2021, total liabilities increased \$68.2 million, or 2.3%, over the prior year. Bonds, notes payable and short-term debt increased \$117.3 million, or 4.7% over 2020, primarily due to the issuance of new single family and multifamily program bonds. Also in 2021, derivative instruments and related borrowings decreased \$54.4 million, or 43.2%, from the prior year due to changing market interest rates.

The Authority's net position as of December 31, 2022, was \$701.2 million, a decrease of \$114.5 million, or 14.0%, compared to the balance as of December 31, 2021. The decrease in net position was due to a decrease in fair market value of investments during 2022, the investments are expected to regain value as the market environment stabilizes. Net position, as a percent of total assets, decreased from 21.8% as of December 31, 2021, to 18.3% as of December 31, 2022.



Management's Discussion and Analysis (unaudited)

Condensed Summary of Revenues, Expenses and Changes in Net Position (in thousands of dollars)

or the years ended December 31,		2022	2021		2020	
Interest income and expense:						
Interest on loans receivable	\$	48,168	\$	47,602	\$	46,525
Interest on investments		51,507		50,532		53,185
Interest on debt		(71,587)		(68,552)		(72,716)
Net interest income		28,088		29,582		26,994
Other operating income:						
Gain on sale of loans		51,997		114,892		128,425
Investment derivative activity gain (loss)		4,741		6,568		(5,108)
Net increase (decrease) in the fair value of investments		(204,822)		(36, 339)		52,472
Other revenues		65,580		64,201		56,868
Total other operating income (loss)		(82,504)		149,322		232,657
Total operating income (loss)		(54,416)		178,904		259,651
Operating expenses:						
Salaries and related benefits		19,555		25,251		20,613
General operating		43,528		85,411		92,777
Depreciation		1,075		799		913
Provision for loan losses		2,245		550		2,391
Total operating expenses		66,403		112,011		116,694
Net operating income (loss)		(120,819)		66,893		142,957
Nonoperating expenses:						
Grant revenues		194,227		169,334		193,872
Grant expenses		(187,944)		(166,973)		(182,807)
Total nonoperating income and expenses, net		6,283		2,361		11,065
Change in net position		(114,536)		69,254		154,022
Net position:						
Beginning of year		815,686		746,432		592,410
End of year	\$	701,150	\$	815,686	\$	746,432

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Management's Discussion and Analysis (unaudited)

Revenues, Expenses and Changes in Net Position

As reflected in the Statement of Revenues, Expenses and Changes in Net Position, the change in net position in 2022 was \$183.8 million or 265.4% less than the results at December 31, 2021. The decrease in the change in net position compared to the prior year was composed of the following:

- A \$1.5 million decrease in net interest income. This decrease is primarily the result of an increase in interest expense due to higher interest rates on debt.
- A \$231.8 million decrease in other operating income as a result of the following:
 - \$62.9 million decrease in gain on sale of loans. This change was driven by a decrease in the amount of single family loans being pooled into MBS and sold through the TBA market at a premium. Additionally, the MBS that were sold through the TBA market generally earned a lower premium than MBS sold in the prior year. Year-over-year sales volume in single family loans is depicted in the table below:

Single Family Loans Sold (in thousands)	2022	2021	2020
GNMA	\$ 2,131,790	\$ 2,490,053	\$ 2,651,041
FNMA	296,384	346,273	354,684
FHLMC	83,329	54,134	63,644
Total Single Family Loans Sold	\$ 2,511,503	\$ 2,890,460	\$ 3,069,369

- \$1.8 million decrease in investment derivative activity
- \$168.5 million decrease in fair value of investments related to a decline in the market value of MBS investments
- \$1.4 million increase in other revenues related to program fee income
- A \$45.6 million decrease in total operating expenses primarily due to decreasing loan payoffs resulting in lowered servicing release premium expense and a decrease in servicing expense. This is coupled with a decrease of \$5.7 million in salaries and benefits.
- A \$3.9 million increase in nonoperating income related to federal grant commitments that will be paid out in subsequent years.

During 2021, total operating income decreased by \$80.7 million, or 31.1%, compared to 2020. The following contributed to the decrease:

- Other revenues increased \$7.3 million related to an increase in servicing fees and LIHTC fee income.
- Gain on sale of loans decreased \$13.5 million due to declining premiums offered in the secondary market.
- The fair value of investments and investment derivative activity collectively decreased by \$77.1 million due primarily to changes in market rates during 2021.

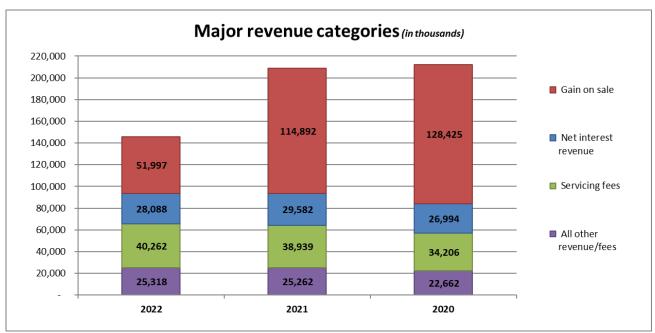
Total operating expenses in 2021 decreased \$4.7 million, or 4.0%, compared to 2020 primarily due to a decrease in loan servicing expense as a result of lower loan production.



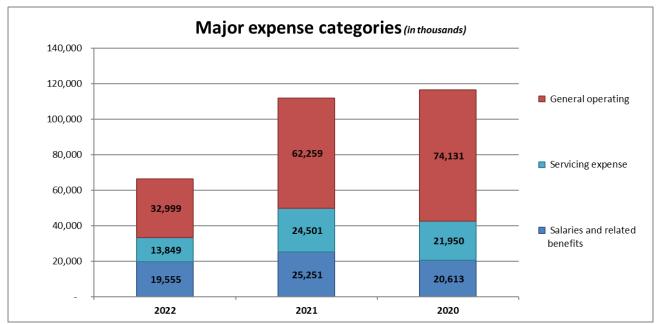
Management's Discussion and Analysis (unaudited)

The federal grant receipts/payments consisted primarily of pass-through amounts related to the Authority's role as a contract administrator of the U.S. Department of Housing and Urban Development's Section 8 subsidy program. Under the Section 8 subsidy program, tenants pay 30% of their income toward rent and the balance is paid by federal subsidy.

Year-over-year comparisons of major income and major expense categories are depicted in the tables below:



Gain on sale represents the gain recognized on the sale of single family loans in the secondary market at a premium. The category for all other revenues/fees is primarily made up of PBCA, LIHTC and conduit transaction fees.



Amounts reported in salaries and related benefits include entries related to GASB Statement No. 68 Pension expense and GASB Statement No. 75 OPEB expense. These amounts totaled \$(10.1) million, \$(1.8) million and \$(4.8) million for fiscal years, 2022, 2021 and 2020, respectively.

Management's Discussion and Analysis (unaudited)

Economic Factors and Next Year's Budget

The 2023 budget was developed to provide desired products and services while maintaining financially responsible practices. The last two years the Authority has seen a decline in single family loan production, partly due to rising interest rates as well as declining affordable inventory in the metro areas of Colorado.

During 2023, the Authority's loan and investment portfolios are projected to increase in size due to continued efforts to add loans and investment securities to the balance sheet. Contributing to this increase is the anticipated addition of over \$700 million in new loans and investment securities as a result of single family and multifamily lending operations. Related debt is also projected to increase in 2023. However, overall net interest revenue is expected to remain fairly consistent.

Pressure on tax credit equity pricing and strong demand for affordable rental housing throughout the state are increasing the need for multifamily financing products and services. This being the case, the Authority is working to enhance its product offerings and increase its presence and visibility within the multifamily financing space. We believe this will result in an increase in the pipeline of multifamily loans the Authority finances in the years to come. The Authority also expects business finance production to continue to generate fee income through the Authority's lending activities.

Securitizing single family loan production and selling the securities for their market premiums is projected to continue to be the major single family program model in 2023. The budget reflects a 'purchase and sell' model for 70% of the \$2.0 billion in budgeted single family loan production. The remaining 30% is budgeted to be bond-financed in an effort to continue rebuilding the Authority's loan portfolio, providing future net interest revenue. The 2023 budget projects single family production to decline from 2022 results.

The Authority's operating expenses are projected to increase over amounts reported for 2022. This increase will reside primarily within the Authority's salaries and related benefits and general operating categories and is due to budgeted merit increases, modest staffing increases, increases in health insurance premium expense and increases in loan servicing costs as loans affected by the COVID-19 pandemic begin going through the loss mitigation and loan modification process.

Certain of the matters contained in this management's discussion and analysis about our future performance, including, without limitation, future revenues, earnings, strategies, prospects, consequences and all other statements that are not purely historical constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Such forward-looking statements are subject to risks and uncertainties, which could cause actual results to differ materially from those anticipated. Such statements are based on management's beliefs as well as assumptions made by and information currently available to management.

Readers are cautioned not to place undue reliance on these forward-looking statements in making any investment decisions with regards to our securities. Forward-looking statements made in this discussion apply only as of the date of these financial statements. While we may elect to update forward-looking statements from time to time, we specifically disclaim any obligation to do so, even in light of new information or future events, unless otherwise required by applicable laws.

Requests for Information

This financial report is designed to provide a general overview of the Authority's finances. Questions concerning the information provided in this report or other financial information should be addressed to the Chief Financial Officer at Colorado Housing and Finance Authority, 1981 Blake Street, Denver, Colorado 80202 (303-297-2432 or toll free, 800-877-2432).



basic financial statements

Colorado Housing and Finance Authority Statement of Net Position

As of December 2022 and 2021

(in thousands of dollars)

	2022	2021
Assets		
Current assets:		
Cash		
Restricted	\$ 160,605	\$ 233,66
Unrestricted	13,013	83,23
Investments (partially restricted, see note 2)	491,905	336,78
Loans receivable (partially restricted, see note 3)	44,356	40,14
Loans receivable held for sale	95,836	224,42
Other current assets	38,485	35,29
Total current assets	844,200	953,54
Noncurrent assets:		
Investments (partially restricted, see note 2)	1,518,542	1,541,87
Loans receivable, net (partially restricted, see note 3)	1,286,317	1,164,10
Derivative instruments	69,029	
Capital assets, net	11,931	12,53
Other assets	105,625	67,46
Total noncurrent assets	2,991,444	2,785,98
Total assets	3,835,644	3,739,52
Deferred outflows of resources		
Accumulated increase in fair value of hedging derivatives	24,513	80,25
Pension and OPEB contributions and investment earnings	3,328	4,89
Refundings of debt	896	95
Total deferred outflows of resources	28,737	86,09
Liabilities		
Current liabilities:		
Short-term debt	162,998	206,92
Bonds payable	185,364	105,04
Notes payable	58	5
Hybrid instrument borrowings	774	1,04
Other current liabilities	145,871	231,89
Total current liabilities	495,065	544,95
Noncurrent liabilities:		
Bonds and notes payable	2,507,676	2,305,46
Derivative instruments		66,88
Hybrid instrument borrowings	2,906	3,68
Net pension and OPEB liability - proportionate share	(463)	14,67
Other liabilities	54,238	49,37
Total noncurrent liabilities	2,564,357	2,440,07
Total liabilities	3,059,422	2,985,02
Deferred inflows of resources		
Accumulated decrease in fair value of hedging derivatives	88,555	13,12
Pension and OPEB investment differences	15,254	11,78
Total deferred inflows of resources	103,809	24,90
Net position		
Investment in capital assets, net of related debt	2,138	2,40
Restricted by grants	6,283	2,36
, <u></u>	•	224,76
Restricted primarily by bond indentures	39,415	224,70
Restricted primarily by bond indentures Unrestricted	39,415 653,314	586,16

See accompanying notes to basic financial statements.

Colorado Housing and Finance Authority Statement of Revenues, Expenses and Changes in Net Position

For the years ended December 2022 and 2021

(in thousands of dollars)

	2022	2021
Interest income and expense:		
Interest on loans receivable	\$ 48,168	\$ 47,602
Interest on investments	51,507	50,532
Interest on debt	(71,587)	(68,552)
Net interest income	28,088	29,582
Other operating income:		
Gain on sale of loans	51,997	114,892
Investment derivative activity gain	4,741	6,568
Net decrease in the fair value of investments	(204,822)	(36, 339)
Other revenues	65,580	64,201
Total other operating income (loss)	(82,504)	149,322
Total operating income (loss)	(54,416)	178,904
Operating expenses:		
Salaries and related benefits	19,555	25,251
General operating	43,528	85,411
Depreciation	1,075	799
Provision for loan losses	2,245	550
Total operating expenses	66,403	112,011
Net operating income (loss)	(120,819)	66,893
Nonoperating income and expenses:		
Grant revenues	194,227	169,334
Grant expenses	(187,944)	(166,973)
Total nonoperating income and expenses	6,283	2,361
Change in net position	(114,536)	69,254
Net position:		
Beginning of year	815,686	746,432
End of year	\$ 701,150	\$ 815,686

See accompanying notes to basic financial statements.

Colorado Housing and Finance Authority Statement of Cash Flows

For the years ended December 2022 and 2021

(in thousands of dollars)

	2022	2021
Cash flows from operating activities:		
Principal payments received on loans receivable		
and receipts from dispositions of other real estate owned	\$ 703,782	\$ 672,167
Interest payments received on loans receivable	45,623	44,833
Payments for loans receivable	(2,788,402)	(3,244,888)
Receipts from sales of Ginnie Mae securities	2,135,838	2,605,266
Changes in servicing escrows	(94,768)	9,296
Receipts from other revenues	64,260	64,024
Payments for salaries and related benefits	(34,596)	(29,675)
Payments for goods and services	(78,844)	(98,236)
All other, net	7,675	1,651
Net cash provided by (used in) operating activities	(39,432)	24,438
Cash flows from noncapital financing activities:		
Net increase (decrease) in short-term debt	(43,924)	29,031
Proceeds from issuance of bonds	649,970	521,305
Receipts from federal grant programs	202,380	167,173
Payments for federal grant programs	(187,944)	(166,973)
Principal paid on bonds	(374,067)	(443,841)
Principal paid on notes payable	(57)	(58)
Interest paid on short-term debt	(3,572)	(1,617)
Interest rate swap settlements	(8,424)	(21,418)
Interest paid on bonds	(50,991)	(35,537)
Interest paid on notes payable	(1,256)	(1,247)
Net cash provided by noncapital financing activities	182,115	46,818
Cash flows from capital and related financing activities:		
Purchase of capital assets	(467)	(735)
Net cash used in capital and related financing activities	(467)	(735)
Cash flows from investing activities:	,	
Proceeds from maturities and sales of investments	3,489,325	4,785,517
Purchase of investments	(3,822,584)	(4,896,025)
Income received from investments	47,754	57,722
Net cash used in capital and related financing activities	(285,505)	(52,786)
Net increase (decrease) in cash	(143,289)	17,735
Cash at beginning of year	316,907	299,172
Cash at end of year	\$ 173,618	\$ 316,907
Restricted	\$ 160,605	\$ 233,669
Unrestricted	13,013	83,238
Cash, end of year	\$ 173,618	\$ 316,907

Continued on the next page

Colorado Housing and Finance Authority Statement of Cash Flows (continued)

For the years ended December 2022 and 2021

(in thousands of dollars)

	2022	2021
Reconciliation of operating income to net cash provided by (used in) operating activities:		
Net operating income (loss)	\$ (120,819)	\$ 66,893
Adjustments to reconcile operating income (loss) to net cash provided by (used in) operating activities:		
Depreciation expense	1,075	799
Amortization and fair value adjustments of service release premiums	(3,132)	28,264
Proportionate share of net pension and OPEB expense	(10,104)	(1,787)
Amortization of derivatives related borrowings	(1,042)	(1,827)
Provision for loan losses	2,245	550
Interest on investments	(51,507)	(50,532)
Interest on debt	72,628	70,379
Unrealized gain on investment derivatives	(4,741)	(6,568)
Unrealized loss on investments	204,822	36,339
Gain on sale of real estate owned	(47)	-
Gain on sale of loans receivable held for sale	(51,997)	(114,892)
Changes in assets and liabilities:		
Loans receivable and other real estate owned	54,397	4,282
Accrued interest receivable on loans and investments	(2,544)	(2,769)
Other assets	(36,148)	(19,377)
Accounts payable and other liabilities	(92,518)	14,684
Net cash provided by (used in) operating activities	\$ (39,432)	\$ 24,438

See accompanying notes to basic financial statements.





notes to basic financial statements



1) Organization and Summary of Significant Accounting Policies

(a) Authorizing Legislation and Reporting Entity

Authorizing Legislation - The Colorado Housing and Finance Authority (the Authority) is a body corporate and a political subdivision of the State of Colorado (the State) established pursuant to the Colorado Housing and Finance Authority Act, Title 29, Article 4, Part 7 of the Colorado Revised Statutes (C.R.S. or the Statutes), as amended (the Act). The Authority is not a state agency and is not subject to administrative direction by the State. The governing body of the Authority is its Board of Directors (the Board). Operations of the Authority commenced in 1974. The Authority is not a component unit of the State or any other entity.

The Authority was created for the purpose of making funds available to assist private enterprise and governmental entities in providing housing facilities for lower- and moderate-income families. Under the Act, the Authority is also authorized to finance projects and working capital loans to industrial and commercial enterprises (both for-profit and nonprofit) of small and moderate size.

In 1992, Colorado voters approved an amendment to the State Constitution, Article X, Section 20, which, among other things, imposes restrictions on increases in revenue and expenditures of state and local governments (known as the Taxpayer Bill of Rights or TABOR). In the opinion of its bond counsel, the Authority is a "special purpose authority", not part of the "State" under C.R.S. 24-77-102(15) and (16), and not a "district" as defined in TABOR and is therefore exempt from its provisions.

In 2001, the Colorado state legislature repealed the limitation on the amount of debt that the Authority can issue as well as removed the moral obligation of the State on future debt issues of the Authority. The bonds, notes and other obligations of the Authority do not constitute debt of the State.

Lending and Housing Programs - The Authority accounts for its lending and operating activities in the following groups:

General Program – The General Program is the Authority's primary operating program. It accounts for assets, deferred outflows, liabilities, deferred inflows, revenues and expenses not directly attributable to a bond program. Most of the bond resolutions of the programs permit the Authority to make cash transfers to the general accounts after establishing reserves required by the bond resolutions. The general accounts financially support the bond programs when necessary. The general accounts include proprietary loan programs developed by the Authority to meet the needs of low- and moderate-income borrowers not served by traditional lending programs. The general accounts also include administrative activities related to the federal government's Section 8 housing assistance payments program.

Single Family Program – The Single Family Program includes bonds issued and assets pledged for payment of the bonds under the related indentures. Loans acquired under this program with the proceeds of single family bond issues include Federal Housing Administration (FHA), conventional, United States Department of Agriculture (USDA) Rural Development, Rural Economic and Community Development Department (RD), and Veterans Administration (VA) loans made under various loan programs.

Multifamily/Business Program – The Multifamily/Business Program includes bonds issued and assets pledged for payment of the bonds under the related indentures. Loans acquired under this program with the proceeds of multifamily and business (sometimes referred to as project) bond issues include loans made for the purchase, construction or rehabilitation of multifamily rental housing. In addition, business loans are made to both for-profit and nonprofit organizations primarily for the purpose of acquisition or expansion of their facilities or for the purchase of equipment.

Notes to Basic Financial Statements (tabular dollar amounts are in thousands)

(b) Basis of Accounting

The Authority presents its financial statements in accordance with United States Generally Accepted Accounting Principles (U.S. GAAP) as established by the Governmental Accounting Standards Board (GASB). For financial purposes, the Authority is considered a special-purpose government engaged in business-type activities. The financial statements are prepared using the economic resources measurement focus and the accrual basis of accounting. Under the accrual basis, revenues are recognized when earned, and expenses are recorded when incurred. All significant intra-entity transactions have been eliminated.

(c) Summary of Significant Accounting Policies

Estimates – The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, deferred outflows and deferred inflows and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reported period. Significant estimates to the Authority's financial statements include the allowance for loan losses, MSRs, interest rate swap agreements and fair value estimates. Actual results could differ from those estimates.

Cash and Restricted Cash – The Authority's cash and cash equivalents are represented by cash on hand and demand deposits held in banks. Restricted cash includes payments received on pledged assets and used for the payment of bonds under the related indenture agreements. Also included in restricted cash are escrow balances, payments in process and various government deposits.

Restricted Assets – Amounts related to Single Family and Multifamily/Business Programs are considered restricted and are detailed in the supplemental schedules. Restricted assets are held for the benefit of respective bondholders and accounted for by program. Certain other assets are held on behalf of various governmental housing initiatives or regulations.

Investments – Investments of the Authority, representing those investments which are held as reserves under indenture or other restrictions, are reported at either amortized cost or fair value based on values obtained from third-party pricing services. The values are based on quoted market prices when available or on adjusted value in relation to observable prices on similar investments. Money market investments are reported at amortized cost. Investment amounts related to Single Family and Multifamily/Business Programs are considered restricted and are detailed in the supplemental schedules.

Loans Receivable – Mortgage loans receivable are reported at their unpaid principal balance net of an allowance for estimated loan losses. Loans related to Single Family and Multifamily/Business Programs are considered restricted and are detailed in the supplemental schedules.

Loans Receivable Held for Sale – Loans originated or acquired and intended for sale in the secondary market are carried at the lower of cost or fair value. Gains and losses on loan sales (sales proceeds minus carrying value) are reported as other operating income.

Allowance for Loan Losses – The allowance for loan losses is a reserve against current operations based on management's estimate of expected loan losses. Management's estimate considers such factors as the payment history of the loans, the projected cash flows of the borrowers, estimated value of the collateral, subsidies, guarantees, mortgage insurance, historical loss experience for each loan type, additional guarantees provided by the borrowers and economic conditions. Based on review of these factors, a total reserve amount is calculated and a provision is made against current operations to reflect the estimated balance.

Troubled Debt Restructuring – A restructuring of a debt constitutes a troubled debt restructuring if the creditor for economic or legal reasons related to the debtor's financial difficulties grants a concession to the debtor that it would not otherwise consider. Whatever the form of concession granted by the creditor to the debtor in a troubled debt restructuring, the creditor's



objective is to make the best of a difficult situation. That is, the creditor expects to obtain more cash or other value from the debtor, or to increase the probability of receipt, by granting the concession than by not granting it.

Interest income is recognized using the new interest rate after restructuring, which approximates the effective interest rate. Additional information is disclosed in the loans receivable note. See note 3.

Capital Assets – Capital assets are defined by the Authority as assets with an initial, individual cost of \$10 thousand or greater and an estimated life of greater than one year. Capital assets are depreciated or amortized using the straight-line method over their estimated useful lives, which are 30 years for buildings and from 3 to 10 years for furniture and equipment.

Other Noncurrent Assets – Other noncurrent asset balances as of December 31, 2022 and 2021, were \$105.6 million and \$67.5 million, respectively. Included in these amounts are mortgage servicing rights of \$102.7 million and \$65.7 million as of December 31, 2022 and 2021, respectively, related to loans sold by the Authority for which the Authority retained the mortgage servicing. These mortgage servicing rights are reported at the lower of cost or fair value.

The Authority recorded fair market value adjustments of \$20.6 million and \$14.2 million on mortgage servicing rights as of December 31, 2022 and 2021, respectively. The adjustments are reported in general operating expense on the Statement of Revenues, Expenses and Changes in Net Position.

Bonds – Bonds payable are general and limited obligations of the Authority and are not a debt or liability of the State or any subdivisions thereof. Each bond issue is secured, as described in the applicable trust indenture, by all revenues, moneys, investments, mortgage loans, and other assets in the accounts of the program to which the bonds relate. Virtually all of the Authority's loans and investments are pledged as security for the bonds. The provisions of the applicable trust indentures require or allow for redemption of bonds through the use of unexpended bond proceeds and excess funds accumulated primarily through prepayment of mortgage loans and program certificates. All outstanding bonds are subject to redemption at the option of the Authority, in whole or in part at any time after certain dates, as specified in the respective series indentures.

The Authority issues fixed rate and variable rate bonds. The rate on the fixed rate bonds is set at bond closing. The variable rate bonds bear interest at either a monthly or a weekly rate until maturity or earlier redemption. For bonds that pay weekly rates, the remarketing agent for each bond issue establishes the weekly rate according to each indenture's remarketing agreement. The weekly rates are communicated to the various bond trustees for preparation of debt service payments. The weekly rate, as set by the remarketing agent, allows the bonds to trade in the secondary market at a price equal to 100% of the principal amount of the bonds outstanding, with each rate not exceeding maximum rates permitted by law.

The Authority has variable rate demand bonds that have Stand-by Purchase Agreements (SBPA), which state that the issuer of the SBPA will purchase the bonds in the event the remarketing agent is unsuccessful in marketing the bonds. In this event, the interest rate paid by the Authority will be calculated using a defined rate from the SBPA. If the bonds remain unsold for a period of 90 days, they are deemed to be "bank bonds" and the Authority is required to repurchase the bonds from the SBPA issuer. The timing of this repurchase, or term out, will vary by issuer from two to five years.

Bond Discounts and Premiums – Discounts and premiums on bonds payable are amortized to interest expense over the lives of the respective bond issues using the effective interest method.

Debt Refundings – For current refundings and advance refundings resulting in defeasance of debt, the difference between the reacquisition price and the net carrying amount of the old debt is deferred and amortized as a component of interest expense over the remaining life of the old or new debt, whichever is shorter. The difference is amortized using the effective interest method, with the exception of the amount relating to deferred loss on terminated interest rate swap hedging relationships, which is amortized on a straight-line basis. The deferred refunding amounts are classified as a component of deferred outflows on the Statement of Net Position.

Notes to Basic Financial Statements (tabular dollar amounts are in thousands)

Derivative Instruments – Derivative instruments, as defined in GASB No. 53, Accounting and Financial Reporting for Derivative Instruments, are measured on the Statement of Net Position at fair value. Changes in fair value for those derivative instruments that meet the criteria for hedging instruments under GASB No. 53 are reported as deferred inflows and outflows. Changes in fair value of investment derivative instruments, which are ineffective derivative instruments, are reported within investment derivative activity loss starting in the period of change.

Derivative Instruments – Interest Rate Swap Agreements – The Authority enters into interest rate swap agreements (swap) with rated swap counterparties in order to (1) provide lower cost fixed rate financing for its loan production needs through synthetic fixed rate structures with refunding bonds in order to generate cash flow savings. The interest differentials to be paid or received under such swaps are recognized as an increase or decrease in interest expense of the related bond liability. The Authority enters into fixed payor swaps, where it pays a fixed interest rate in exchange for receiving a variable interest rate from the counterparty. The variable interest rate may be based on either a taxable or tax-exempt index. By entering into a swap agreement, the Authority hedges its interest rate exposure on the associated variable rate bonds. The Authority's interest rate swaps are generally considered to be hedging derivative instruments under GASB No. 53. However, certain interest rate swaps have been deemed ineffective and are classified as investment derivative instruments. Additional information about the swap agreements is provided in note 8.

Derivative Instruments – Forward Sales Contracts – Forward sales of mortgage backed securities within the To-Be-Announced market are utilized to hedge changes in fair value of mortgage loan inventory and commitments to purchase mortgage loans at fixed rates. As of December 31, 2022, the Authority had executed 12 forward sales transactions with a \$77.0 million notional amount with five counterparties with concentrations and ratings (Standard and Poor's/Moody's Investors Service) as shown in note 8. The forward sales will all settle by March 13, 2023. These contracts were considered investment derivative instruments and carried a fair value of \$205 thousand as of December 31, 2022. As of December 31, 2021, the Authority had executed 41 forward sales transactions with a \$591.0 million notional amount with eight counterparties with concentrations and ratings (Standard and Poor's/Moody's Investors Service) as shown in note 8. The forward sales all settled by March 21, 2022. These contracts were considered investment derivative instruments and carried a fair value of \$(1.4) million as of December 31, 2021.

Hybrid Instrument Borrowings – Hybrid instrument borrowings represent cash premiums received on interest rate swaps that had a fair value other than zero at the date of execution, generally because the fixed rates were different from market rates at that date. Interest expense is imputed on these borrowings, which are reported at amortized cost.

Net Pension Liability – For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, pension expense, information about the fiduciary net position of the Public Employee's Retirement Association of Colorado (PERA) pension plan and additions to/deductions from PERA's fiduciary net position have been determined on the same basis as they are reported by PERA. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms.

Post Employment Benefits Other than Pension (OPEB) – For purposes of measuring the net OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of the OPEB Plan and additions to/deductions from the plan fiduciary net position have been determined on the same basis as they are reported by PERA. For this purpose, PERA recognizes benefit payments when due and payable in accordance with the benefit terms.

Other Liabilities - The major other liabilities are as follows:

- Servicing escrow: The net amount of collected escrow funds currently being held on behalf of borrowers to pay future obligations of property taxes and insurance premiums due on real properties. The Authority has a corresponding asset that is recorded in restricted cash.
- Deferred Low Income Housing Tax Credit Income: Compliance monitoring fees collected in advance on multifamily properties that have been awarded low-income housing tax credits to be used over a 15-year period. These fees

Notes to Basic Financial Statements (tabular dollar amounts are in thousands)

- cover the ongoing cost the Authority incurs to certify that these properties remain low-income compliant during the 15-year period and continue to be eligible to use the tax credits awarded.
- Compensated Absences: Employees accrue paid time off at a rate based on length of service. Employees may accrue and carry over a maximum of 150% of their annual paid time off benefit. The liability for compensated absences is based on current salary rates and is reported in the Statement of Net Position.
- Federal Financing Bank (FFB) Program: Certificates of Participation of multifamily loans are sold to FFB and entitles FFB to a portion of interest and 100% of principal received from participated mortgage loans. The Authority has a corresponding asset that is recorded in loans receivable.

Classification of Revenues and Expenses – The Authority distinguishes operating revenues and expenses from nonoperating items. Operating revenues and expenses generally result from providing services in connection with the Authority's ongoing operations. The principal operating revenues of the Authority are interest income on loans, gain on sale of loans and investment income. The Authority also recognizes revenues from rental operations and other revenues, which include loan servicing fees and other administrative fees. Operating expenses include interest expense, administrative expenses, depreciation, and the provision for loan losses. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.

The Authority's nonoperating revenues and expenses consist primarily of pass-through amounts related to the Authority's role as a contract administrator of the U.S. Department of Housing and Urban Development's (HUD) Section 8 subsidy program. Under the Section 8 subsidy program, tenants pay 30% of their income toward rent and the balance is paid to the Authority by federal subsidy.

New Accounting Principles – GASB Statement No. 87 Leases was effective for the Authority in 2022. The objective of Statement No. 87 is to better meet the informational needs of financial statement users by improving accounting and financial reporting for leases by governments. This Statement increases the usefulness of a governments' financial statements by requiring the recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources, thereby enhancing the relevance and consistency of information about governments' leasing activities. There was no impact to the Authority's net position related to the adoption of this Statement.

GASB Statement No. 91 *Conduit Debt Obligations* was effective for the Authority in 2022. The primary objectives of Statement No. 91 are to provide a single method of reporting conduit debt obligations by issuers and eliminate diversity in practice associated with (1) commitments extended by issuers, (2) arrangements associated with conduit debt obligations and (3) related note disclosures. The Statement achieves those objectives by clarifying the existing definition of a conduit debt obligation; establishing that a conduit debt obligation is not a liability of the issuer; establishing standards for accounting and financial reporting of additional commitments and voluntary commitments extended by issuers and arrangements associated with conduit debt obligations; and improving required note disclosures. The Authority reports conduit debt obligations in note 7 of this report. There was no impact to the Authority's net position related to the adoption of this Statement.

GASB Statement No. 92 *Omnibus 2020* was effective for the Authority in 2022. The primary objectives of Statement No. 92 are intended to enhance comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing practice issues that have been identified during implementation and application of certain GASB Statements.

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This Statement addresses a variety of topics and includes specific provisions about the following:

- The effective date of Statement No. 87, Leases, and Implementation Guide No. 2019-3, Leases, for interim financial reports. The requirements of Statement No. 92 related to the effective date of Statement 87 and Implementation Guide 2019-3, reinsurance recoveries, and terminology used to refer to derivative instruments are effective upon issuance.
- Reporting of intra-entity transfers of assets between a primary government employer and a component unit defined benefit pension plan or OPEB plan.
- The applicability of Statements No. 73, Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68, as amended, and No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, as amended, to reporting assets accumulated for postemployment benefits.
- The applicability of certain requirements of Statement No. 84, *Fiduciary Activities*, to postemployment benefit arrangements.
- Measurement of liabilities (and assets, if any) related to asset retirement obligations (AROs) in a government acquisition.
- Reporting by public entity risk pools for amounts that are recoverable from reinsurers or excess insurers.
- Reference to nonrecurring fair value measurements of assets or liabilities in authoritative literature.
- Terminology used to refer to derivative instruments.

The requirements of this Statement are intended to enhance comparability in the application of accounting and financial reporting requirements and will improve the consistency of authoritative literature. More comparable reporting will improve the usefulness of information for users of state and local government financial statements. There was no impact to the Authority's net position related to the adoption of this Statement.

GASB Statement No. 97 Certain Component Unit Criteria, and Account and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans was effective for the Authority in 2022. The primary objectives of this Statement are to (1) increase consistency and comparability related to the reporting of fiduciary component units in circumstances in which a potential component unit does not have a governing board and the primary government performs the duties that a governing board typically would perform; (2) mitigate costs associated with the reporting of certain defined contribution pension plans, defined OPEB plans, and employee benefit plans other than pension plans or OPEB plans as fiduciary component units in fiduciary fund financial statements; and (3) enhance the relevance, consistency, and comparability of the accounting and financial reporting for Internal Revenue Code (IRC) Section 457 deferred compensation plans (Section 457 plans) that meet the definition of a pension plan and for benefits provided through those plans. There was no impact to the Authority's net position related to the adoption of this Statement.

Future Accounting Principles – GASB issued Statement No 96 Subscription-based Information Technology Arrangements, which is effective for fiscal years beginning after June 15, 2022. This Statement provides guidance on the accounting and financial reporting for subscription-based information technology arrangements (SBITAs) for government end users (governments). This Statement (1) defines a SBITA; (2) establishes that a SBITA results in a right-to-use subscription asset—an intangible asset—and a corresponding subscription liability; (3) provides the capitalization criteria for outlays other than subscription payments, including implementation costs of a SBITA; and (4) requires note disclosures regarding a SBITA. To the extent relevant, the standards for SBITAs are based on the standards established in Statement No. 87, Leases, as amended.

A SBITA is defined as a contract that conveys control of the right to use another party's (a SBITA vendor's) information technology (IT) software, alone or in combination with tangible capital assets (the underlying IT assets), as specified in the contract for a period of time in an exchange or exchange-like transaction. This statement will be applicable to the Authority in

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2023; however, the impact of the applicability of Statement No 96 on the Authority's financial statements, and footnotes therein, has not yet been determined.

GASB issued Statement No. 99 *Omnibus 2022* which has varying effective dates for different components, some are effective upon issuance. The requirements related to leases, Public-Private and Public-Public Partnerships (PPP), and SBITAs are effective for fiscal years beginning after June 15, 2022. The requirements related to financial guarantees and the classification and reporting of derivative instruments within the scope of Statement 53 are effective for fiscal years beginning after Jun 15, 2023. The objectives of this Statement are to enhance comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing (1) practice issues that have been identified during implementation and application of certain GASB Statements and (2) accounting and financial reporting for financial guarantees. The practice issues addressed by this Statement are as follows:

- Classification and reporting of derivative instruments within the scope of Statement No. 53, Accounting and Financial Reporting for Derivative Instruments, that do not meet the definition of either an investment derivative instrument or a hedging derivative instrument
- Clarification of provisions in Statement No. 87, Leases, as amended, related to the determination of the lease term, classification of a lease as a short-term lease, recognition and measurement of a lease liability and a lease asset, and identification of lease incentives
- Clarification of provisions in Statement No. 94, Public-Private and Public-Public Partnerships and Availability
 Payment Arrangements, related to (a) the determination of the PPP term and (b) recognition and measurement of
 installment payments and the transfer of the underlying PPP asset
- Clarification of provisions in Statement No. 96, Subscription-Based Information Technology Arrangements, related to the SBITA term, classification of a SBITA as a short-term SBITA, and recognition and measurement of a subscription liability
- Extension of the period during which the London Interbank Offered Rate (LIBOR) is considered an appropriate benchmark interest rate for the qualitative evaluation of the effectiveness of an interest rate swap that hedges the interest rate risk of taxable debt
- Accounting for the distribution of benefits as part of the Supplemental Nutrition Assistance Program (SNAP)
- Disclosures related to nonmonetary transactions
- Pledges of future revenues when resources are not received by the pledging government
- Clarification of provisions in Statement No. 34, Basic Financial Statements—and Management's Discussion and Analysis—for State and Local Governments, as amended, related to the focus of the government-wide financial statements
- Terminology updates related to certain provisions of Statement No. 63, Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position
- Terminology used in Statement 53 to refer to resource flows statements.

The impact of the applicability of Statement No. 99 on the Authority's financial statements, and footnotes therein, has not yet been determined.

GASB issued Statement No. 100 Accounting Changes and Error Corrections – an Amendment of GASB Statement No. 62, which is effective for accounting changes and error corrections made in fiscal years after June 15, 2023. The primary objective of this Statement is to enhance accounting and financial reporting requirements for accounting changes and error corrections to provide more understandable, reliable, relevant, consistent, and comparable information for making decisions or assessing accountability. The impact of the applicability of Statement No. 100 on the Authority's financial statements, and footnotes therein, has not yet been determined.

GASB issued Statement No. 101 *Compensated Absences*, which is effective for fiscal years beginning after December 15, 2023. The objective of this Statement is to better meet the information needs of financial statement users by updating the



recognition and measurement guidance for compensated absences. That objective is achieved by aligning the recognition and measurement guidance under a unified model and amending certain previously required disclosures. The impact of the applicability of Statement No. 101 on the Authority's financial statements, and footnotes therein, has not yet been determined.

(2) Cash and Investments

Cash and Cash Equivalents – The Authority's cash and cash equivalents are reported as either restricted or unrestricted and are represented by cash on hand and demand deposits held in banks. Cash is classified as restricted when its use is subject to external limits such as bond indentures, legal agreements or statutes. Restricted cash includes payments received on pledged assets and used for the payment of bonds under the related indenture agreements. Also included in restricted cash are escrow balances, payments in process and various government deposits. As of December 31, 2022 and 2021, the Authority had unrestricted cash of \$13.0 million and \$83.2 million, respectively.

Restricted cash as of December 31, was as follows:

Summary of Restricted Cash	2022	2021		
Customer escrow accounts	\$ 95,597	\$ 191,372		
Payments in process	24,308	16,862		
Administered program deposits	40,700	25,435		
Total fair value	\$ 160,605	\$ 233,669		

Custodial Credit Risk – Cash Deposits – In the case of cash deposits, custodial credit risk is the risk that in the event of a bank failure, cash deposits belonging to the Authority may not be returned. All deposit accounts were either covered by the Federal Deposit Insurance Corporation or fully collateralized in accordance with the State of Colorado's Division of Banking's Public Deposit Protection Act.

Included in cash deposits are escrow deposits in the amount of \$95.6 million and \$191.4 million as of December 31, 2022 and 2021, respectively. These escrow deposits, included in other current liabilities on the statement of net position, are primarily held for the payment of property taxes and insurance on behalf of the mortgagors whose loans are owned or serviced by the Authority.

Investments – The Authority is authorized by means of a Board-approved investment policy to invest in notes, bonds and other obligations issued or guaranteed by the U.S. government and certain governmental agencies. Additionally, the Authority is permitted to invest, with certain restrictions as to concentration of risk, collateralization levels, maximum periods to maturity, and/or underlying rating levels applied, in revenue or general obligations of states and their agencies, certificates of deposits, U.S. dollar denominated corporate or bank debt, commercial paper, repurchase agreements backed by U.S. government or agency securities, money market mutual funds and investment agreements. The Authority's investment policy requires 1) staggered maturities to avoid undue concentrations of assets in a specific maturity sector, 2) stable income, 3) adequate liquidity to meet operations and debt service obligations and 4) diversification to avoid overweighting in any one type of security. The Authority is also subject to permissible investments as authorized by Title 24, Article 75, Part 6 of the Statutes. Permissible investments pursuant to the Statutes are either identical to or less restrictive than the Authority's investment policy. In addition, each of the trust indentures established under the Authority's bond programs contains requirements as to permitted investments of bond fund proceeds, which may be more or less restrictive than the Authority's investment policy. These investments are included in the disclosures below under State and political subdivision obligations.



General Program investments of \$50.1 million include investments pledged as of December 31, 2022 as follows: \$15.8 million in interest only strips held at Wells Fargo, \$23.6 million in pledged securities with Federal Home Loan Bank (FHLB), FirstBank investments of Rural Development Loan Program (RDLP), RDLP II and RDLP V in the amounts of \$1.2 million, \$485 thousand and \$441 thousand, respectively; each pledged as collateral for the RDLP notes payable.

General Program investments of \$27.0 million include investments pledged as of December 31, 2021 as follows: \$16.7 million in interest only strips held at Wells Fargo, FirstBank investments of Rural Development Loan Program (RDLP), RDLP II and RDLP V in the amounts of \$956 thousand, \$323 thousand and \$437 thousand, respectively; each pledged as collateral for the RDLP notes payable.

All Single Family and Multifamily/Business Program investments, which total \$2.0 billion and \$1.9 billion as of December 31, 2022 and 2021, respectively, are restricted under bond indentures or other debt agreements, or otherwise pledged as collateral for borrowings. These amounts are detailed in the supplemental schedules.

Interest Rate Risk – Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Except for the money market mutual fund investments, substantially all of the Authority's investments are subject to this risk.

As of December 31, 2022, the Authority had the following investment maturities:

Investment Maturities (In Yea							s (In Years)		
		Less						More	
Investment Type	1	Γhan 1		1-5			6-10	Than 10	Total
External investment pool	\$	10,672	\$		-	\$	-	\$ -	\$ 10,672
Investment agreements - uncollateralized		53,142			-		-	-	53,142
Money market fund		392,663			-		-	-	392,663
Repurchase agreement		11,794			-		-	-	11,794
U.S. government agencies		23,634			-		24,173	1,489,390	1,537,197
U.S. Treasury		-			-		4,979	-	4,979
Total	\$	491,905	\$		-	\$	29,152	\$ 1,489,390	\$ 2,010,447



As of December 31, 2021, the Authority had the following investment maturities:

		Less			More	
Investment Type	•	Than 1	1-5	6-10	Than 10	Total
External investment pool	\$	9,741	\$ _	\$ _	\$ -	\$ 9,741
Investment agreements - uncollateralized		45,388	23,800	-	-	69,188
Money market fund		265,863	-	-	-	265,863
Repurchase agreement		15,338	-	-	-	15,338
U.S. government agencies		-	-	29,416	1,482,728	1,512,144
U.S. Treasury		454	-	5,929	-	6,383
Total	\$	336,784	\$ 23,800	\$ 35,345	\$ 1,482,728	\$ 1,878,657

Credit Risk – The following table provides credit ratings of the Authority's investments as determined by Standard and Poor's and/or Moody's Investors Service.

	202	2	2021	2021			
Investment Type	Rating	Total	Rating	Total			
External investment pool	A-/NA	\$ 10,672	A-/NA	\$ 9,741			
Investment agreements - uncollateralized	AA+/Aa3	21,067	AA+/Aa3	-			
Investment agreements - uncollateralized	AA+/Aa2	-	AA+/Aa2	22,597			
Investment agreements - uncollateralized	AA-/Aa2	23,800	BBB+/Baa1	616			
Investment agreements - uncollateralized	AA-/Aa3	-	AA-/Aa3	36,200			
Investment agreements - uncollateralized	A/A1	8,275	A/A1	9,775			
Money market mutual fund	AAAm/Aaa	392,663	AAAm/Aaa	265,863			
Repurchase agreements	AA+/Aaa	11,794	AA+/Aaa	15,338			
U.S. government agencies	AA+/Aaa	1,537,197	AA+/Aaa	1,512,144			
U.S. Treasury	AA+/Aaa	4,979	AA+/Aaa	6,383			
Total		\$ 2,010,447		\$ 1,878,657			

Investment agreements meet the requirements of the rating agency providing the rating on the related debt issue and of the Board's investment policy. The Board's investment policy states that the Authority is empowered to invest in any security that is a revenue or general obligation of any political subdivision. The credit rating at the time of purchase must be rated in one of its two highest rating categories by one or more nationally recognized organizations, which regularly rate such obligations and concentration limits may not exceed more than 20% of the investment portfolio.



Concentration of Credit Risk – The Authority has various maximum investment limits both by type of investment and by issuer to prevent inappropriate concentration of credit risk. The following table provides information on issuers in which the Authority has investments representing more than 5% of its total investments as of December 31, 2022 and 2021.

Issuer	2022	2021
GNMA	73.48%	77.93%
Goldman Sachs	17.05%	7.69%
Wells Fargo	2.21%	6.17%

Custodial Credit Risk – Investments – Custodial credit risk is the risk that, in the event of the failure of the custodian, the Authority will not be able to recover the value of its investment or collateral securities that are in the possession of the custodian. All securities owned by the Authority are either in the custody of the related bond indenture trustees or held in the name of the Authority by a party other than the issuer of the security.

(3) Loans Receivable, Related Allowances and Troubled Debt Restructuring

Loans receivable and loans receivable held for sale at December 31, consisted of the following:

	2022	2021
General Program	\$ 712,758	\$ 678,612
Single Family Program	176,149	194,066
Multifamily/Business Program:		
Multifamily/Project	508,595	507,102
Multifamily Pass Through	86,940	100,053
Total Multifamily/Business Program	595,535	607,155
Less intercompany loans, included in Multifamily/Project above	(39,793)	(40, 139)
Total loans receivable	1,444,649	1,439,694
Payments in process	(9,218)	(3,768)
Allowance for loan losses	(8,922)	(7,255)
Total loans receivable, net	\$ 1,426,509	\$ 1,428,671

Loans in the Single Family Program and the Multifamily/Business Program in the table above are grouped based on the related bond type (see note 6 for additional information). Amounts related to these programs are considered restricted and are detailed in the supplemental schedules.

General Program loans include single family, multifamily and business finance loans acquired under various programs of the General Program, loans to be sold through the issuance of Ginnie Mae securities, loans to be sold to Fannie Mae and Freddie Mac, loans to be pooled and swapped for securities issued by Fannie Mae, loans held as investments and loans backed by bonds within the General Program. These loans are typically collateralized by mortgages on real property and improvements. Certain of these loans are also insured or guaranteed by agencies of the U.S. government.



Single family bond program loans are collateralized by mortgages on applicable real property and, in the case of loans with an initial loan-to-value ratio of 80% or more, are generally either insured by the FHA or guaranteed by the VA or RD or insured by private mortgage insurance.

The single family loan portfolio included in the general and single family programs as of December 31, 2022 was comprised of \$332.3 million of FHA insured loans, \$9.9 million of VA guaranteed loans, \$6.4 million of RD guaranteed loans and \$27.1 million of conventional insured loans with the balance of \$389.9 million made up of uninsured conventional and second mortgage loans.

The single family loan portfolio included in the general and single family programs as of December 31, 2021 was comprised of \$351.6 million of FHA insured loans, \$10.7 million of VA guaranteed loans, \$8.2 million of RD guaranteed loans and \$54.4 million of conventional insured loans with the balance of \$345.8 million made up of uninsured conventional and second mortgage loans.

The Authority is exposed to operational risk, which makes it subject to loss or repurchase of insured FHA loans if specific guidelines are not met. As of December 31, 2022 and 2021, the Authority recorded a reserve of \$208 thousand and \$213 thousand, respectively, for claim refunds to be paid to the HUD.

As of December 31, 2022 and 2021, single family mortgage loans with pending foreclosure actions have aggregate principal balances of approximately \$33.2 million and \$1.0 million, respectively. As of December 31, 2022 and 2021, the aggregate principal balance of single family mortgage loans delinquent 91 days or greater was approximately \$101.4 million and \$50.0 million, respectively.

The Multifamily/Business Program loans and a portion of General Program loans are commercial loans. Commercial loans are collateralized by mortgages on applicable real estate and, in some cases, are insured by an agency of the U.S. government, which reduces the credit risk exposure for that type of insured loan.

As of December 31, 2022, approximately \$406.1 million, or 74.7%, of the commercial loan balances are not covered by insurance. The insured loans were comprised of \$275.7 million of Section 542(c) risk share loans, which are 50% insured.

As of December 31, 2021, approximately \$391.7 million, or 73.5%, of the commercial loan balances are not covered by insurance. The insured loans were comprised of \$265.0 million of Section 542(c) risk share loans, which are 50% insured.

As of December 31, 2022 and 2021, there were no commercial loans with pending foreclosure actions. As of December 31, 2022 and 2021, the aggregate principal balance of commercial loans delinquent 91 days or greater was approximately \$305 thousand and \$252 thousand, respectively.



Activity in the allowance for loan loss for the years ended December 31, was as follows:

	2022	2021		
Beginning balance	\$ 7,255	\$	7,386	
Provision	2,245		550	
Net charge-offs				
Single Family	(499)		(578)	
Multifamily/Business	(79)		(103)	
Ending balance	\$ 8,922	\$	7,255	

The Authority services loans that it securitizes as Ginnie Mae mortgage-backed securities and sells. As of December 31, 2022 and 2021, these loans totaled \$7.2 billion and \$6.3 billion, respectively.

The Authority services loans on the behalf of others, primarily for Fannie Mae and Freddie Mac, which are not reported on the Statement of Net Position. As of December 31, 2022 and 2021, these outstanding loan balances were \$1.5 billion and \$1.3 billion, respectively.



The Authority has granted terms and interest rate concessions to debtors, which are considered troubled debt restructurings, as of December 31, as summarized below:

Single Family Program Loans:	2022	2021
Aggregate recorded balance	\$ 49,233	\$ 65,395
Number of loans	351	413
Gross interest revenue if receivables had been current	\$ 2,525	\$ 3,292
Interest revenue included in changes in net position	\$ 1,558	\$ 1,875
Multifamily/Business Program Loans:	2022	2021
Aggregate recorded balance	\$ 3,634	\$ 3,897
Number of loans	6	7
Gross interest revenue if receivables had been current	\$ 174	\$ 526
Interest revenue included in changes in net position	\$ 173	\$ 423



(4) Capital Assets

Capital asset activity for the year ended December 31, 2022 was as follows:

	Beginning Balance Additions		Re	ductions	Ending Balance	
Nondepreciable capital assets:						
Land	\$	1,573	\$ -	\$	-	\$ 1,573
Construction in progress		1,080	544		(1,048)	576
Total nondepreciable capital assets		2,653	544		(1,048)	2,149
Depreciable capital assets:						
Cost:						
Computer equipment/software		7,519	946		-	8,465
Furniture and equipment		2,369	25		-	2,394
Buildings and related improvements		13,736	-		-	13,736
Total depreciable capital assets		23,624	971		-	24,595
Less accumulated depreciation:						
Computer equipment/software		(7,278)	(400)		-	(7,678)
Furniture and equipment		(966)	(291)		-	(1,257)
Buildings and related improvements		(5,494)	(384)		-	(5,878)
Total accumulated depreciation		(13,738)	(1,075)		-	(14,813)
Total depreciable capital assets, net		9,886	(104)		-	9,782
Total capital assets, net	\$	12,539	\$ 440	\$	(1,048)	\$ 11,931



Capital asset activity for the year ended December 31, 2021 was as follows:

	ginning Balance	A	dditions	Re	ductions	Ending Balance
Nondepreciable capital assets:						
Land	\$ 1,573	\$	-	\$	-	\$ 1,573
Construction in progress	357		723		-	1,080
Total nondepreciable capital assets	1,930		723		-	2,653
Depreciable capital assets:						
Cost:						
Computer equipment/software	8,883		-		(1,364)	7,519
Furniture and equipment	2,357		12		-	2,369
Buildings and related improvements	13,736		-		-	13,736
Total depreciable capital assets	24,976		12		(1,364)	23,624
Less accumulated depreciation:						
Computer equipment/software	(8,516)		(126)		1,364	(7,278)
Furniture and equipment	(680)		(286)		-	(966)
Buildings and related improvements	(5,107)		(387)		-	(5,494)
Total accumulated depreciation	(14,303)		(799)		1,364	(13,738)
Total depreciable capital assets, net	10,673		(787)		-	9,886
Total capital assets, net	\$ 12,603	\$	(64)	\$	-	\$ 12,539

(5) Short-Term Debt

The Authority has an agreement with the FHLB for collateralized borrowings in an amount not to exceed the lending limit internally established by the FHLB, which is 40% of the Authority's total assets, or \$1.5 billion. Amounts drawn under the agreement bears interest at the same rates charged by the FHLB to its member banks and are collateralized by certain mortgage loans and investments. As of December 31, 2022 and 2021, the Authority had \$81.5 million and \$146.9 million of short-term debt outstanding with the FHLB.

The Authority had a revolving, unsecured, commercial bank line of credit agreement for borrowings of up to \$150.0 million. Amounts drawn under the agreement incurred interest fixed at a spread above the one week or one-month LIBOR rate. The Authority paid an unused line fee based upon the average daily unused amount of the line of credit computed on the basis of a 360-day year. This line of credit agreement expired on March 31, 2022, and was not renewed. As of December 31, 2021, there was an outstanding balance of \$60.0 million.

In 2021 the Authority obtained an additional revolving, unsecured, commercial bank line of credit agreement for borrowings of up to \$50.0 million. Amounts drawn under the agreement bear interest fixed at a spread above Term Secured Overnight Financing Rate (SOFR). This line of credit agreement terminates on March 31, 2023. The Authority pays an unused line fee based upon the average daily unused amount of the line of credit computed on the basis of a 360-day year, payable quarterly

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in arrears. As of December 31, 2022 and 2021, the Authority had \$20.0 million and \$0 of short-term debt outstanding on this agreement.

In 2022 the Authority obtained an additional revolving, unsecured commercial bank line of credit agreement for borrowings of up to \$150.0 million. Amounts drawn under the agreement bear interest fixed at a spread above Daily Simple SOFR. This line of credit agreement terminates on March 28, 2024. The Authority pays a commitment fee based upon the actual daily available commitment, payable quarterly in arrears. As of December 31, 2022, there was an outstanding balance of \$61.5 million on this agreement.

In 2022 the Authority obtained a third revolving, unsecured commercial bank line of credit agreement for borrowings of up to \$250.0 million. Amounts drawn under the agreement bear interest at a spread above Term SOFR. This line of credit agreement terminates on June 1, 2023. The Authority pays a facility fee based upon the daily available commitment, payable in arrears on the first business day of February, May, August and November. In December 2022, the borrowing limit was reduced from \$250.0 million to \$150.0 million. As of December 31, 2022, there was no outstanding balance on this agreement.

Borrowings under these agreements are used to support the Authority's various lending programs, to purchase loans to be sold through the issuance and sale of Ginnie Mae and Fannie Mae securities, to provide additional liquidity for Ginnie Mae loan buyouts and for activities related to the Authority's private activity bond volume cap preservation program. There are no commitment fees associated with these agreements.

Short-term debt activity for the years ended December 31, was as follows:

	2022	2021
Beginning balance	\$ 206,922	\$ 177,891
Additions	8,145,320	9,304,028
Reductions	 (8,189,244)	(9,274,997)
Ending balance	\$ 162,998	\$ 206,922

(6) Bonds, Notes Payable and Other Liabilities

The Authority issues bonds and notes payable to finance its lending programs. Proceeds from long-term debt of the Single Family and Multifamily/Business bonds are used for funding of single family, multifamily and business loans. Long-term debt of the General Program (including notes payable) is used to finance single family and business loans. The aggregate principal amounts of bonds and notes payable outstanding as of December 31, 2022 and 2021 are shown in the table on the following pages. Interest is payable semiannually unless otherwise noted. Interest rates on variable rate debt reset on a weekly or monthly basis. At December 31, 2022, these rates ranged from 3.60% to 4.40%. At December 31, 2021, these rates ranged from 0.08% to 0.15%.



Outstanding Bonds as of December 31:

Descripton and due date		Interest rate (%)	2022	2021
Bonds payable:				
Single Family Fund:				
Single Family Mortgage Bonds:				
2001 Series AA	2023 - 2041	Variable	\$ 34,010 \$	38,105
2014 Series A	2023 - 2027	3.08 - 3.53	3,910	7,440
2015 Series A	2023 - 2031	2.64 - 4.00	12,425	17,180
2015 Series B	2023 - 2025	2.90 - 3.27	1,485	3,000
2017 Series A	2023 - 2047	3.00	9,630	17,087
2017 Series B	2023 - 2044	Variable and 3.05	8,290	10,830
2017 Series AA	2023 - 2047	3.03	9,248	15,733
2017 Series CDE	2023 - 2048	Variable and 4.00	31,170	40,160
2018 Series AA	2023 - 2048	3.70	18,313	28,508
2018 Series AB	2023 - 2048	Variable and 4.00	36,070	43,885
2018 Series C	2023 - 2048	2.30 - 4.25	23,515	36,715
2018 Series D	2023 - 2029	3.20 - 3.81	15,735	20,395
2018 Series BB	2023 - 2048	4.20 - 4.50	24,668	38,771
2019 Series ABC	2023 - 2049	Variable and 3.00 - 4.75	45,230	53,475
2019 Series DE	2023 - 2049	Variable and 1.95 - 4.25	74,115	87,530
2019 Series FG	2023 - 2049	Variable and 1.90 - 4.25	47,250	59,235
2019 Series HI	2023 - 2049	Variable and 2.25 - 4.25	57,100	69,510
2019 Series AA	2023 - 2049	3.18	21,718	32,274
2019 Series BB	2023 - 2049	2.85 - 3.60	19,745	32,512
2019 Series JKL	2023 - 2050	Variable and 1.70 - 4.00	71,185	92,615
2019 Series CC	2023 - 2050	2.91	20,437	33,121
2020 Series ABC	2023 - 2050	Variable and 1.88 - 3.75	76,765	102,575
2020 Series AA	2023 - 2050	2.35	27,707	38,220
2020 Series BB	2023 - 2050	2.60	22,982	31,114
2020 Series DEF	2023 - 2050	Variable and 0.80 - 3.50	86,890	102,775
2020 Series GHI	2023 - 2050	Variable and 0.60 - 3.00	110,605	124,980
2021 Series ABC	2023 - 2051	Variable and 0.25 - 3.00	111,635	122,410
2021 Series DEF	2023 - 2051	0.35 - 3.00	78,280	83,255
2021 Series GHIJ	2023 - 2051	Variable and 0.40 - 3.00	122,534	129,331
2021 Series KLM	2023 - 2051	Variable and 0.38 - 3.25	120,535	125,000
2022 Series ABC	2023 - 2052	Variable and 0.70 - 3.25	123,110	-
2022 Series AA	2023 - 2052	3.55	49,685	-
2022 Series D	2023 - 2047	Variable and 2.55 - 5.00	75,000	-
2022 Series BB	2023 - 2052	4.65 - 4.80	49,895	-
2022 Series EFG	2023 - 2052	Variable and 1.90 - 5.25	99,990	-
2022 Series HI	2023 - 2053	Variable and 4.70 - 6.50	149,990	-
2022 Series JKL	2023 - 2053	Variable and 3.60 - 6.10	99,990	-
Total Single Family Mortgage Bond			1,990,842	1,637,741
Total Single Family Fund			1,990,842	1,637,741

Table continued on following page.



2 - 2022	Variable Variable Variable 3.90 - 4.50 2.55 - 4.20 Variable 3.20 2.10 - 4.00 3.45 3.00 3.10 3.13 3.40 3.85 3.76 3.75 3.64 Variable and 3.05 - 1.55 - 3.00 1.55 - 3.50 Variable 1.55 - 1.65 0.45 - 2.25 Variable and 0.88 - 0.35 - 2.65 0.45 - 2.38 0.67 0.25 - 2.60	- 4.33	2,045 44,230 9,955 138,940 7,145 9,260 - 355 2,688 9,675 4,886 8,667 3,229 6,167		2,3 44,2 10,9 141,9 7,4 9,4 15,8 7 4,5 10,0 4,9
3 - 2038 Variable 3 - 2029 Variable 3 - 2052 Variable 3 - 2051 3.90 - 4. 2 - 2022 2.55 - 4. 2 - 2022 2.55 - 4. 3 - 2044 3.20 3 - 2044 3.20 3 - 2044 3.20 3 - 2056 3.45 3 - 2056 3.45 3 - 2056 3.10 3 - 2052 3.10 3 - 2052 3.10 3 - 2053 3.40 3 - 2056 3.13 3 - 2057 3.75 3 - 2057 3.76 3 - 2057 3.76 3 - 2057 3.75 3 - 2057 3.75 3 - 2057 3.75 3 - 2057 3.76 3 - 2057 3.75 3 - 2057 3.75 3 - 2057 3.75 3 - 2057 3.75 3 - 2057 3.75 3 - 2057 3.75 3 - 2057 3.64 3 - 2050 Variable 3 - 2040 1.55 - 3. 3 - 2051 Variable 3 - 2050 Variable 3 - 2050 Variable 3 - 2050 Variable 3 - 2050 Variable 3 - 2041 0.45 - 2. 3 - 2042 0.45 - 2. 3 - 2042 0.45 - 2. 3 - 2043 0.50 - 2. 3 - 2042 0.45 - 2. 3 - 2042 0.45 - 2. 3 - 2024 0.67 3 - 2061 0.25 - 2. 3 - 2023 0.38	Variable Variable Variable 3.90 - 4.50 2.55 - 4.20 Variable 3.20 2.10 - 4.00 3.45 3.00 3.10 3.13 3.40 3.85 3.76 3.75 3.64 Variable and 3.05 - 1.55 - 3.50 Variable 1.55 - 1.65 0.50 - 2.35 0.45 - 2.25 Variable and 0.88 - 0.35 - 2.65 0.45 - 2.38 0.67 0.25 - 2.60 0.38	-4.33	44,230 9,955 138,940 7,145 9,260 - 355 2,688 9,675 4,886 8,667 3,229		44,2 10,9 141,9 7,4 9,4 15,8 7 4,5
3 - 2038 Variable 3 - 2029 Variable 3 - 2052 Variable 3 - 2051 3.90 - 4. 2 - 2022 2.55 - 4. 2 - 2022 2.55 - 4. 3 - 2044 3.20 3 - 2044 3.20 3 - 2044 3.20 3 - 2056 3.45 3 - 2056 3.45 3 - 2056 3.10 3 - 2052 3.10 3 - 2052 3.10 3 - 2053 3.40 3 - 2056 3.13 3 - 2057 3.75 3 - 2057 3.76 3 - 2057 3.76 3 - 2057 3.75 3 - 2057 3.75 3 - 2057 3.75 3 - 2057 3.76 3 - 2057 3.75 3 - 2057 3.75 3 - 2057 3.75 3 - 2057 3.75 3 - 2057 3.75 3 - 2057 3.75 3 - 2057 3.64 3 - 2050 Variable 3 - 2040 1.55 - 3. 3 - 2051 Variable 3 - 2050 Variable 3 - 2050 Variable 3 - 2050 Variable 3 - 2050 Variable 3 - 2041 0.45 - 2. 3 - 2042 0.45 - 2. 3 - 2042 0.45 - 2. 3 - 2043 0.50 - 2. 3 - 2042 0.45 - 2. 3 - 2042 0.45 - 2. 3 - 2024 0.67 3 - 2061 0.25 - 2. 3 - 2023 0.38	Variable Variable Variable 3.90 - 4.50 2.55 - 4.20 Variable 3.20 2.10 - 4.00 3.45 3.00 3.10 3.13 3.40 3.85 3.76 3.75 3.64 Variable and 3.05 - 1.55 - 3.50 Variable 1.55 - 1.65 0.50 - 2.35 0.45 - 2.25 Variable and 0.88 - 0.35 - 2.65 0.45 - 2.38 0.67 0.25 - 2.60 0.38	- 4.33	44,230 9,955 138,940 7,145 9,260 - 355 2,688 9,675 4,886 8,667 3,229		44,2 10,9 141,9 7,4 9,4 15,8 7 4,5
3 - 2029 Variable 3 - 2051 3.90 - 4. 3 - 2051 3.90 - 4. 2 - 2022 2.55 - 4. 3 - 2023 Variable 3 - 2044 3.20 3 - 2044 3.20 3 - 2044 3.20 3 - 2041 2.10 - 4. 3 - 2056 3.45 3 - 2056 3.00 3 - 2052 3.10 3 - 2056 3.13 3 - 2057 3.76 3 - 2057 3.76 3 - 2057 3.76 3 - 2057 3.75 3 - 2057 3.64 3 - 2057 3.75 3 - 2057 3.64 3 - 2050 Variable 3 - 2040 1.55 - 3. 3 - 2051 Variable 3 - 2040 1.55 - 3. 3 - 2051 Variable	Variable Variable 3.90 - 4.50 2.55 - 4.20 Variable 3.20 2.10 - 4.00 3.45 3.00 3.10 3.13 3.40 3.85 3.76 3.75 3.64 Variable and 3.05 - 1.55 - 3.00 1.55 - 3.50 Variable 1.55 - 1.65 0.50 - 2.35 0.45 - 2.25 Variable and 0.88 - 0.35 - 2.65 0.45 - 2.38 0.67 0.25 - 2.60 0.38	- 4.33	9,955 138,940 7,145 9,260 - 355 2,688 9,675 4,886 8,667 3,229		10,9 141,9 7,4 9,4 15,8 7 4,5
3 - 2052 Variable 3 - 2041 Variable 3 - 2051 3.90 - 4. 2 - 2022 2.55 - 4. 3 - 2023 Variable 3 - 2044 3.20 3 - 2044 3.20 3 - 2041 2.10 - 4. 3 - 2056 3.45 3 - 2056 3.00 3 - 2052 3.10 3 - 2052 3.10 3 - 2052 3.10 3 - 2057 3.85 3 - 2057 3.75 3 - 2057 3.75 3 - 2057 3.64 3 - 2057 3.64 3 - 2050 Variable 3 - 2040 1.55 - 3. 3 - 2051 Variable 3 - 2050 Variable 3 - 2051 Variable	Variable Variable 3.90 - 4.50 2.55 - 4.20 Variable 3.20 2.10 - 4.00 3.45 3.00 3.10 3.13 3.40 3.85 3.76 3.75 3.64 Variable and 3.05 - 1.55 - 3.00 1.55 - 3.50 Variable 1.55 - 1.65 0.50 - 2.35 0.45 - 2.25 Variable and 0.88 - 0.35 - 2.65 0.45 - 2.25 0.45 - 2.25 Variable and 0.88 - 0.35 - 2.65 0.45 - 2.38 0.67 0.25 - 2.60 0.38	- 4.33	138,940 7,145 9,260 - 355 2,688 9,675 4,886 8,667 3,229		141,9 7,4 9,4 15,8 7 4,5 10,0
3 - 2041 Variable 3 - 2051 3.90 - 4. 2 - 2022 2.55 - 4. 2 - 2023 Variable 3 - 2044 3.20 3 - 2041 2.10 - 4. 3 - 2056 3.45 3 - 2056 3.00 3 - 2052 3.10 3 - 2052 3.10 3 - 2056 3.43 3 - 2057 3.85 3 - 2057 3.75 3 - 2057 3.64 3 - 2057 3.64 3 - 2057 3.64 3 - 2050 Variable 3 - 2040 1.55 - 3. 3 - 2051 Variable 3 - 2050 Variable 3 - 2050 Variable 3 - 2050 Variable 3 - 2051 Variable	Variable 3.90 - 4.50 2.55 - 4.20 Variable 3.20 2.10 - 4.00 3.45 3.00 3.10 3.13 3.40 3.85 3.76 3.75 3.64 Variable and 3.05 - 1.55 - 3.00 1.55 - 3.50 Variable 1.55 - 1.65 0.50 - 2.35 0.45 - 2.25 Variable and 0.88 - 0.35 - 2.65 0.45 - 2.38 0.67 0.25 - 2.60 0.38	- 4.33	7,145 9,260 - 355 2,688 9,675 4,886 8,667 3,229		7,4 9,4 15,8 7 4,5 10,0
3 - 2051 3.90 - 4. 2 - 2022 2.55 - 4. 3 - 2023 Variable 3 - 2044 3.20 3 - 2041 2.10 - 4. 3 - 2056 3.45 3 - 2056 3.00 3 - 2052 3.10 3 - 2052 3.10 3 - 2055 3.45 3 - 2057 3.85 3 - 2057 3.76 3 - 2057 3.76 3 - 2057 3.64 3 - 2057 3.64 3 - 2050 Variable 3 - 2040 1.55 - 3. 3 - 2051 Variable	3.90 - 4.50 2.55 - 4.20 Variable 3.20 2.10 - 4.00 3.45 3.00 3.10 3.13 3.40 3.85 3.76 3.75 3.64 Variable and 3.05 - 1.55 - 3.00 1.55 - 3.50 Variable 1.55 - 1.65 0.50 - 2.35 0.45 - 2.25 Variable and 0.88 - 0.35 - 2.65 0.45 - 2.38 0.67 0.25 - 2.60 0.38	- 4.33	9,260 - 355 2,688 9,675 4,886 8,667 3,229		9,4 15,8 7 4,5 10,0
2 - 2022	2.55 - 4.20 Variable 3.20 2.10 - 4.00 3.45 3.00 3.10 3.13 3.40 3.85 3.76 3.75 3.64 Variable and 3.05 - 1.55 - 3.00 1.55 - 3.50 Variable 1.55 - 1.65 0.50 - 2.35 0.45 - 2.25 Variable and 0.88 - 0.35 - 2.65 0.45 - 2.38 0.67 0.25 - 2.60 0.38	- 4.33	355 2,688 9,675 4,886 8,667 3,229		15,8 7 4,5 10,0
3 - 2023 Variable 3 - 2044 3.20 3 - 2041 2.10 - 4.1 3 - 2056 3.45 3 - 2056 3.00 3 - 2052 3.10 3 - 2056 3.13 3 - 2056 3.13 3 - 2057 3.85 3 - 2057 3.76 3 - 2057 3.76 3 - 2057 3.64 3 - 2040 Variable 3 - 2040 1.55 - 3.1 3 - 2040 1.55 - 3.1 3 - 2051 Variable 3 - 2051 Variable 3 - 2051 Variable 3 - 2051 Variable 3 - 2050 1.55 - 1.1 3 - 2051 Variable	Variable 3.20 2.10 - 4.00 3.45 3.00 3.10 3.13 3.40 3.85 3.76 3.75 3.64 Variable and 3.05 - 1.55 - 3.00 1.55 - 3.50 Variable 1.55 - 1.65 0.50 - 2.35 0.45 - 2.25 Variable and 0.88 - 0.35 - 2.65 0.45 - 2.38 0.67 0.25 - 2.60 0.38	- 4.33	2,688 9,675 4,886 8,667 3,229		7 4,5 10,0
3 - 2044 3.20 3 - 2041 2.10 - 4.1 3 - 2056 3.45 3 - 2056 3.00 3 - 2052 3.10 3 - 2056 3.13 3 - 2056 3.13 3 - 2057 3.85 3 - 2057 3.76 3 - 2057 3.76 3 - 2057 3.64 3 - 2040 Variable 3 - 2040 1.55 - 3.1 3 - 2051 Variable 3 - 2050 Variable	3.20 2.10 - 4.00 3.45 3.00 3.10 3.13 3.40 3.85 3.76 3.75 3.64 Variable and 3.05 - 1.55 - 3.00 1.55 - 3.50 Variable 1.55 - 1.65 0.50 - 2.35 0.45 - 2.25 Variable and 0.88 - 0.35 - 2.65 0.45 - 2.38 0.67 0.25 - 2.60 0.38	- 4.33	2,688 9,675 4,886 8,667 3,229		4,5 10,0
3 - 2041 2.10 - 4.3 3.45 3.45 3.2056 3.00 3.45 3.10 3.2056 3.13 3.2056 3.13 3.2057 3.85 3.2057 3.76 3.2057 3.64 3.2057 3.64 3.2059 1.55 - 3.2059 1.55 - 3. 3.20	2.10 - 4.00 3.45 3.00 3.10 3.13 3.40 3.85 3.76 3.75 3.64 Variable and 3.05 - 1.55 - 3.00 1.55 - 3.50 Variable 1.55 - 1.65 0.50 - 2.35 0.45 - 2.25 Variable and 0.88 - 0.35 - 2.65 0.45 - 2.38 0.67 0.25 - 2.60 0.38	- 4.33	9,675 4,886 8,667 3,229		10,0
3 - 2056 3.45 3 - 2056 3.00 3 - 2052 3.10 3 - 2056 3.13 3 - 2055 3.40 3 - 2057 3.85 3 - 2057 3.75 3 - 2057 3.64 3 - 2040 Variable 3 - 2040 1.55 - 3. 3 - 2059 1.55 - 3. 3 - 2051 Variable 3 - 2051 Variable 3 - 2050 Variable	3.45 3.00 3.10 3.13 3.40 3.85 3.76 3.75 3.64 Variable and 3.05 - 1.55 - 3.00 1.55 - 3.50 Variable 1.55 - 1.65 0.50 - 2.35 0.45 - 2.25 Variable and 0.88 - 0.35 - 2.65 0.45 - 2.38 0.67 0.25 - 2.60 0.38	- 4.33	4,886 8,667 3,229		
3 - 2056 3.00 3 - 2052 3.10 3 - 2056 3.13 3 - 2045 3.40 3 - 2057 3.85 3 - 2057 3.75 3 - 2057 3.64 3 - 2057 3.64 3 - 2040 Variable 3 - 2040 Variable 3 - 2059 1.55 - 3. 3 - 2051 Variable 3 - 2051 Variable 3 - 2051 Variable 3 - 2050 Variable 3 - 2050 Variable 3 - 2041 0.45 - 2. 3 - 2042 0.45 - 2. 3 - 2042 0.45 - 2. 3 - 2024 0.67 3 - 2061 0.25 - 2. 3 - 2061 0.25 - 2. 3 - 2061 0.25 - 2. 3 - 2061 0.25 - 2. 3 - 2061 0.25 - 2.	3.00 3.10 3.13 3.40 3.85 3.76 3.75 3.64 Variable and 3.05 - 1.55 - 3.00 1.55 - 3.50 Variable 1.55 - 1.65 0.50 - 2.35 0.45 - 2.25 Variable and 0.88 - 0.35 - 2.65 0.45 - 2.38 0.67 0.25 - 2.60 0.38	- 4.33	8,667 3,229		4.0
3 - 2052 3.10 3 - 2056 3.13 3 - 2045 3.40 3 - 2057 3.85 3 - 2057 3.76 3 - 2057 3.75 3 - 2057 3.64 3 - 2040 Variable 3 - 2040 1.55 - 3. 3 - 2059 1.55 - 3. 3 - 2051 Variable 3 - 2057 1.55 - 1. 3 - 2057 1.55 - 1. 3 - 2058 0.50 - 2. 3 - 2059 Variable 3 - 2050 Variable	3.10 3.13 3.40 3.85 3.76 3.75 3.64 Variable and 3.05 - 1.55 - 3.00 1.55 - 3.50 Variable 1.55 - 1.65 0.50 - 2.35 0.45 - 2.25 Variable and 0.88 - 0.35 - 2.65 0.45 - 2.38 0.67 0.25 - 2.60 0.38	- 4.33	3,229		4,5
3 - 2056 3.13 3 - 2045 3.40 3 - 2057 3.85 3 - 2057 3.76 3 - 2057 3.75 3 - 2057 3.64 3 - 2040 Variable 3 - 2040 1.55 - 3. 3 - 2051 Variable 3 - 2051 Variable 3 - 2051 Variable 3 - 2051 Variable 3 - 2050 Variable	3.13 3.40 3.85 3.76 3.75 3.64 Variable and 3.05 - 1.55 - 3.00 1.55 - 3.50 Variable 1.55 - 1.65 0.50 - 2.35 0.45 - 2.25 Variable and 0.88 - 0.35 - 2.65 0.45 - 2.38 0.67 0.25 - 2.60 0.38	- 4.33			8,7
3 - 2045 3.40 3 - 2057 3.85 3 - 2057 3.76 3 - 2057 3.75 3 - 2057 3.64 3 - 2040 Variable 3 - 2040 1.55 - 3. 3 - 2051 Variable 3 - 2051 Variable 3 - 2057 1.55 - 1. 3 - 2043 0.50 - 2. 3 - 2041 0.45 - 2. 3 - 2050 Variable 3 - 2061 0.35 - 2. 3 - 2042 0.45 - 2. 3 - 2024 0.67 3 - 2061 0.25 - 2. 3 - 2061 0.25 - 2. 3 - 2061 0.25 - 2. 3 - 2061 0.25 - 2. 3 - 2061 0.25 - 2. 3 - 2023 0.38	3.40 3.85 3.76 3.75 3.64 Variable and 3.05 - 1.55 - 3.00 1.55 - 3.50 Variable 1.55 - 1.65 0.50 - 2.35 0.45 - 2.25 Variable and 0.88 - 0.35 - 2.65 0.45 - 2.38 0.67 0.25 - 2.60 0.38	- 4.33	6,167		3,2
3 - 2057 3.85 3 - 2057 3.76 3 - 2057 3.64 3 - 2040 Variable 3 - 2040 1.55 - 3. 3 - 2059 1.55 - 3. 3 - 2051 Variable 3 - 2051 Variable 3 - 2057 1.55 - 1. 3 - 2043 0.50 - 2. 3 - 2041 0.45 - 2. 3 - 2050 Variable 3 - 2050 0.35 - 2. 3 - 2042 0.45 - 2. 3 - 2042 0.67 3 - 2061 0.25 - 2. 3 - 2061 0.25 - 2. 3 - 2061 0.25 - 2.	3.85 3.76 3.75 3.64 Variable and 3.05 - 1.55 - 3.00 1.55 - 3.50 Variable 1.55 - 1.65 0.50 - 2.35 0.45 - 2.25 Variable and 0.88 - 0.35 - 2.65 0.45 - 2.38 0.67 0.25 - 2.60 0.38	- 4.33			6,2
3 - 2057 3.76 3 - 2057 3.75 3 - 2057 3.64 3 - 2040 Variable 3 - 2040 1.55 - 3. 3 - 2059 1.55 - 3. 3 - 2051 Variable 3 - 2057 1.55 - 1. 3 - 2043 0.50 - 2. 3 - 2041 0.45 - 2. 3 - 2050 Variable 3 - 2061 0.35 - 2. 3 - 2042 0.45 - 2. 3 - 2024 0.67 3 - 2024 0.67 3 - 2061 0.25 - 2. 3 - 2023 0.38	3.76 3.75 3.64 Variable and 3.05 - 1.55 - 3.00 1.55 - 3.50 Variable 1.55 - 1.65 0.50 - 2.35 0.45 - 2.25 Variable and 0.88 - 0.35 - 2.65 0.45 - 2.38 0.67 0.25 - 2.60 0.38	- 4.33	11,291		21,6
3 - 2057 3.75 3 - 2057 3.64 3 - 2040 Variable 3 - 2040 1.55 - 3. 3 - 2059 1.55 - 3. 3 - 2051 Variable 3 - 2057 1.55 - 1. 3 - 2043 0.50 - 2. 3 - 2041 0.45 - 2. 3 - 2050 Variable 3 - 2050 Variable 3 - 2061 0.35 - 2. 3 - 2042 0.45 - 2. 3 - 2024 0.67 3 - 2024 0.67 3 - 2061 0.25 - 2. 3 - 2061 0.25 - 2. 3 - 2023 0.38	3.75 3.64 Variable and 3.05 - 1.55 - 3.00 1.55 - 3.50 Variable 1.55 - 1.65 0.50 - 2.35 0.45 - 2.25 Variable and 0.88 - 0.35 - 2.65 0.45 - 2.38 0.67 0.25 - 2.60 0.38	- 4.33	9,767		9,8
3 - 2057 3.64 3 - 2040 Variable 3 - 2040 1.55 - 3. 3 - 2059 1.55 - 3. 3 - 2051 Variable 3 - 2057 1.55 - 1. 3 - 2043 0.50 - 2. 3 - 2041 0.45 - 2. 3 - 2050 Variable 3 - 2061 0.35 - 2. 3 - 2042 0.45 - 2. 3 - 2024 0.67 3 - 2061 0.25 - 2. 3 - 2023 0.38	3.64 Variable and 3.05 - 1.55 - 3.00 1.55 - 3.50 Variable 1.55 - 1.65 0.50 - 2.35 0.45 - 2.25 Variable and 0.88 - 0.35 - 2.65 0.45 - 2.38 0.67 0.25 - 2.60 0.38	- 4.33	6,323		6,3
3 - 2040 Variable 3 - 2040 1.55 - 3. 3 - 2059 1.55 - 3. 3 - 2051 Variable 3 - 2057 1.55 - 1. 3 - 2043 0.50 - 2. 3 - 2041 0.45 - 2. 3 - 2050 Variable 3 - 2061 0.35 - 2. 3 - 2042 0.45 - 2. 3 - 2024 0.67 3 - 2061 0.25 - 2. 3 - 2023 0.38	Variable and 3.05 - 1.55 - 3.00 1.55 - 3.50 Variable 1.55 - 1.65 0.50 - 2.35 0.45 - 2.25 Variable and 0.88 - 0.35 - 2.65 0.45 - 2.38 0.67 0.25 - 2.60 0.38	- 4.33	9,092		9,1
3 - 2040 1.55 - 3. 3 - 2059 1.55 - 3. 3 - 2051 Variable 3 - 2057 1.55 - 1. 3 - 2043 0.50 - 2. 3 - 2041 0.45 - 2. 3 - 2050 Variable 3 - 2061 0.35 - 2. 3 - 2042 0.45 - 2. 3 - 2024 0.67 3 - 2061 0.25 - 2. 3 - 2061 0.25 - 2.	1.55 - 3.00 1.55 - 3.50 Variable 1.55 - 1.65 0.50 - 2.35 0.45 - 2.25 Variable and 0.88 - 0.35 - 2.65 0.45 - 2.38 0.67 0.25 - 2.60 0.38	- 4.33	24,966		25,2
3 - 2059 1.55 - 3. 3 - 2051 Variable 3 - 2057 1.55 - 1. 3 - 2043 0.50 - 2. 3 - 2041 0.45 - 2. 3 - 2050 Variable 3 - 2061 0.35 - 2. 3 - 2042 0.45 - 2. 3 - 2024 0.67 3 - 2061 0.25 - 2. 3 - 2023 0.38	1.55 - 3.50 Variable 1.55 - 1.65 0.50 - 2.35 0.45 - 2.25 Variable and 0.88 - 0.35 - 2.65 0.45 - 2.38 0.67 0.25 - 2.60 0.38		44,500		51,7
3 - 2051 Variable 3 - 2057 1.55 - 1. 3 - 2043 0.50 - 2. 3 - 2041 0.45 - 2. 3 - 2050 Variable 3 - 2061 0.35 - 2. 3 - 2042 0.45 - 2. 3 - 2024 0.67 3 - 2061 0.25 - 2. 3 - 2023 0.38	Variable 1.55 - 1.65 0.50 - 2.35 0.45 - 2.25 Variable and 0.88 - 0.35 - 2.65 0.45 - 2.38 0.67 0.25 - 2.60 0.38		18,895		19,5
3 - 2057	1.55 - 1.65 0.50 - 2.35 0.45 - 2.25 Variable and 0.88 - 0.35 - 2.65 0.45 - 2.38 0.67 0.25 - 2.60 0.38		19,965		42,3
3 - 2043 0.50 - 2. 3 - 2041 0.45 - 2. 3 - 2050 Variable 3 - 2061 0.35 - 2. 3 - 2042 0.45 - 2. 3 - 2024 0.67 3 - 2061 0.25 - 2. 3 - 2023 0.38	0.50 - 2.35 0.45 - 2.25 Variable and 0.88 - 0.35 - 2.65 0.45 - 2.38 0.67 0.25 - 2.60 0.38		40,000		40,0
3 - 2041	0.45 - 2.25 Variable and 0.88 - 0.35 - 2.65 0.45 - 2.38 0.67 0.25 - 2.60 0.38		34,035		39,3
3 - 2041	0.45 - 2.25 Variable and 0.88 - 0.35 - 2.65 0.45 - 2.38 0.67 0.25 - 2.60 0.38		35,025		35,0
3 - 2050 Variable 3 - 2061 0.35 - 2.0 3 - 2042 0.45 - 2.0 3 - 2024 0.67 3 - 2061 0.25 - 2.0 3 - 2023 0.38	Variable and 0.88 - 0.35 - 2.65 0.45 - 2.38 0.67 0.25 - 2.60 0.38		8,040		12,6
3 - 2061	0.35 - 2.65 0.45 - 2.38 0.67 0.25 - 2.60 0.38	- 2.31	54,915		57,4
3 - 2042	0.45 - 2.38 0.67 0.25 - 2.60 0.38		24,560		24,5
3 - 2024 0.67 3 - 2061 0.25 - 2.0 3 - 2023 0.38	0.67 0.25 - 2.60 0.38		20,895		20,8
3 - 2061 0.25 - 2.0 3 - 2023 0.38	0.25 - 2.60 0.38		8,225		8,2
3 - 2023 0.38	0.38		14,200		14,2
					1,9
					11,0
					722,
			644,921		722,1
			2,635,763		2,359,8
			56 782		50,0
					2,409,9
				\$	- 6
				1,900 2.75 11,085 644,921 644,921	1,900 11,085 644,921 644,921 2,635,763 56,782 2,692,545



A breakdown of bonds payable as of December 31, by fixed and variable interest rates, follows in the table below. Certain of the Authority's variable rate debt has been hedged by entering into pay fixed/receive variable rate interest rate swap agreements as further described in note 8. Such debt is referred to in the table as synthetic fixed rate debt.

Description	2022	2021
Fixed rate debt	\$ 1,725,768	\$ 1,551,185
Synthetic fixed rate debt	826,650	700,540
Unhedged variable rate debt	83,345	108,135
Total	\$ 2,635,763	\$ 2,359,860

Also included in the table of bonds and notes payable outstanding are certain Single Family and Multifamily/Project bonds, which carry the Authority's general obligation pledge. These general obligation bonds are presented in the following table as of December 31:

Description	2022			
Single Family/Mortgage Bonds, Class III	\$ 54,515	\$	29,900	
Multifamily/Project Bonds, Class I	40,935		40,935	
Multifamily/Project Bonds, Class II	9,955		10,955	
Total	\$ 105,405	\$	81,790	



SBPA's provide liquidity support on variable rate bonds that are remarketed weekly. The liquidity/commitment fees vary by agreement and are based on a percentage of the outstanding bond balance, payable monthly or quarterly. If the liquidity agreements expire or the renewal or replacement efforts are unsuccessful for the liquidity agreements and the bonds are mandatorily redeemed, the bond's principal portion of the debt service requirements would increase by the respective amounts for the respective years as presented in the following schedule of providers and maturities as of December 31, 2022. During 2022 and 2021, the Authority renewed or replaced expiring liquidity facilities of \$49.6 million and \$409.6 million, respectively. Liquidity fees for the years ended December 31, 2022 and 2021, were \$2.9 million and \$2.6 million, respectively.

A schedule of providers and maturities is presented below, as of December 31, 2022:

Liquidity Expiration	Α	Bank of America (1)	Barclays Capital (2)	FHLB (3)	F	Royal Bank of Canada (4)	Grand Total
2023	\$	-	\$ 22,130	\$ 104,820	\$	-	\$ 126,950
2024		26,735	-	289,195		56,160	372,090
2025		32,465	20,000	203,990		27,890	284,345
2026		-	42,000	-		51,080	93,080
2027		-	-	-		33,530	33,530
Total	\$	59,200	\$ 84,130	\$ 598,005	\$	168,660	\$ 909,995

The following provides the terms of the debt service requirements that would result if the SBPA commitments were to be exercised (bank bond rate, accelerated payment schedule, and lien):

- (1) (a) Bank Rate: for the first 90 days following the purchase date, the "Base Rate," which equals the highest of (i) the Federal Funds Rate plus 2.00%, (ii) the Prime Rate plus 1.00%, (iii) the LIBOR Rate plus 2.0%, and (iv) 7.50%; then the Base Rate plus 1.00%.
 - (b) Term out provisions: repayments due 366 days following the purchase date and the first business day of every sixth month thereafter to the fifth anniversary of the purchase date with the first such payment being equal to 2/10ths of the outstanding principal amount of such Bank Bonds and each subsequent being equal to 1/10th of such amount. Class III lien/General Obligation.
- (2) (a) Bank Rate: for the first 60 days following the purchase date, the "Base Rate," which equals the highest of (i) the Fed Funds Rate plus 2.50%, (ii) the Prime Rate plus 2.50%, (iii) 150% of the yield on actively traded 30-year United State Treasury Bonds and (iv) 8.00%; then for the period 61-120 days following the purchase date, the Base Rate plus 1.00%; then the Base Rate plus 2.00%.
 - (b) Term out provisions: repayments due 366 days following purchase date and each six-month anniversary thereafter in equal installments to the third anniversary of such purchase date. Class III lien/General Obligation.
- (3) (a) Bank Rate: SOFR Rate plus 2.115% 3.000%.
 - (b) Term out provisions: repayments due 90 days after the 366th calendar day following the Purchase date in equal semiannual installments until fifth anniversary of the purchase date. Class III lien/General Obligation.
- (4) (a) Bank Rate: for the first 366 days following the purchase date Daily LIBOR plus 3.00%; then for the period 367 days and higher following the purchase date, the "Base Rate", which equals the highest of (i) the Prime Rate plus 2.5%, (ii) the Federal Funds Rate plus 3.0% and (iii) 10.00%.
 - (b) Term out provisions: repayments due on the first business day of February, May, August or November on or following 366 days following purchase date and thereafter quarterly on each such date in equal installments to the third anniversary of such purchase date. Class III lien/General Obligation.



The following table presents the detail of bonds, notes payable and certain other liabilities that include current and noncurrent activity for the year ended December 31, 2022:

	Beginning						Ending				
Description	Balance	Α	Additions		Reductions		Balance		Current	Noncurrent	
Bonds payable	\$ 2,359,860	\$	649,970	\$	(374,067)	\$	2,635,763	\$	181,455	\$ 2,454,308	
Bond premiums - unamortized	50,091		10,718		(4,027)		56,782		3,909	52,873	
Total bonds payable	2,409,951		660,688		(378,094)		2,692,545		185,364	2,507,181	
Notes payable	610		-		(57)		553		58	495	
Unearned revenue	8,095		1,873		(809)		9,159		611	8,548	
Other liabilities	42,450		4,760		(811)		46,399		709	45,690	
Total other liabilities	50,545		6,633		(1,620)		55,558		1,320	54,238	
Total	\$ 2,461,106	\$	667,321	\$	(379,771)	\$	2,748,656	\$	186,742	\$ 2,561,914	

The following table presents the detail of bonds, notes payable and certain other liabilities that include current and noncurrent activity for the year ended December 31, 2021:

	Beginning						Ending				
Description	Balance	Additions		Reductions		Balance		Current		Noncurrent	
Bonds payable	\$ 2,282,396	\$	521,305	\$	(443,841)	\$	2,359,860	\$	103,510	\$	2,256,350
Bond premiums - unamortized	39,217		13,731		(2,857)		50,091		1,533		48,558
Total bonds payable	2,321,613		535,036		(446,698)		2,409,951		105,043		2,304,908
Notes payable	668		-		(58)		610		58		552
Unearned revenue	7,407		1,422		(734)		8,095		540		7,555
Other liabilities	42,994		-		(544)		42,450		628		41,822
Total other liabilities	50,401		1,422		(1,278)		50,545		1,168		49,377
Total	\$ 2,372,682	\$	536,458	\$	(448,034)	\$	2,461,106	\$	106,269	\$	2,354,837



Bonds and notes payable sinking fund installments and contractual maturities subsequent to December 31, 2022, using rates in effect as of December 31, 2022, are as follows:

Years Ending	Single Family					Multifamily / Business					Notes Payable				
December 31,	Principal			Interest		Principal			Interest			Principal		Interest	
2023	\$	112,700	\$	73,242		\$	68,755	\$	21,795		\$	58	\$	6	
2024		43,055		70,408			20,385		20,078			59		5	
2025		43,815		69,339			9,195		19,832			59		4	
2026		42,620		68,226			8,540		19,655			25		4	
2027		38,740		67,094			8,255		19,464			26		4	
2028 - 2032		209,820		316,078			46,370		92,994			132		12	
2033 - 2037		240,680		275,031			41,775		86,694			138		7	
2038 - 2042		279,045		221,885			106,960		71,436			56		1	
2043 - 2047		341,222		157,109			47,644		59,673			-		-	
2048 - 2052		617,145		68,275			195,819		51,771			-		-	
2053 - 2057		22,000		335			83,347		12,908			-		-	
2058 - 2062		-		-			7,876		413			-		-	
Total	\$	1,990,842	\$	1,387,022		\$	644,921	\$	476,713	_	\$	553	\$	43	

(7) Conduit Debt Obligation

The Authority has issued certain conduit bonds, the proceeds of which were made available to various developers and corporations for rental housing and commercial purposes. The bonds are payable solely from amounts received by the trustees. The faith and credit of the Authority is not pledged for the payment of the principal or interest on the bonds. Accordingly, these obligations are excluded from the Authority's financial statements.

As of December 31, 2022 and 2021, the aggregate principal amount of conduit debt outstanding totaled \$1.3 billion and \$1.2 billion, respectively.

(8) Derivative Instruments

The Authority reports derivative instruments at fair value. The fair value of all derivatives is reported on the Statement of Net Position as a derivative instrument at the end of the year. If an interest rate hedge is considered ineffective, it is referred to as an investment derivative and the change in fair value is reported on the Statement of Revenues, Expenses and Changes in Net Position as investment derivative activity loss. The annual changes in the fair value of effective hedging derivative instruments are reported as deferred inflows and outflows, as appropriate, on the Statement of Net Position.

Swaps Transactions – The Authority has entered into pay fixed, receive variable interest rate swaps in order to (1) provide lower cost fixed rate financing for its production needs through synthetic fixed rate structures and (2) utilize synthetic fixed rate structures with refunding bonds in order to generate cash flow savings. The objective of the swaps is to hedge interest rate risk.



The fair values take into consideration the prevailing interest rate environment and the specific terms and conditions of each swap. All fair values were estimated using the zero-coupon discounting method. This method calculates the future payments required by the swap, assuming that the current forward rates implied by the yield curve are the market's best estimate of future spot interest rates. These payments are then discounted using the spot rates implied by the current yield curve for hypothetical zero coupon rate bonds due on the date of each future net settlement payment on the swaps.

The Authority's interest rate swaps, which were used to hedge interest rate risk, are generally considered to be hedging derivative instruments under GASB No. 53. However, certain interest rate swaps have been deemed ineffective and are classified as investment derivative instruments.

There were no deemed termination events for the year ended December 31, 2022.

On February 23, 2022, the Authority entered into an interest rate swap agreement totaling \$30.1 million. The swap is considered to be an effective interest rate hedge of certain single family bonds.

On May 25, 2022, the Authority entered into an interest rate swap agreement totaling \$26.6 million. The swap is considered to be an effective interest rate hedge of certain single family bonds.

On November 1, 2022, the Authority entered into an interest rate swap agreement totaling \$33.5 million. The swap is considered to be an effective interest rate hedge of certain single family bonds.

On November 29, 2022, the Authority entered into an interest rate swap agreement totaling \$20.3 million. The swap is considered to be an effective interest rate hedge of certain single family bonds.

On December 15, 2022, the Authority entered into an interest rate swap agreement totaling \$33.5 million. The swap is considered to be an effective interest rate hedge of certain single family bonds.

Deemed termination activity for the year ended December 31, 2021 was as follows:

Deemed Terminations	Amount					
July 01	\$	4,500				
Total deemed terminations	\$	4,500				

On January 21, 2021, the Authority entered into an interest rate swap agreement totaling \$43.1 million. The swap is considered to be an effective interest rate hedge of certain single family bonds.

On November 18, 2021, the Authority entered into an interest rate swap agreement totaling \$21.0 million. The swap is considered to be an effective interest rate hedge of certain single family bonds.



A summary of interest rate swaps for the years ended December 31, was as follows:

	2022	2021		
Summary of Interest Rate Swaps	Fair Value	Fair Value		
Par optional termination right	\$ (85,049)	\$ (2,470)		
Trigger	307	3,024		
Plain	15,508	67,703		
Total fair value	\$ (69,234)	\$ 68,257		

Trigger: The variable rate received on these swaps is 68% of the one-month LIBOR, if LIBOR is equal to or greater than 3.5%. The variable rate received on these swaps is based on the Securities Industry Financial Markets Association Municipal Swap Index (SIFMA) plus a spread if the one-month LIBOR is less than 3.5%. See further discussion in the basis risk section below.

Par Optional Termination Right: Certain swaps contain a cancellation clause that provides the Authority the option to cancel a certain amount of the swaps on certain dates. The Authority may cancel the optional termination amount for no payment (callable at par). The optional termination dates coincide with the debt service dates on the associated hedged bonds payable. These dates and amounts are provided in the table below.

Detail of Outstanding Interest Rate Swaps – The key terms, including the fair values and counterparty credit ratings of the outstanding swaps as of December 31, 2022 and 2021, are shown in the table below. Except as discussed under amortization risk below, the Authority's swap agreements contain scheduled reductions to outstanding notional amounts that are expected to approximately follow scheduled or anticipated reductions in the associated bonds payable. Based on the standard swap agreement, payments are settled on a net basis.

The Authority enters into master netting arrangements with each of its swap counterparties. All of the agreements provide for the netting of the value of assets and liability positions of all transactions with the respective counterparty. There are no other significant transactions with these counterparties outside of these swap agreements, such that the aggregate amount of liabilities included in the master netting arrangements is equal to the net fair value of the swaps.



Outstanding Swaps as of December 31:

Swap Series	Current Notional Amount	Effective Date	Termination Date	Fixed Rate Paid	Variable Rate Received *	Embedded Options	Optional Termination Date, at Par	Optional Termination Amount	Counterparty Rating S&P/Moody's	2022 Fair Value **	Change in Fair Value	2021 Fair Value **
Single Family:												
Investment derivative	es (includes ov	erhedged po	rtion of interest	rate swaps):								
2002C-3 ****	\$ -	12/4/2008	5/1/2022	4.4220% Tr	rigger, SIFMA + .15% or 68% LIBOR			\$ -	A / A1	\$ -	\$ (21)	\$ 21
2018B-2	-	5/1/2019	11/1/2041	2.6000% LI	BOR * 70%	***		-	AA- / Aa1	-	(188)	188
2019I-2	2,000	7/23/2019	11/1/2040	2.5800% LI	BOR	***	5/1/2023	740	AA- / Aa1	(271)	(271)	-
2019L-2	6,700	11/20/2019	5/1/2041	2.2300% LI	BOR	***	11/1/2023	35,265	AA- / Aa1	(1,106)	(1,106)	-
2020C-2	9,800	2/20/2020	5/1/2041	2.2480% LI	BOR	***	5/1/2024	2,690	A+ / Aa2	(1,651)	(1,651)	-
2020F-2	735	7/30/2020	5/1/2041	1.2245% LI	BOR	***	5/1/2024	33,505	AA- / Aa1	(182)	(182)	-
20201-2	4,000	10/29/2020	5/1/2041	1.3510% LI	BOR	***	11/1/2024	2,895	A+ / Aa2	(1,048)	(1,048)	-
2021C-2	4,300	1/21/2021	11/12043	1.6190% LI	BOR	***	11/1/2024	4,085	AA- / Aa1	(994)	(994)	-
Total	27,535									(5,252)	(5,461)	209
Hedging derivatives:												
2001AA-2 ****	26,760	12/4/2008	5/1/2031	5.5260% Tr	rigger, SIFMA + .05% or 68% LIBOR			-	A / A1	307	(2,702)	3,009
2002C-3 ****	-	12/4/2008	5/1/2022	4.4220% Tr	rigger, SIFMA + .15% or 68% LIBOR			-	A / A1	-	6	(6
2012A-2 (SPV)	17,625	5/1/2018	5/1/2038	2.3230% LI	BOR * 70%	***		-	A+ / Aa2	(1,314)	(1,768)	454
2018B-2	21,930	5/1/2019	11/1/2041	2.6000% LI	BOR * 70%	***	5/1/2030	6,300	AA- / Aa1	(804)	(1,872)	1,068
2019B-2 (A)	10,000	1/3/2019	5/1/2028	2.9675% LI	BOR			-	Aa- / Aa2	(374)	(1,396)	1,022
2019B-2 (B)	10,000	1/3/2019	5/1/2042	3.7575% LI	BOR	***	5/1/2025	10,000	Aa- / Aa2	(771)	(1,556)	785
2019D	43,925	5/1/2019	11/1/2037	2.4300% LI	BOR * 70%		5/1/2030	8,485	A+ / Aa2	(2,470)	(3,693)	1,223
2019G-2	22,130	7/15/2019	5/1/2043	3.2275% LI	BOR	***	5/1/2023	2,145	Aa- / Aa2	(1,928)	(3,985)	2,057
2019I-2	28,000	7/23/2019	11/1/2040	2.5800% LI	BOR	***	5/1/2023	740	AA- / Aa1	(3,792)	(4,915)	1,123
2019L-2	32,465	11/20/2019	5/1/2041	2.2300% LI	BOR	***	11/1/2023	3,900	AA- / Aa1	(5,359)	(5,817)	458
2020C-2	27,890	2/20/2020	5/1/2041	2.2480% LI	BOR	***	5/1/2024	2,690	A+ / Aa2	(4,699)	(5,323)	624
2020F-2	36,425	7/30/2020	5/1/2041	1.2245% LI	BOR	***	5/1/2024	3,655	AA- / Aa1	(9,022)	(6,392)	(2,630
20201-2	37,690	10/29/2020	5/1/2041	1.3510% LI	BOR	***	11/1/2024	2,895	A+ / Aa2	(9,877)	(6,960)	(2,917
2021C-2	38,785	1/21/2021	11/1/2043	1.6190% LI	BOR	***	11/1/2024	4,085	AA- / Aa1	(8,962)	(7,274)	(1,688
2021M-2	21,000	11/18/2021	11/1/2030	1.4408% LI	BOR			-	Aa- / Aa2	(2,954)	(3,074)	120
2022C-2	30,140	2/23/2022	11/1/2030	1.6980% S	OFR+11.448 bp			-	A+ / Aa2	(4,007)	(4,007)	-
2022D-2	26,625	5/25/2022	5/1/2041	3.0680% S	OFR+11.448 bp	***	11/1/2031	19,695	Aa- / Aa2	(1,910)	(1,910)	-
2022G-2	33,530	11/1/2022	11/1/2040	3.1960% S	OFR+11.448 bp	***	11/1/2031	22,450	Aa- / Aa2	(1,858)	(1,858)	-
2022H-3	20,275	11/29/2022	5/1/2039	4.5230% S	OFR+11.448 bp	***	11/1/2038	880	AA- / Aa1	401	401	-
2022L-3	33,530	12/15/2022	11/1/2039	4.4940% S	OFR+11.448 bp	***	11/1/2029	27,180	AA- / Aa1	762	762	-
Total	518,725									(58,631)	(63,333)	4,702
Total Single Family	546,260									(63,883)	(68,794)	4,911

Table continued on following page.



Swap Series	Current Notional Amount	Effective Date	Termination Date	Fixed Rate Paid		riable Rate	Embedded Options	Optional Termination Date, at Par	Optional Termination Amount	Counterparty Rating S&P/Moody's	2022 Fair Value **	Change in Fair Value	2021 Fair Value **
Multifamily:										-			
Investment derivative	s (includes ov	erhedged po	rtion of interest	ate swaps	:								
2002A-1 ****	-	11/21/2008	10/1/2022	5.1000%	SIFMA + .15%				-	A / A1	-	(28)	28
2007B-2 (D) ****	3,885	12/3/2008	4/1/2028	4.6510%	SIFMA + .15%		***	4/1/2023	3,835	A / A1	7	(196)	203
2009A-1 ****	4,460	6/24/2009	10/1/2041	4.7900%	SIFMA + .05%		***	4/1/2024	3,809	A / A1	20	(390)	410
2013A ****	2,540	11/21/2008	10/1/2023	6.0350%	SIFMA + .05%				-	A / A1	31	(248)	279
Total	10,885										58	(862)	920
Hedging derivatives:													
2006A-1 ****	3,235	12/3/2008	4/1/2027	5.7100%	LIBOR + .05%				-	A / A1	(183)	(128)	(55)
2007B-1 ****	3,920	12/3/2008	4/1/2038	5.6400%	LIBOR + .05%		***		-	A / A1	(575)	(544)	(31)
2007B-1 (G)	-	10/1/2007	4/1/2028	5.2200%	LIBOR + .05%		***		-	A+ / Aa2	-	(226)	226
2007B-1 (replacement)	35,070	4/1/2021	10/1/1938	5.1300%	LIBOR + .05%		***	4/1/2027	15,195	A / A1	(7,825)	(5,800)	(2,025)
2008B (a) ****	96,385	12/3/2008	10/1/2044	5.1722%	LIBOR				-	AA- / Aa1	15,138	(28,863)	44,001
2008B (b) ****	41,135	12/3/2008	3/1/2047	5.2071%	LIBOR				-	AA- / Aa1	7,903	(14,564)	22,467
2009A-1 ****	7,145	6/24/2009	10/1/2041	4.7900%	SIFMA + .05%		***	4/1/2024	7,306	A / A1	(439)	(492)	53
2013A ****	355	11/21/2008	10/1/2023	6.0350%	SIFMA + .05%				-	A / A1	(46)	113	(159)
2018A-2	25,900	4/1/2018	4/1/2040	3.1450%	LIBOR		***	4/1/2025	22,185	Aa- / Aa2	(2,106)	(3,668)	1,562
2019C (A)	30,000	10/1/2019	10/1/2034	1.6000%	LIBOR		***	10/1/2026	26,500	A+ / Aa2	(4,444)	(4,108)	(336)
2019C (B)	9,775	10/1/2019	10/1/2039	1.8510%	LIBOR		***	10/1/2028	8,685	A+ / Aa2	(2,008)	(1,827)	(181)
2020A	10,375	4/1/2023	4/1/2050	1.8510%	LIBOR		***	10/1/2028	8,210	A+ / Aa2	(2,350)	(1,560)	(790)
2020D-2	27,470	10/1/2020	4/1/2050	1.3600%	LIBOR		***	10/1/2029	13,020	A+ / Aa2	(8,474)	(6,168)	(2,306)
Total	290,765										(5,409)	(67,835)	62,426
Total Multifamily	301,650										(5,351)	(68,697)	63,346
Total	\$ 847,910										\$ (69,234)	\$ (137,491)	\$ 68,257

^(*) SIFMA is the Securities Industry Financial Markets Association Municipal Swap Index. LIBOR is the London Interbank Offered Rate.

^(**) All fair values include the effect of any related embedded option.

^(***) Par optional termination right.

^(****) Swaps for which cash premiums were received in the amount of \$73.4 million in 2008. The outstanding unamortized balance of the premium is reported on the Statement of Net Position as a component of hybrid instrument borrowings.

⁽SPV) Counterparty operates as a special-purpose vehicle.

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Notes to Basic Financial Statements (tabular dollar amounts are in thousands)

Risk Disclosure

Credit Risk: All of the Authority's swaps rely upon the performance of the third parties who serve as swap counterparties, and as a result, the Authority is exposed to credit risk – that is, the risk that a swap counterparty fails to perform according to its contractual obligations. The appropriate measurement of this risk at the reporting date is the fair value of the swaps, as shown in the column labeled "Fair Value" in the outstanding swaps table above. The Authority is exposed to credit risk in the amount of any positive net fair value exposure to each counterparty. As of December 31, 2022 and 2021, the Authority was exposed to minimal credit risk to any of its counterparties. To mitigate credit risk, the Authority maintains strict credit standards for swap counterparties. All swap counterparties must be rated in the AA/Aa or higher category by either Standard & Poor's (S&P) or Moody's Investors Service (Moody's), respectively, at the time the contract is executed. Since the time of contract execution, certain counterparty ratings were lowered due to the national recession.

At December 31, 2022, the Authority had executed 32 swap transactions with five counterparties with concentrations and ratings (Standard and Poor's/ Moody's Investors Service) as shown in the following table:

Swap Count	-	lotional Amount	Concentration	Counterparty Rating (S&P / Moody's)
9	\$	248,690	29.3%	A+ / Aa2
7	\$	149,185	17.6%	AA-/Aa2
6		52,300	6.2%	A / A1
10		397,735	46.9%	AA-/Aa1
32	\$	847,910	100.0%	

At December 31, 2021, the Authority had executed 30 swap transactions with five counterparties with concentrations and ratings (Standard and Poor's/ Moody's Investors Service) as shown in the following table:

Swap	N	lotional		Counterparty Rating
Count	-	Amount	Concentration	(S&P / Moody's)
10	\$	235,380	32.2%	A+ / Aa2
11		429,385	58.7%	AA- / Aa2
9		66,665	9.1%	A / A1
30	\$	731,430	100.0%	

Interest Rate Risk: The Authority is exposed to interest rate risk in that as the variable rates on the swaps agreements decrease, the Authority's net payment on the swap agreement would increase.

Basis Risk: The Authority is exposed to basis risk when the variable interest rate paid to the holders of its variable rate demand obligations is not equivalent to the variable interest rate received from its counterparties on the related swap agreements. When exposed to basis risk, the net interest expense incurred on the combination of the swap agreement and the associated variable rate debt may be higher or lower than anticipated.

The Authority's tax-exempt variable rate bond interest payments are substantially equivalent to the SIFMA rate (plus a trading spread). Certain tax-exempt swaps, as indicated in the table above, contain a trigger feature in which the Authority receives



a rate indexed on SIFMA should LIBOR be less than a predetermined level (the trigger level, 3.5%), or a rate pegged at a percentage of LIBOR should LIBOR be equal to or greater than the predetermined trigger level. For these swaps, the Authority would be negatively exposed to basis risk during the time period it is receiving the rate based on a percentage of LIBOR should the relationship between LIBOR and SIFMA converge.

The Authority's taxable variable rate bond interest payments are substantially equivalent to LIBOR (plus a trading spread) and are reset on a weekly basis. The Authority is receiving one-month LIBOR (plus a trading spread) or LIBOR flat for all of its taxable swaps and therefore is only exposed to basis risk to the extent that the Authority's bonds diverge from their historic trading relationship with LIBOR.

Termination Risk: The Authority's swap agreements do not contain any out-of-the-ordinary termination events that would expose it to significant termination risk. In keeping with market standards, the Authority or the counterparty may terminate each swap if the other party fails to perform under the terms of the contract. In addition, the swap documents allow either party to terminate in the event of a significant loss of creditworthiness. If at the time of the termination a swap has a negative value, the Authority would be liable to the counterparty for a payment equal to the fair value of such swap.

There are certain termination provisions relevant to the Authority's counterparties operating as special-purpose vehicles (SPV) with a terminating structure. In the case of certain events, including the credit downgrade of the SPV or the failure of the parent company to maintain certain collateral levels, the SPV would be required to wind up its business and terminate all of its outstanding transactions with all clients, including the Authority. All such terminations would be at mid-market pricing. In the event of such termination, the Authority would be exposed to the risk of market re-entry and the cost differential between the mid-market termination and the offered price upon re-entry.

Rollover Risk: The Authority is exposed to rollover risk only on swaps that mature or may be terminated at the counterparty's option prior to the maturity of the associated debt. As of December 31, 2022 and 2021, the Authority was not exposed to rollover risk.

Amortization Risk: The Authority is exposed to amortization risk in the event that the swap amortization schedules fail to match the actual amortization of the underlying bonds as a result of loan prepayments, which significantly deviate from expectations. If prepayments are significantly higher than anticipated, the Authority would have the option of reinvesting or recycling the prepayments, or calling unhedged bonds. Alternatively, if the Authority chose to call bonds associated with the swap, the Authority could elect an early termination of the related portions of the swap at a potential cost to the Authority. If prepayments are significantly lower than anticipated and the associated bonds remained outstanding longer than the relevant portion of the swap, the Authority could experience an increase in its exposure to unhedged variable rate bonds. Alternatively, the Authority could choose to enter into a new swap or an extension of the existing swap. If interest rates are higher at the time of entering into a new swap or swap extension, such action would result in an increased cost to the Authority.

Collateral Requirements: As of December 31, 2022 and 2021, swaps with a fair value of \$(68.4) million and \$64.5 million, respectively, require the Authority to post collateral in the event that the underlying Class I bond rating drops below Aa3 as issued by Moody's Investor Service or AA- as issued by Standard & Poor's. Collateral requirements range up to 100% of the fair value of the swap depending on the bond rating. Over collateralization is required for investments posted in lieu of cash. At December 31, 2022 and 2021, the ratings of bonds subject to collateral requirements exceed the levels specified in the swap agreements.



Swap Payments – Using interest rates as of December 31, 2022, debt service requirements of the Authority's outstanding variable rate debt and net swap payments were as follows. As rates vary, variable rate interest rate payments on the bonds and net swap payments will change.

Years Ending December 31,	Changes in Notional Amounts	Interest	Swaps, Net	Total		
2023	\$ 21,655	\$ 34,767	\$ (10,305)	\$ 46,117		
2024	22,195	34,266	(10,361)	46,100		
2025	24,180	33,325	(10,261)	47,244		
2026	24,305	32,378	(10,198)	46,485		
2027	25,675	31,383	(10,117)	46,941		
2028 - 2032	224,870	133,980	(44,966)	313,884		
2033 - 2037	269,130	79,861	(25,230)	323,761		
2038 - 2042	182,200	26,842	(6,135)	202,907		
2043 - 2047	42,710	5,604	(1,056)	47,258		
2048 - 2050	10,990	686	(520)	11,156		
Total	\$ 847,910	\$ 413,092	\$ (129,149)	\$ 1,131,853		

Hybrid Instrument Borrowings – Certain interest rate swaps, as identified on the detailed swap table above, include fixed rates that were off-market at the execution of the interest rate swaps. For financial reporting purposes, these interest rate swaps are considered hybrid instruments and are bifurcated between borrowings, with an aggregate original amount of \$98.0 million reflecting the fair value of the instrument at its execution, and an interest rate swap with a fixed rate that was considered at-the-market at execution.

Activity for the hybrid instrument borrowings for the years ended December 31, was as follows:

	2022	2021		
Beginning balance Reductions	\$ 4,722 (1,042)	\$	6,548 (1,826)	
Ending balance	\$ 3,680	\$	4,722	



The following table sets forth as of December 31, 2022, payments of principal and interest on the hybrid instrument borrowings for the next five years and thereafter. The total payments generally reflect the difference between the stated fixed rate of the hybrid instrument and the at-the-market fixed rate at the execution of the instrument.

Years Ending December 31,	ncipal Interest
2023	\$ 774
2024	623
2025	534
2026	441
2027	336
2028 - 2032	678
2033 - 2037	205
2038 - 2042	79
2043 - 2047	10
Total	\$ 3,680

Forward Sales Contracts – The Authority has entered into forward sales of mortgage backed securities with the To-Be-Announced market in order to lock in the sales price of certain single family loans to be securitized and later sold. The contracts offset potential changes in interest rates between the time of the loan reservation and the securitization and sale of such loans into Ginnie Mae and Fannie Mae securities. These contracts are considered investment derivative instruments, such that their change in fair value is reported as investment derivative activity gains or losses on the Statement of Revenues, Expenses and Changes in Net Position.

The outstanding forward contracts, summarized by counterparty as of December 31, 2022, were as follows:

			(Original	1:	2/31/22			Counterparty Rating
Count	Par	Exposure	Sa	ales Price	Ρ	remium	Fa	ir Value	(S&P / Moody's)
2	\$ 14,000	18.2%	\$	14,090	\$	13,998	\$	(92)	A+ / Aa2
4	13,000	16.9%		13,196		13,244		48	A / A1
3	12,000	15.6%		12,282		12,252		(30)	A+ / Aa3
2	35,000	45.4%		35,597		35,804		207	BBB+/Baa1
1	3,000	3.9%		2,982		3,054		72	A+ / Aa3
12	\$ 77,000	100.0%	\$	78,147	\$	78,352	\$	205	



The outstanding forward contracts, summarized by counterparty as of December 31, 2021, were as follows:

				Original	1	2/31/21			Counterparty Rating
Count	Par	Exposure	S	ales Price	Р	remium	Fa	ir Value	(S&P / Moody's)
5	\$ 78,000	13.2%	\$	80,138	\$	79,883	\$	(255)	A+ / Aa2
2	26,000	4.4%		26,727		26,688		(39)	A/A1
4	92,000	15.6%		94,994		94,868		(126)	AA- / Aa2
1	25,000	4.2%		26,059		25,809		(250)	NA
7	66,000	11.2%		67,834		67,664		(170)	A+ / Aa3
4	55,000	9.3%		56,498		56,408		(90)	BBB+/Baa1
10	119,000	20.1%		121,879		121,635		(244)	BBB+/A2
8	130,000	22.0%		133,706		133,503		(203)	A+ / Aa2
41	\$ 591,000	100.00%	\$	607,835	\$	606,458	\$	(1,377)	

Summary

A summary of derivative instruments activity for the years ended December 31, is as follows:

	2022						2021								
	Н	edging		Invest	mei	nts		Н	ledging		Invest	mei	nts		
	,	Swaps		Swaps	Fo	rwards	Total		Swaps		Swaps	Fo	rwards		Total
Fair value, beginning	\$	67,126	\$	1,131	\$	(1,377)	\$ 66,880	\$	113,164	\$	2,050	\$	4,203	\$	119,417
Settlements		(7,040)		(342)		1,377	(6,005)		(18,387)		(1,204)		(4,203)		(23,794)
Change in fair value		(124,129)		(5,980)		205	(129,904)		(27,651)		285		(1,377)		(28,743)
Fair value, ending	\$	(64,043)	\$	(5,191)	\$	205	\$ (69,029)	\$	67,126	\$	1,131	\$	(1,377)	\$	66,880

(9) Debt Refundings

There were no debt refunding transactions during 2022 or 2021.

(10) Fair Value Measurement

The Authority categorizes its fair value measurements within the fair value hierarchy established by U.S. GAAP. The hierarchy is based on the valuation inputs used to measure the fair value of the assets and liabilities and gives the highest priority to Level 1 measurements and the lowest priority to Level 3 measurements. These measurements are described as follows:

Level 1 – Unadjusted quoted prices for identical instruments in active markets.

Level 2 – Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs are observable.

Level 3 – Valuations derived from valuation techniques in which significant inputs are unobservable.



The Authority has the following recurring fair value measurements as of December 31, 2022:

			Fair Value Measurements Using					I	
				Quoted					
			Pı	rices in					
				Active	S	Significant			
			Ма	rkets for		Other	Significant		
			ld	entical	C	bservable	Unob	servable	
				Assets		Inputs	Inputs (Level 3)		
		12/31/2022	(L	evel 1)		(Level 2)			
Investments by fair value level									
U.S. government agencies	\$	1,537,197	\$	24,174	\$	1,513,023	\$	-	
U.S. Treasuries		4,979		4,794		185		-	
Total investments by fair value level			\$	28,968	\$	1,513,207	\$	-	
Other investments not subject to the leveling hierarchy	,								
Investment agreements - uncollaterlized		53,142							
Repurchase agreements		11,794							
Money market funds		392,663							
External investment pools		10,672							
Total investments	\$	2,010,447							
Derivative instruments									
Forward sale agreements	\$	205	\$	-	\$	205	\$	-	
Hedging and investment derivatives		(69,234)		-		(69,234)		-	
Total derivative instruments	\$	(69,029)	\$	-	\$	(69,029)	\$	_	

Investments and derivative instruments classified as Level 2 are valued using either bid evaluation or a matrix-based pricing technique. Bid evaluations are typically based on market quotations, yields, maturities, call features and ratings. Matrix pricing is used to value securities based on a securities' relationship to benchmark quoted prices.

As of December 31, 2022, the Authority held investments totaling \$64.9 million that were not subject to the leveling hierarchy, these investments consisted of private, guaranteed investment contracts categorized as either investment agreements or repurchase agreements. Additionally, the Authority held investments in money market funds and in an external governmental investment pool totaling \$392.7 million and \$10.7 million, respectively, which were not subject to the leveling hierarchy as amounts are recorded based on amortized cost.



The Authority has the following recurring fair value measurements as of December 31, 2021:

			Fair Value Measurements Using						
				Quoted					
			Pı	rices in					
				Active	S	Significant			
			Ма	rkets for		Other	Sign	ificant	
			ld	lentical	0	bservable	Unobservable Inputs		
				Assets		Inputs			
		12/31/2021	(L	evel 1)		(Level 2)	(Level 3)		
Investments by fair value level									
U.S. government agencies	\$	1,512,144	\$	24,888	\$	1,487,256	\$	-	
U.S. Treasuries		6,383		6,162		221		-	
Total investments by fair value level			\$	31,050	\$	1,487,477	\$		
Other investments not subject to the leveling hierarch	y								
Investment agreements - uncollaterlized		69,188							
Repurchase agreements		15,338							
Money market funds		265,863							
External investment pools		9,741							
Total investments	\$	1,878,657							
Derivative instruments									
Forward sale agreements	\$	(1,377)	\$	-	\$	(1,377)	\$	-	
Hedging and investment derivatives		68,257		-		68,257		-	
Total derivative instruments	\$	66,880	\$	-	\$	66,880	\$	-	

Investments and derivative instruments classified as Level 2 are valued using either bid evaluation or a matrix-based pricing technique. Bid evaluations are typically based on market quotations, yields, maturities, call features and ratings. Matrix pricing is used to value securities based on a securities' relationship to benchmark quoted prices.

As of December 31, 2021, the Authority held investments totaling \$84.5 million that were not subject to the leveling hierarchy, these investments consisted of private, guaranteed investment contracts categorized as either investment agreements or repurchase agreements. Additionally, the Authority held investments in money market funds and in an external governmental investment pool totaling \$265.9 million and \$9.7 million, respectively, which were not subject to the leveling hierarchy as amounts are recorded based on amortized cost.

(11) Restricted and Unrestricted Net Position

The amounts restricted for the Single Family bond programs and the Multifamily/Business bond programs are for the payment of principal, redemption premium, if any, and interest, including net swap payments, on all outstanding single family and multifamily/business bond issues, in the event that no other funds are legally available for such payments. Such assets are segregated within the Single Family and Multifamily/Business bond programs and are held in cash, loans receivable and investments.



The Board may authorize the withdrawal of all or part of this restricted balance if (1) updated cash flow projections indicate that adequate resources will exist after any withdrawal to service the outstanding debt, subject to approval by the bond trustee and the rating agency review; (2) the Authority determines that such funds are needed for the implementation or maintenance of any duly adopted program of the Authority; and (3) no default exists in the payment of the principal, redemption premium, if any, or interest on such bonds.

The Board has designated certain amounts of the unrestricted net position of the General Programs as of December 31, 2022 and 2021, for various purposes, as indicated in the following table. These designations of net position are not binding and can be changed by the Board.

Unrestricted Net Position for the years ended December 31:

	2022	2021
Designations:		
Housing lending program	\$ 519,766	\$ 381,702
Commerical lending program	892	987
General operating and working capital reserves	40,241	40,119
Debt reserves	92,415	163,353
Total general programs unrestricted net position	\$ 653,314	\$ 586,161

(12) Retirement Plans

(a) Summary of Significant Accounting Policies

Pensions – The Authority participates in the Local Government Division Trust Fund (LGDTF), a cost-sharing multiple-employer defined benefit pension fund administered by the PERA. The net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, pension expense, information about the fiduciary net position and additions to/deductions from the fiduciary net position of the LGDTF have been determined using the economic resources measurement focus and the accrual basis of accounting. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

(b) General Information about the Pension Plan

Plan description – Eligible employees of the Authority are provided with pensions through the LGDTF - a cost-sharing multiple-employer defined benefit pension plan administered by PERA. Plan benefits are specified in Title 24, Article 51 of the C.R.S., administrative rules set forth at 8 C.C.R. 1502-1, and applicable provisions of the IRC. Colorado State law provisions may be amended from time to time by the Colorado General Assembly. PERA issues a publicly available ACFR that can be obtained at www.copera.org/investments/pera-financial-reports.

Benefits provided – PERA provides retirement, disability and survivor benefits. Retirement benefits are determined by the amount of service credit earned and/or purchased, highest average salary, the benefit structure(s) under which the member retires, the benefit option selected at retirement, and age at retirement. Retirement eligibility is specified in tables set forth at C.R.S. § 24-51-602, 604, 1713 and 1714.



The lifetime retirement benefit for all eligible retiring employees under the PERA Benefit Structure is the greater of the:

- Highest average salary multiplied by 2.5% and then multiplied by years of service credit.
- The value of the retiring employee's member contribution account plus a 100% match on eligible amounts as of the
 retirement date. This amount is then annuitized into a monthly benefit based on life expectancy and other actuarial
 factors.

In all cases the service retirement benefit is limited to 100% of highest average salary and also cannot exceed the maximum benefit allowed by IRC.

Members may elect to withdraw their member contribution accounts upon termination of employment with all PERA employers; waiving rights to any lifetime retirement benefits earned. If eligible, the member may receive a match of either 50% or 100% on eligible amounts depending on when contributions were remitted to PERA, the date employment was terminated, whether five years of service credit has been obtained and the benefit structure under which contributions were made.

Upon meeting certain criteria, benefit recipients who elect to receive a lifetime retirement benefit generally receive post-retirement cost-of-living adjustments, referred to as annual increases in the C.R.S. Subject to the AAP under C.R.S. § 24-51-413, eligible benefit recipients under the PERA benefit structure who began membership before January 1, 2007, will receive the maximum annual increase (AI) or AI cap of 1.00% unless adjusted by the AAP. Eligible benefit recipients under the PERA benefit structure who began membership on or after January 1, 2007, will receive the lesser of an annual increase of the 1.00% AI cap or the average increase of the Consumer Price Index for Urban Wage Earners and Clerical Workers for the prior calendar year, not to exceed a determined increase that would exhaust 10% of PERA's Annual Increase Reserve (AIR) for the LGDTF. The AAP may raise or lower the aforementioned AI cap by up to 0.25% based on the parameters specified in C.R.S. § 24-51-413.

Disability benefits are available for eligible employees once they reach five years of earned service credit and are determined to meet the definition of disability. The disability benefit amount is based on the retirement benefit formula shown above considering a minimum of 20 years of service credit, if deemed disabled.

Survivor benefits are determined by several factors, which include the amount of earned service credit, highest average salary of the deceased, the benefit structure(s) under which service credit was obtained, and the qualified survivor(s) who will receive the benefits.

Contributions – Eligible employees and the Authority are required to contribute to the LGDTF at a rate set by Colorado statute. The contribution requirements are established under C.R.S. § 24-51-401, *et seq.* and § 24-51-413. Employee contribution rates for the period of January 1, 2021 through December 31, 2022, are summarized in the table below:

	January 1, 2021 Through	July 1, 2022 Through
	June 30, 2022	December 31, 2022
Employee Contribution Rate ¹	8.50%	9.00%

¹Rates are expressed as a percentage of salary as defined in C.R.S. § 24-51-101(42).



The employer contribution requirements for all employees are summarized in the table below:

	January 1, 2021 Through December 31, 2021	January 1, 2022 Through June 30, 2022	July 1, 2022 Through December 31, 2022
Employer Contribution Rate ¹	10.50%	10.50%	11.00%
Amount of Employer Contribution apportioned to the Health Care Trust			
Fund as specified in C.R.S. § 24-51-208(1)(f) 1	-1.02%	-1.02%	-1.02%
Amount Apportioned to the LGDTF ¹	9.48%	9.48%	9.98%
Amortization Equalization Disbursement (AED) as specified in C.R.S. §			
24-51-411 ¹	2.20%	2.20%	2.20%
Supplemental Amortization Equalization Disbursement (SAED) as			
specified in C.R.S. § 24-51-411 ¹	1.50%	1.50%	1.50%
Defined Contribution Supplement as specified in C.R.S. § 24-51-415 ¹	0.02%	0.03%	0.03%
Total Employer Contribution Rate to the LGDTF ¹	13.20%	13.21%	13.71%

¹Rates are expressed as a percentage of salary as defined in C.R.S. § 24-51-101(42).

Employer contributions are recognized by the LGDTF in the period in which the compensation becomes payable to the member and the Authority is statutorily committed to pay the contributions to the LGDTF. Employer contributions recognized by the LGDTF from the Authority were \$2.3 million and \$2.2 million for the years ended December 31, 2022 and 2021, respectively.

(c) Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

At December 31, 2022, the Authority reported a liability of \$(2.0) million for its proportionate share of the net pension liability. The net pension liability was measured as of December 31, 2021, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of December 31, 2020. Standard update procedures were used to roll forward the total pension liability to December 31, 2021. The Authority's proportion of the net pension liability was based on the Authority's contributions to the LGDTF for the calendar year 2021 relative to the total contributions of participating employers to the LGDTF.

At December 31, 2021, the Authority's proportion was 2.34%, which was a decrease of 0.13% from its proportion measured as of December 31, 2020.

At December 31, 2021, the Authority reported a liability of \$12.9 million for its proportionate share of the net pension liability. The net pension liability was measured as of December 31, 2020, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of December 31, 2019. Standard update procedures were used to roll forward the total pension liability to December 31, 2020. The Authority's proportion of the net pension liability was based on the Authority's contributions to the LGDTF for the calendar year 2020 relative to the total contributions of participating employers to the LGDTF.

At December 31, 2020, the Authority's proportion was 2.47%, which was an increase of 0.05% from its proportion measured as of December 31, 2019.

For the years ended December 31, 2022 and 2021, the Authority recognized pension expense of \$(9.6) million and \$(1.6) million, respectively.



At December 31, 2022, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Defer	red Outflow	Defe	erred Inflow
	of R	Resources	O	of Resources
Difference between expected and actual experience	\$	59	\$	19
Change of assumptions or other inputs		406		-
Net difference between projected and actual earnings on				
pension plan investments		-		14,239
Changes in proportion and differences between contributions				
recognized and proportionate share of contributions		80		392
Contributions subsequent to the measurement date		2,501		
Total	\$	3,046	\$	14,650

The \$2.5 million reported as deferred outflows of resources related to pensions, resulting from contributions subsequent to the measurement date, will be recognized as a reduction of the net pension liability in the year ended December 31, 2023.

At December 31, 2021, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	red Outflow Resources	ferred Inflow Resources
Difference between expected and actual experience	\$ 348	\$ -
Change of assumptions or other inputs	1,760	-
Net difference between projected and actual earnings on		
pension plan investments	-	11,195
Changes in proportion and differences between contributions		
recognized and proportionate share of contributions	263	-
Contributions subsequent to the measurement date	2,224	-
Total	\$ 4,595	\$ 11,195

The \$2.2 million reported as deferred outflows of resources related to pensions, resulting from contributions subsequent to the measurement date, will be recognized as a reduction of the net pension liability in the year ended December 31, 2022.



Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Years Ending						
December 31,	Pension Expense					
2023	\$	(3,487)				
2024		(5,493)				
2025		(3,442)				
2026		(1,683)				
2027		-				
Thereafter		-				

Actuarial assumptions – The total pension liability in the December 31, 2020 actuarial valuation was determined using the following actuarial cost method, actuarial assumptions and other inputs:

Actuarial cost method	Entry age
Price inflation	2.30%
Real wage growth	0.70%
Wage inflation	3.00%
Salary increases, including wage inflation	3.20% - 11.30%
Long-term investment rate of return, net of pension	
plan investment expenses, including price inflation	7.25%
Discount Rate	7.25%
Post-retirement benefit increases:	
PERA benefit structure hired prior to 1/1/07	
and DPS benefit structure (compounded annually)	1.00%
PERA benefit structure hired after 12/31/06 ¹	Financed by the AIR

¹ Post-retirement benefit increases are provided by the AIR, accounted separately within each Division Trust Fund, and subject to moneys being available; therefore, liabilities related to increases for members of these benefit tiers can never exceed available assets.

The TPL as of December 31, 2021, includes the anticipated adjustments to contribution rates and the Al cap, resulting from the 2020 AAP assessment, statutorily recognized July 1, 2021, and effective July 1, 2022.

The mortality tables described below are generational mortality tables developed on a benefit-weighted basis.

Pre-retirement mortality assumptions for members were based upon the PubG-2010 Employee Table with generational projection using scale MP-2019.

Post-retirement non-disabled mortality assumptions for members were based upon the PubG-2010 Healthy Retiree Table, adjusted as follows:

 Males: 94% of the rates prior to age 80 and 90% of the rates for ages 80 and older, with generational projection using scale MP-2019.



• Females: 87% of the rates prior to age 80 and 107% of the rates for ages 80 and older, with generational projection using scale MP-2019.

Post-retirement non-disabled beneficiary mortality assumptions were based upon the Pub-2010 Contingent Survivor Table, adjusted as follows

- Males: 97% of the rates for all ages, with generational projection using scale MP-2019.
- Females: 105% of the rates for all ages, with generational projection using scale MP-2019.

Disabled mortality assumptions for members were based upon the PubNS-2010 Disabled Retiree Table using 99% of the rates for all ages with generational projection using scale MP-2019.

The actuarial assumptions used in the December 31, 2020, valuation were based on the results of the 2020 experience analysis for the periods January 1, 2016, through December 31, 2019, and were reviewed and adopted by the PERA Board at their November 20, 2020, meeting.

The long-term expected return on plan assets is reviewed as part of regular experience studies prepared every four to five years for PERA. Recently this assumption has been reviewed more frequently. The most recent analyses were outlined in the Experience Study report dated October 28, 2020.

Several factors are considered in evaluating the long-term rate of return assumption, including long-term historical data, estimates inherent in current market data, and a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected return, net of investment expense and inflation) were developed for each major asset class. These ranges were combined to produce the long- term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentages and then adding expected inflation.

The PERA Board first adopted the 7.25% long-term expected rate of return as of November 18, 2016. Following an asset/liability study, the Board reaffirmed the assumed rate of return at the Board's November 15, 2019, meeting, to be effective January 1, 2020. As of the most recent reaffirmation of the long-term rate of return, the target asset allocation, and best estimates of geometric real rates of return for each major asset class are summarized in the table as follows:

Asset Class	Target Allocation	30 Year Expected Geometric Real rate of Return
Global Equity	54.00%	5.60%
Fixed Income	23.00%	1.30%
Private Equity	8.50%	7.10%
Real Estate	8.50%	4.40%
Alternatives	6.00%	4.70%
Total	100.00%	

Note: In setting the long-term expected rate of return, projections employed to model future returns provide a range of expected long-term returns that, including expected inflation, ultimately support a long-term expected nominal rate of return assumption of 7.25%.

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Notes to Basic Financial Statements (tabular dollar amounts are in thousands)

Discount rate – The discount rate used to measure the TPL was 7.25%. The projection of cash flows used to determine the discount rate applied the actuarial cost method and assumptions shown above. In addition, the following methods and assumptions were used in the projection of cash flows:

- Total covered payroll for the initial projection year consists of the covered payroll of the active membership present on the valuation date and the covered payroll of future plan members assumed to be hired during the year. In subsequent projection years, total covered payroll was assumed to increase annually at a rate of 3.00%.
- Employee contributions were assumed to be made at the member contribution rates in effect for each year, including
 the required adjustments resulting from the 2018 AAP assessment, and the additional 0.50% resulting from the 2020
 AAP assessment, statutorily recognized July 1, 2021, and effective July 1, 2022. Employee contributions for future
 plan members were used to reduce the estimated amount of total service costs for future plan members.
- Employer contributions were assumed to be made at rates equal to the fixed statutory rates specified in law for each year, including the required adjustments resulting from the 2018 AAP assessment, and the additional 0.50% resulting from the 2020 AAP assessment, statutorily recognized July 1, 2021, and effective July 1, 2022. Employer contributions also include current and estimated future AED and SAED, until the actuarial value funding ratio reaches 103%, at which point the AED and SAED will each drop 0.50% every year until they are zero. Additionally, estimated employer contributions reflect reductions for the funding of the AIR and retiree health care benefits. For future plan members, employer contributions were further reduced by the estimated amount of total service costs for future plan members not financed by their member contributions.
- Employer contributions and the amount of total service costs for future plan members were based upon a process to estimate future actuarially determined contributions assuming an analogous future plan member growth rate.
- The AIR balance was excluded from the initial fiduciary net position, as, per statute, AIR amounts cannot be used to
 pay benefits until transferred to either the retirement benefits reserve or the survivor benefits reserve, as appropriate.
 AIR transfers to the fiduciary net position and the subsequent AIR benefit payments were estimated and included in
 the projections.
- The projected benefit payments reflect the lowered AI cap, from 1.25% to 1.00%, resulting from the 2020 AAP assessment, statutorily recognized July 1, 2021, and effective July 1, 2022.
- Benefit payments and contributions were assumed to be made at the middle of the year.

Based on the above assumptions and methods, LGDTF's fiduciary net position was projected to be available to make all projected future benefit payments of current members. Therefore, the long-term expected rate of return of 7.25% on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability. The discount rate determination does not use the municipal bond index rate, and therefore, the discount rate is 7.25%. There was no change in the discount rate from the prior measurement date.

Sensitivity of the Authority's proportionate share of the net pension liability to changes in the discount rate – The following presents the proportionate share of the net pension liability calculated using the discount rate of 7.25%, as well as



what the proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.25%) or 1-percentage-point higher (8.25%) than the current rate:

	1.0% Decrease (6.25%)	Cur	rent Discount Rate (7.25%)	1.0% Increase (8.25%)
Proportionate share of the net pension liability	\$ 13,739	\$	(2,004) \$	(15,172)

Pension plan fiduciary net position – Detailed information about the LGDTF's fiduciary net position is available in PERA's ACFR which can be obtained at www.copera.org/investments/pera-financial-reports.

(d) Defined Contribution Pension Plans

PERAPlus 401(k) Plan

Plan Description - Employees of the Authority that are also members of the LGDTF may voluntarily contribute to the Voluntary Investment Program, an IRC Section 401(k) defined contribution plan administered by PERA. Title 24, Article 51, Part 14 of the C.R.S., as amended, assigns the authority to establish the Plan provisions to the PERA Board of Trustees. PERA issues a publicly available ACFR which includes additional information on the Voluntary Investment Program. That report can be obtained at www.copera.org/investments/pera-financial-reports.

Funding Policy - The Voluntary Investment Program is funded by voluntary member contributions up to the maximum limits set by the Internal Revenue Service (IRS), as established under Title 24, Article 51, Section 1402 of the C.R.S., as amended. In addition, the Authority has agreed to match employee contributions up to 5.0% of covered salary as determined by the IRS. Employees are immediately vested in their own contributions, employer contributions and investment earnings. For both years ended December 31, 2022 and 2021, program members contributed \$1.4 million. For years ended December 31, 2022 and 2021, the Authority recognized expense of \$811 thousand and \$765 thousand, respectively, related to the PERAPlus 401(k) plan.

PERAPlus 457 Plan

Plan Description - Employees of the Authority that are also members of the LGDTF may voluntarily contribute to the PERAPlus 457 plan, an IRC Section 457 defined contribution plan administered by PERA. Title 24, Article 51, Part 14 of the C.R.S., as amended, assigns the authority to establish the Plan provisions to the PERA Board of Trustees. PERA issues a publicly available ACFR for the Program. That report can be obtained at www.copera.org/investments/pera-financial-reports.

Funding Policy - The PERAPlus 457 plan is funded by voluntary member contributions up to the maximum limits set by the IRS, as established under Title 24, Article 51, Section 1402 of the C.R.S., as amended. The Authority does not match employee contributions. Employees are immediately vested in their own contributions and investment earnings. For the years ended December 31, 2022 and 2021, program members contributed \$159 thousand and \$171 thousand, respectively.

(e) Other Post-Employment Benefits

Defined Benefit Other Post Employment Benefit (OPEB) Plan

Summary of Significant Accounting Policies

OPEB - The Authority participates in the Health Care Trust Fund (HCTF), a cost-sharing multiple-employer defined benefit OPEB fund administered PERA. The net OPEB liability, deferred outflows of resources and deferred inflows of resources

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Notes to Basic Financial Statements (tabular dollar amounts are in thousands)

related to OPEB, OPEB expense, information about the fiduciary net position and additions to/deductions from the fiduciary net position of the HCTF have been determined using the economic resources measurement focus and the accrual basis of accounting. For this purpose, benefits paid on behalf of health care participants are recognized when due and/or payable in accordance with the benefit terms. Investments are reported at fair value.

General Information about the OPEB Plan

Plan description - Eligible employees of the Authority are provided with OPEB through the HCTF – a cost-sharing multiple-employer defined benefit OPEB plan administered by PERA. The HCTF is established under Title 24, Article 51, Part 12 of the Colorado Revised Statutes (C.R.S.), as amended, and sets forth a framework that grants authority to the PERA Board to contract, self-insure, and authorize disbursements necessary in order to carry out the purposes of the PERACare program, including the administration of the premium subsidies. Colorado State law provisions may be amended by the Colorado General Assembly. PERA issues a publicly available ACFR that can be obtained at www.copera.org/investments/perafinancial-reports.

Benefits provided - The HCTF provides a health care premium subsidy to eligible participating PERA benefit recipients and retirees who choose to enroll in one of the PERA health care plans, however, the subsidy is not available if only enrolled in the dental and/or vision plan(s). The health care premium subsidy is based upon the benefit structure under which the member retires and the member's years of service credit. For members who retire having service credit with employers in the Denver Public Schools (DPS) Division and one or more of the other four Divisions (State, School, Local Government and Judicial), the premium subsidy is allocated between the HCTF and the Denver Public Schools Health Care Trust Fund (DPS HCTF). The basis for the amount of the premium subsidy funded by each trust fund is the percentage of the member contribution account balance from each division as it relates to the total member contribution account balance from which the retirement benefit is paid.

C.R.S. § 24-51-1202 et seq. specifies the eligibility for enrollment in the health care plans offered by PERA and the amount of the premium subsidy. The law governing a benefit recipient's eligibility for the subsidy and the amount of the subsidy differs slightly depending under which benefit structure the benefits are calculated. All benefit recipients under the PERA benefit structure and all retirees under the DPS benefit structure are eligible for a premium subsidy, if enrolled in a health care plan under PERACare. Upon the death of a DPS benefit structure retiree, no further subsidy is paid.

Enrollment in the PERACare health benefits program is voluntary and is available to benefit recipients and their eligible dependents, certain surviving spouses, and divorced spouses and guardians, among others. Eligible benefit recipients may enroll into the program upon retirement, upon the occurrence of certain life events, or on an annual basis during an open enrollment period.

OPEB Benefit Structure - The maximum service-based premium subsidy is \$230 per month for benefit recipients who are under 65 years of age and who are not entitled to Medicare; the maximum service-based subsidy is \$115 per month for benefit recipients who are 65 years of age or older or who are under 65 years of age and entitled to Medicare. The maximum service-based subsidy, in each case, is for benefit recipients with retirement benefits based on 20 or more years of service credit. There is a 5% reduction in the subsidy for each year less than 20. The benefit recipient pays the remaining portion of the premium to the extent the subsidy does not cover the entire amount.

For benefit recipients who have not participated in Social Security and who are not otherwise eligible for premium-free Medicare Part A for hospital-related services, C.R.S. § 24-51-1206(4) provides an additional subsidy. According to the statute, PERA cannot charge premiums to benefit recipients without Medicare Part A that are greater than premiums charged to benefit recipients with Part A for the same plan option, coverage level, and service credit. Currently, for each individual PERACare enrollee, the total premium for Medicare coverage is determined assuming plan participants have both Medicare Part A and Part B and the difference in premium cost is paid by the HCTF or the DPS HCTF on behalf of benefit recipients not covered by Medicare Part A.



Contributions - Pursuant to Title 24, Article 51, Section 208(1)(f) of the C.R.S., as amended, certain contributions are apportioned to the HCTF. PERA-affiliated employers of the State, School, Local Government, and Judicial Divisions are required to contribute at a rate of 1.02% of PERA-includable salary into the HCTF.

Employer contributions are recognized by the HCTF in the period in which the compensation becomes payable to the member and the Authority is statutorily committed to pay the contributions. Employer contributions recognized by the HCTF from the Authority were \$179 thousand and \$175 thousand for the years ended December 31, 2022 and 2021.

OPEB Liabilities, OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

At December 31, 2022 the Authority reported a liability of \$1.6 million for its proportionate share of the net OPEB liability. The net OPEB liability for the HCTF was measured as of December 31, 2021, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of December 31, 2020. Standard update procedures were used to roll-forward the total OPEB liability to December 31, 2021. The Authority's proportion of the net OPEB liability was based on the Authority's contributions to the HCTF for the calendar year 2021 relative to the total contributions of participating employers to the HCTF.

At December 31, 2021, the Authority's proportion was 0.18%, which was a decrease of 0.01% from its proportion measured as of December 31, 2020.

At December 31, 2021 the Authority reported a liability of \$1.8 million for its proportionate share of the net OPEB liability. The net OPEB liability for the HCTF was measured as of December 31, 2020, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of December 31, 2019. Standard update procedures were used to roll-forward the total OPEB liability to December 31, 2020. The Authority's proportion of the net OPEB liability was based on the Authority's contributions to the HCTF for the calendar year 2020 relative to the total contributions of participating employers to the HCTF.

At December 31, 2020, the Authority's proportion was 0.19%, which was an increase of 0.01% from its proportion measured as of December 31, 2019.

For the years ended December 31, 2022 and 2021, the Authority recognized OPEB expense of \$(199) thousand and \$(163) thousand, respectively.



At December 31, 2022, the Authority reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Deferr	ed Outflow	Defe	rred Inflow
	of R	esources	of	Resources
Difference between expected and actual experience	\$	2	\$	316
Change of assumptions or other inputs		27		72
Net difference between projected and actual earnings on				
OPEB plan investments		-		78
Changes in proportion and differences between contributions				
recognized and proportionate share of contributions		63		138
Contributions subsequent to the measurement date		190		-
Total	\$	282	\$	604

The \$190 thousand reported as deferred outflows of resources related to OPEB, resulting from contributions subsequent to the measurement date, will be recognized as a reduction of the net OPEB liability in the year ended December 31, 2023.

At December 31, 2021, the Authority reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	d Outflow sources	rred Inflow Resources
Difference between expected and actual experience	\$ 4	\$ 325
Change of assumptions or other inputs	11	92
Net difference between projected and actual earnings on		
OPEB plan investments	-	59
Changes in proportion and differences between contributions		
recognized and proportionate share of contributions	104	114
Contributions subsequent to the measurement date	179	-
Total	\$ 298	\$ 590

The \$179 thousand reported as deferred outflows of resources related to OPEB, resulting from contributions subsequent to the measurement date, will be recognized as a reduction of the net OPEB liability in the year ended December 31, 2022.



Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

Years Ending			
December 31,	OPEB	Expense	
2023	\$	(124)	
2024		(165)	
2025		(132)	
2026		(64)	
2027		(23)	
Thereafter		(4)	

Actuarial assumptions - The total OPEB liability in the December 31, 2020 actuarial valuation was determined using the following actuarial cost method, actuarial assumptions and other inputs:

Actuarial cost method	Entryage
Price inflation	2.30%
Real wage growth	0.70%
Wage inflation	3.00%
Salary increases, including wage inflation	3.20% - 11.30%
Long-term investment rate of return, net of OPEB	
plan investment expenses, including price inflation	7.25%
Discount Rate	7.25%
Health care cost trend rates	
PERA benefit structure:	
Service-based premium subsidy	0.00%
PERACare Medicare plans	4.50% in 2021, 6.00% in 2022
	gradually decreasing to 4.50% in 2029
Medicare Part A premiums	3.75% for 2021, gradually
	increasing to 4.50% in 2029

Calculations are based on the benefits provided under the terms of the substantive plan in effect at the time of each actuarial valuation and on the pattern of sharing of costs between employers of each fund to that point.



In determining the additional liability for PERACare enrollees who are age 65 or older and who are not eligible for premium-free Medicare Part A in the December 31, 2020, valuation, the following monthly costs/premiums (actual dollars) are assumed for 2021 for the PERA Benefit Structure:

Initial Costs for Members without Medicare Part A

Medicare Plan	Monthly Cost	Monthly Premium	Monthly Cost Adjusted to Age 65
Medicare Advantage/Self Insured Rx	\$633	\$230	\$591
Kaiser permanente Medicare	φοσο	ΨΣΟΟ	φοσι
Advantage HMO	\$596	\$199	\$562

The 2021 Medicare Part A premium is \$471 (actual dollars) per month.

All costs are subject to the health care cost trend rates, as discussed below.

Health care cost trend rates reflect the change in per capita health costs over time due to factors such as medical inflation, utilization, plan design, and technology improvements. For the PERA benefit structure, health care cost trend rates are needed to project the future costs associated with providing benefits to those PERACare enrollees not eligible for premium-free Medicare Part A.

Health care cost trend rates for the PERA benefit structure are based on published annual health care inflation surveys in conjunction with actual plan experience (if credible), building block models and industry methods developed by health plan actuaries and administrators. In addition, projected trends for the Federal Hospital Insurance Trust Fund (Medicare Part A premiums) provided by the Centers for Medicare & Medicaid Services are referenced in the development of these rates. Effective December 31, 2020, the health care cost trend rates for Medicare Part A premiums were revised to reflect the current expectation of future increases in rates of inflation applicable to Medicare Part A premiums.



The PERA benefit structure health care cost trend rates that were used to measure the total OPEB liability are summarized in the table below:

	PERACare	Medicare Part A
Year	Medicare Plans	Premiums
2021	4.50%	3.75%
2022	6.00%	3.75%
2023	5.80%	4.00%
2024	5.60%	4.00%
2025	5.40%	4.00%
2026	5.10%	4.25%
2027	4.90%	4.25%
2028	4.70%	4.25%
2029+	4.50%	4.50%

Mortality assumptions used in the December 31, 2020, valuation for the determination of the total pension liability for each of the Division Trust Funds as shown below, reflect generational mortality and were applied, as applicable, in the determination of the total OPEB liability for the HCTF, but developed using a headcount-weighted basis. Affiliated employers of the State, School, Local Government and Judicial Divisions participate in the HCTF.

Pre-retirement mortality assumptions for the State and Local Government Divisions were based upon the PubG-2010 Employee Table with generational projection using scale MP-2019.

Post-retirement non-disabled mortality assumptions for the State and Local Government Divisions were based on the PubG-2010 Healthy Retiree Table, adjusted as follows:

- Males: 94% of the rates prior to age 80 and 90% of the rates for ages 80 and older, with generational projection using scale MP-2019.
- Females: 87% of the rates prior to age 80 and 107% of the rates for ages 80 and older, with generational projection using scale MP-2019.

Post-retirement non-disabled beneficiary mortality assumptions were based upon the Pub-2010 Contingent Survivor Table, adjusted as follows:

- Males: 97% of the rates for all ages, with generational projection using scale MP-2019.
- Females: 105% of the rates for all ages, with generational projection using scale MP-2019.

Disabled mortality assumptions for members were based upon the PubNS-2010 Disabled Retiree Table using 99% of the rates for all ages with generational projection using scale MP-2019.



The following health care costs assumptions were updated and used in the roll-forward calculation for the Trust Fund:

- Initial per capita health care costs for those PERACare enrollees under the PERA benefit structure who are expected to attain age 65 and older ages and are not eligible for premium-free Medicare Part A benefits were updated to reflect the change in costs for the 2021 plan year.
- The health care cost trend rates for Medicare Part A premiums were revised to reflect the then-current expectation of future increases in rates of inflation applicable to Medicare Part A premiums.

Actuarial assumptions pertaining to per capita health care costs and their related trend rates are analyzed and updated annually by PERA Board's actuary, as discussed above.

The actuarial assumptions used in the December 31, 2020, valuation were based on the results of the 2020 experience analysis for the period January 1, 2016, through December 31, 2019, and were reviewed and adopted by the PERA Board at their November 20, 2020, meeting.

The long-term expected return on plan assets is reviewed as part of regular experience studies prepared every four to five years for PERA. Recently this assumption has been reviewed more frequently. The most recent analyses were outlined in the Experience Study report dated October 28, 2020.

Several factors are considered in evaluating the long-term rate of return assumption, including long-term historical data, estimates inherent in current market data, and a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected return, net of investment expense and inflation) were developed for each major asset class. These ranges were combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentages and then adding expected inflation.

As of the most recent reaffirmation of the long-term rate of return, the target asset allocation and best estimates of geometric real rates of return for each major asset class are summarized in the table as follows:

Asset Class	Target Allocation	30 Year Expected Geometric Real rate of Return
Global Equity	54.00%	5.60%
Fixed Income	23.00%	1.30%
Private Equity	8.50%	7.10%
Real Estate	8.50%	4.40%
Alternatives	6.00%	4.70%
Total	100.00%	

Note: In setting the long-term expected rate of return, projections employed to model future returns provide a range of expected long-term returns that, including expected inflation, ultimately support a long-term expected nominal rate of return assumption of 7.25%.



Sensitivity of the Authority's proportionate share of the net OPEB liability to changes in the Health Care Cost Trend Rates - The following presents the net OPEB liability using the current health care cost trend rates applicable to the PERA benefit structure, as well as if it were calculated using health care cost trend rates that are one percentage point lower or one percentage point higher than the current rates:

	1% Decrease in	n Current	1% Increase in
	Trend Rates	Trend Rates	Trend Rates
Initial PERACare Medicare trend rate	3.50%	4.50%	5.50%
Ultimate PERACare Medicare trend rate	3.50%	4.50%	5.50%
Initial Medicare Part Atrend rate	2.75%	3.75%	4.75%
Ultimate Medicare Part A trend rate	3.50%	4.50%	5.50%
Net OPEB Liability	\$ 1,5	15 \$ 1,560	\$ 1,612

Discount rate - The discount rate used to measure the total OPEB liability was 7.25%. The projection of cash flows used to determine the discount rate applied the actuarial cost method and assumptions shown above. In addition, the following methods and assumptions were used in the projection of cash flows:

- Updated health care cost trend rates for Medicare Part A premiums as of the December 31, 2021, measurement date.
- Total covered payroll for the initial projection year consists of the covered payroll of the active membership present on the valuation date and the covered payroll of future plan members assumed to be hired during the year. In subsequent projection years, total covered payroll was assumed to increase annually at a rate of 3.00%.
- Employer contributions were assumed to be made at rates equal to the fixed statutory rates specified in law and effective as of the measurement date.
- Employer contributions and the amount of total service costs for future plan members were based upon a process
 used by the plan to estimate future actuarially determined contributions assuming an analogous future plan member
 growth rate.
- Estimated transfers of dollars into the HCTF representing a portion of purchase service agreements intended to cover the costs associated with OPEB benefits.
- Benefit payments and contributions were assumed to be made at the middle of the year.

Based on the above assumptions and methods, the projection test indicates the HCTF's fiduciary net position was projected to make all projected future benefit payments of current members. Therefore, the long-term expected rate of return of 7.25% on OPEB plan investments was applied to all periods of projected benefit payments to determine the total OPEB liability. The discount rate determination does not use the municipal bond index rate, and therefore, the discount rate is 7.25%. There was no change in the discount rate from the prior measurement date.



Sensitivity of the Authority's proportionate share of the net OPEB liability to changes in the discount rate - The following presents the proportionate share of the net OPEB liability calculated using the discount rate of 7.25%, as well as what the proportionate share of the net OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.25%) or 1-percentage-point higher (8.25%) than the current rate:

	1.0% Decrease (6.25%)	Cur	rent Discount Rate (7.25%)	1.0% Increase (8.25%)
Proportionate share of the net OPEB liability	\$ 1,812	\$	1,560	\$ 1,345

OPEB plan fiduciary net position - Detailed information about the HCTF's fiduciary net position is available in PERA's ACFR which can be obtained at www.copera.org/investments/pera-financial-reports.

(13) Risk Management

The Authority's Legal and Enterprise Risk Management function consists of Legal Operations, Internal Audit, Compliance, Information Security and Privacy. The Authority embraces the Three Lines of Defense Model to enterprise risk management, in which senior management and the Board look to (a) operating management, (b) the risk and compliance functions and (c) internal audit testing to appropriately manage risk. The Enterprise Risk Management function includes the Board and an Enterprise Risk Management Committee including the executive officers, Directors of Information Technology, Research and Strategy and Human Resources, Managers of Audit, Compliance, Information Security and Privacy and other staff as necessary or appropriate. Risk management techniques utilized include annual risk assessments with periodic updates, periodic review of governance around risk and opportunity, information technology and strategic projects, establishment of appropriate policies and procedures, business continuity planning and testing and insurance coverage as appropriate. The Authority presently maintains commercial general and premises liability, business automobile liability, property, mortgage protection, worker's compensation, crime, cyber and public entity and official's liability coverages. Settled claims did not exceed insurance coverage during the reporting period.

(14) Related-Party Transactions

As of the years ended December 31, 2022 and 2021, the Authority had allocated Federal and State Low Income Housing Tax Credits in the amount of \$9.8 million to housing projects in which the Fort Collins Housing Authority (FCHA) is the general partner. Federal tax credits are provided annually for each of ten years and State tax credits are provided annually for each of six years. In addition, the Authority has outstanding loans with the FCHA. As of December 31, 2022 and 2021, the unpaid principal balance on the loans was \$3.9 million. The Executive Director of the FCHA is a member of the Authority's Board.

As of the years ended December 31, 2022 and 2021, the Authority had allocated Federal Low Income Housing Tax Credits in the amount of \$4.9 million to housing projects in which the Grand Junction Housing Authority (GJHA) is the general partner. The allocated tax credits will be provided annually for each of ten years. In addition, the Authority has outstanding loans with the GJHA. As of December 31, 2022 and 2021, the unpaid principal balance on the loans totaled \$4.3 million and \$5.1 million, respectively. The Executive Director of the GJHA was a member of the Authority's Board at the time that the tax credits were allocated and the loans were made.

As of the years ended December 31, 2022 and 2021, the Authority has outstanding loans with the Housing Authority of the City of Loveland (HACL). As of December 31, 2022 and 2021, the unpaid principal balance on the loans totaled \$3.4 million. The Executive Director of the HACL was a member of the Authority's Board at the time that the loans were made.



As of the year ended December 31, 2022, the Authority had allocated Federal Low Income Housing Tax Credits in the amount of \$930 thousand to a housing project in which Total Concept is the general partner. Federal tax credits are provided annually for each of ten years. The Executive Director of Total Concept is a member of the Authority's Board.

(15) Commitments and Contingencies

The Authority had outstanding commitments to make or acquire single family and multifamily/business loans of \$185.6 million and \$94.7 million, respectively, as of December 31, 2022. The Authority had outstanding commitments to make or acquire single family and multifamily/business loans of \$460.1 million and \$86.5 million, respectively, as of December 31, 2021.

There are a limited number of claims or suits pending against the Authority arising in the Authority's ordinary course of business. In the opinion of the Authority's management and counsel, any losses that might result from these claims and suits are either covered by insurance or, to the extent not covered by insurance, would not have a material adverse effect on the Authority's financial position.

The Authority participates in the Ginnie Mae MBS Programs. Through the MBS Programs, Ginnie Mae guarantees securities that are issued by the Authority and backed by pools of mortgage loans. If a borrower fails to make a timely payment on a mortgage loan, the Authority must advance its own funds to ensure that the security holders receive timely payment. All loans pooled under the Ginnie Mae MBS Program are either insured by the FHA or are guaranteed by the VA or RD. The Authority assesses the overall risk of loss on loans that it may be required to repurchase and advances funds to repurchase the loans as necessary. Advances are recovered as claims are processed or loans are modified. The Authority repurchased \$282.9 million and \$163.1 million of these loans in 2022 and 2021, respectively. Claims, recoveries and proceeds from re-pooled, modified loans substantially reimburse the Authority over time.

The Authority also participates in the Whole Loan Sales and MBS programs with Fannie Mae. Through the consideration of Whole Loan Sales to Fannie Mae, the Authority receives cash for mortgages. Through the MBS program, the Authority swaps loans for securities issued by Fannie Mae. Whole Loan Sales are serviced by the Authority in an Actual/Actual remittance method and the MBS loans are serviced by the Authority in a Schedule/Schedule remittance method. Under the Schedule/Schedule method, if a borrower fails to make a timely payment on a MBS mortgage loan, the Authority must advance its own funds to ensure that the security holders receive timely payment. The Authority assesses the overall risk of loss on loans that it may be required to repurchase and repurchases the loans as necessary. The Authority repurchased \$170 thousand and \$1.8 million of these loans in 2022 and 2021, respectively.

The Authority also participates in the Whole Loan Sales program with Freddie Mac. Through the consideration of Whole Loan Sales to Freddie Mac, the Authority receives cash for mortgages. Whole Loan Sales are serviced by the Authority in a Schedule/Actual remittance method. Under the Schedule/Actual method, if a borrower fails to make a timely payment on a mortgage loan, the Authority must advance its own funds to ensure that the interest is current. The Authority assesses the overall risk of loss on loans that it may be required to repurchase and repurchases the loans as necessary. The Authority repurchased \$184 thousand and \$652 thousand of these loans in 2022 and 2021, respectively.

Certain external events, such as pandemics, natural disasters, severe weather, technological emergencies, riots, acts of war or terrorism or other circumstances, could potentially disrupt the Authority's ability to conduct its business. One such external event is the global outbreak of COVID-19 (COVID-19), a respiratory disease declared in 2020 to be a pandemic (the Pandemic) by the World Health Organization and an emergency by federal and state governments. Since the start of the Pandemic, Presidential administrations, Congress, the Federal Reserve, HUD/FHA (including GNMA), the Federal Housing Finance Agency (including Fannie Mae and Freddie Mac), USDA Rural Development, VA, the Centers for Disease Control, and the Consumer Financial Protection Bureau, along with the State, have enacted legislation and/or issued orders or directives (collectively, "Governmental Actions") to alleviate the effects of COVID-19 on homeowners, renters, landlords, servicers and lenders. Governmental Actions have included loan forbearance directives, moratoriums on foreclosures and/or evictions, loan modification directives, loan servicing assistance, rental assistance, and homeownership loan assistance. Such legislation



and/or orders have been extended and/or modified, and others have expired or been enjoined. While it is generally expected that new legislation may be enacted, new orders may be issued, and existing and new orders may be extended, modified, litigated, or allowed to expire, no guarantee can be made with regards to the duration and/or effectiveness of any such legislation or orders.

(16) Subsequent Events

There have not been any reportable events identified subsequent to the end date of the audit period through the issuance of this report.



required supplemental information (unaudited)

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Colorado Housing and Finance Authority Schedule of the Authority's Share of Net Pension Liability Last 10 Fiscal Years*

(in thousands of dollars)

	2022	2021		2020	2019	2018	2017	2016	2015
Proportion of the net pension liability	 2.34%	2.47%	,	2.42%	2.41%	2.61%	2.41%	2.29%	2.16%
Proportionate share of net pension liability	\$ (2,004)	\$ 12,886	\$	17,693	\$ 30,278	\$ 29,015	\$ 32,535	\$ 25,185	\$ 19,360
Covered-employee payroll	\$ 17,539	\$ 17,165	\$	16,634	\$ 15,994	\$ 14,974	\$ 14,091	\$ 12,984	\$ 11,857
Proportionate share of the net pension liability as a percentage of its covered-employee payroll	-11.43%	75.07%		106.38%	189.31%	193.77%	230.89%	193.97%	163.28%
Plan fiduciary net position as a percentage of the total pension plan liability	101.49%	90.88%		86.26%	75.96%	79.37%	73.65%	76.87%	80.72%

^{*} This schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

The accompanying notes are an integral part of the Required Supplementary Information.

Colorado Housing and Finance Authority Schedule of Authority Contributions Local Government Division Trust Fund Last 10 Fiscal Years* (in thousands of dollars)

	 2022	 2021	 2020	 2019	 2018	 2017	 2016	 2015
Contractually required contribution	\$ 2,315	\$ 2,215	\$ 2,109	\$ 2,028	\$ 1,899	\$ 1,787	\$ 1,646	\$ 1,504
Contributions in relation to the contractually required contribution	 2,315	2,215	2,109	 2,028	 1,899	1,787	 1,646	 1,504
Contribution deficiency	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 	\$
Covered-employee payroll	\$ 17,539	\$ 17,165	\$ 16,634	\$ 15,994	\$ 14,974	\$ 14,091	\$ 12,984	\$ 11,857
Contributions as a percentage of covered-employee payroll	13.20%	12.90%	12.68%	12.68%	12.68%	12.68%	12.68%	12.68%

^{*} This schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

 $\label{thm:company:equation:company:equation:company:equation: The accompanying notes are an integral part of the Required Supplementary Information.$

Notes to the Required Supplementary Information (unaudited) (tabular dollar amounts are in thousands)

1) Significant changes in Plan Provisions Affecting Trends in Actuarial Information

2021 changes

- The following changes reflect the anticipated adjustments resulting from the 2020 AAP assessment, statutorily recognized July 1,2021, and effective July 1, 2022:
 - Member contribution rates increase by 0.50%.
 - Employer contribution rates increase by 0.50%.
 - Al cap is lowered from 1.25% per year to 1.00% per year.

2020 changes

• House Bill (HB) 20-1379, enacted on June 29, 2020, suspended the \$225 million (actual dollars) direct distribution payable on July 1,2020 for the State's 2020-21 fiscal year.

2019 changes

- Senate Bill (SB) 18-200 was enacted on June 4, 2018, which included the adoption of the AAP. The following changes reflect the anticipated adjustments resulting from the 2018 AAP assessment, statutorily recognized July 1, 2019, and effective July 1, 2020:
 - Member contribution rates increase by 0.50%.
 - Employer contribution rates increase by 0.50%.
 - Al cap is lowered from 1.50% per year to 1.25% per year.
- HB 19-1217, enacted May 20, 2019, repealed the member contribution increases scheduled for the Local Government Division pursuant to SB 18-200.

2018 changes

- The following changes were made to the plan provisions as part of SB 18-200:
 - Member contribution rates increase by 0.75% effective July 1, 2019, an additional 0.75% effective July 1, 2020, and an additional 0.50% effective July 1, 2021.
 - Al cap is lowered from 2.00% per year to 1.50% per year.
 - Initial AI waiting period is extended from one year after retirement to three years after retirement.
 - All payments are suspended for 2018 and 2019.
 - The number of years used in the Highest Average Salary calculation for non-vested members as of January 1, 2020, increases from three to five years for the State, School, Local Government and DPS Divisions and increases from one to three years for the Judicial Division.

2017 changes

• There were no changes made to plan provisions.

2016 changes

There were no changes made to plan provisions.

Notes to the Required Supplementary Information (unaudited) (tabular dollar amounts are in thousands)

2015 changes

• There were no changes made to plan provisions.

2014 changes

There were no changes made to plan provisions.

2) Significant changes in Assumptions or Other Inputs Affecting Trends in Actuarial Information

2021 changes

The assumption used to value the AI cap benefit provision was changed from 1.25% to 1.00%.

2020 changes

- The price inflation assumption was lowered from 2.40% to 2.30%.
- The wage inflation assumption was lowered from 3.50% to 3.00%.
- The real rate of investment return assumption was increased to 4.95% per year, net of investment expenses from 4.85% per year, net of investment expenses.
- Salary scale assumptions were revised to align with revised economic assumptions and to more closely reflect actual experience.
- Rates of termination / withdrawal, retirement and disability were revised to more closely reflect actual experience.
- The pre-retirement mortality assumption for the State and Local Government Divisions (Members other than State Troopers) was changed to the PubG-2010 Employee Table with generational projection using scale MP-2019.
- The post-retirement non-disabled mortality assumption for the State and Local Government Divisions (Members other than State Troopers) was changed to the PubG-2010 Healthy Retiree Table, adjust as follows:
 - Males: 94% of the rates prior to age 80 and 90% of the rates for ages 80 and older, with generational projection using scale MP-2019.
 - Females: 87% of the rates prior to age 80 and 107% of the rates for ages 80 and older, with generational projection using scale MP-2019.
- The mortality tables described above are generational mortality tables on a benefit-weighted basis.

2019 changes

The assumption used to value the AI cap benefit provision was changed from 1.50% to 1.25%.

2018 changes

There were no changes made to actuarial methods or assumptions.

2017 changes

There were no changes made to actuarial methods or assumptions.

Notes to the Required Supplementary Information (unaudited) (tabular dollar amounts are in thousands)

2016 changes

- The investment return assumption was lowered from 7.50% to 7.25%.
- The price inflation assumption was lowered from 2.80% to 2.40%.
- The wage inflation assumption was lowered from 3.90% to 3.50%.
- The post-retirement mortality assumption for healthy lives for the State and Local Government Divisions was changed to the RP-2014 Healthy Annuitant Mortality Table with adjustments for credibility and gender adjustments of a 73% factor applied to ages below 80 and a 108% factor applied to age 80 and above, projected to 2018, for males, and a 78% factor applied to ages below 80 and a 109% factor applied to age 80 and above, projected to 2020, for females.
- For disabled retirees, the mortality assumption was changed to reflect 90% of RP-2014 Disabled Retiree Mortality Table.
- The mortality assumption for active members was changed to RP-2014 White Collar Employee Mortality Table, a
 table specifically developed for actively working people. To allow for an appropriate margin of improved mortality
 prospectively, the mortality rates incorporate a 70% factor applied to male rates and a 55% factor applied to female
 rates.
- The rates of retirement, withdrawal and disability were revised to reflect more closely actual experience.
- The estimated administrative expense as a percentage of covered payroll was increased from 0.35% to 0.40%.
- The single equivalent interest rate (SEIR) for the Local Government Division was lowered from 7.50% to 7.25%, reflecting the change in the long-term expected rate of return.

2015 changes

- The following programming changes were made:
 - Valuation of the full survivor benefit without reduction for possible remarriage.
 - Reflection of the employer match on separation benefits for all eligible years.
 - Reflection of one year of service eligibility for survivor annuity benefit.
 - Refinement of the 18-month Al timing.
 - Refinements to directly value certain and life, modified cash refund and pop-up benefit forms.
- The following methodology changes were made:
 - Recognition of merit salary increases in the first projection year.
 - Elimination of the assumption that 35% of future disabled members elect to receive a refund.
 - Removal of the negative value adjustment for liabilities associated with refunds of future terminating members.
 - Adjustments to the timing of the normal cost and unfunded actuarial accrued liability (UAAL) payment calculation to reflect contributions throughout the year.

2014 changes

There were no changes made to actuarial methods or assumptions.



Colorado Housing and Finance Authority Schedule of the Authority's Share of Net OPEB Liability Last 10 Fiscal Years*

(in thousands of dollars)

	2022	2021	2020	2019	2018	2017
Proportion of the net OPEB liability	0.18%	0.19%	0.18%	0.19%	0.20%	0.18%
Proportionate share of net OPEB liability	\$ 1,560	\$ 1,789	\$ 2,083	\$ 2,541	\$ 2,632	\$ 2,398
Covered-employee payroll	\$ 17,539	\$ 17,165	\$ 16,634	\$ 15,994	\$ 14,974	\$ 14,091
Proportionate share of the net OPEB liability as a percentage of its covered-employee payroll	8.90%	10.42%	12.52%	15.89%	17.57%	17.02%
Plan fiduciary net position as a percentage of the total OPEB plan liability	39.40%	32.78%	24.49%	17.03%	17.53%	16.72%

^{*} This schedule is intended to show information for 10 years. Additional years will be displayed as they become available. The accompanying notes are an integral part of the Required Supplementary Information.

Colorado Housing and Finance Authority Schedule of Authority Contributions Health Care Trust Fund Last 10 Fiscal Years*

	 2022	 2021	 2020	 2019	 2018	 2017
Contractually required contribution	\$ 179	\$ 175	\$ 170	\$ 161	\$ 153	\$ 144
Contributions in relation to the contractually required contribution	 179	 175	 170	 161	 153	 144
Contribution deficiency	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Covered-employee payroll	\$ 17,539	\$ 17,165	\$ 16,634	\$ 15,994	\$ 14,974	\$ 14,091
Contributions as a percentage of covered-employee payroll	1.02%	1.02%	1.02%	1.02%	1.02%	1.02%

^{*} This schedule is intended to show information for 10 years. Additional years will be displayed as they become available. The accompanying notes are an integral part of the Required Supplementary Information.



Notes to the Required Supplementary Information (unaudited) (tabular dollar amounts are in thousands)

1) Significant changes in Plan Provisions Affecting Trends in Actuarial Information

2021 changes

• There were no changes made to plan provisions.

2020 changes

- The price inflation assumption was lowered from 2.40% to 2.30%.
- The wage inflation assumption was lowered from 3.50% to 3.00%.
- The real rate of investment return assumption was increased to 4.95% per year, net of investment expenses from 4.85% per year, net of investment expenses.
- Rates of termination / withdrawal, retirement and disability were revised to more closely reflect actual experience.
- The pre-retirement mortality assumption for the State and Local Government Divisions (Members other than State Troopers) was changed to the PubG-2010 Employee Table with generational projection using scale MP-2019.
- The post-retirement non-disabled mortality assumption for the State and Local Government Divisions (Members other than State Troopers) was changed to the PubG-2010 Healthy Retiree Table, adjust as follows:
 - Males: 94% of the rates prior to age 80 and 90% of the rates for ages 80 and older, with generational projection using scale MP-2019.
 - Females: 87% of the rates prior to age 80 and 107% of the rates for ages 80 and older, with generational projection using scale MP-2019.
- The mortality tables described above are generational mortality tables on a benefit-weighted basis.

2019 changes

There were no changes made to plan provisions.

2018 changes

• There were no changes made to plan provisions.

2017 changes

There were no changes made to plan provisions.

2016 changes

There were no changes made to plan provisions.

2) Significant changes in Assumptions or Other Inputs Affecting Trends in Actuarial Information

2021 changes

There were no changes made to actuarial methods or assumptions.

Notes to the Required Supplementary Information (unaudited) (tabular dollar amounts are in thousands)

2020 changes

- The price inflation assumption was lowered from 2.40% to 2.30%.
- The wage inflation assumption was lowered from 3.50% to 3.00%.
- The real rate of investment return assumption was increased to 4.95% per year, net of investment expenses from 4.85% per year, net of investment expenses.
- Rates of termination, withdrawal, retirement and disability were revised to more closely reflect actual experience.
- The pre-retirement mortality assumption for the State and Local Government Divisions (members other than State Troopers) was changed to the PubG-2010 Employee Table with generational projection using scale MP-2019.
- The post-retirement non-disabled mortality assumption for the State and Local Government Divisions (members other than State Troopers) was changed to the PubG-2010 Healthy Retiree Table, adjusted as follows:
 - Males: 94% of the rates prior to age 80 and 90% of the rates for ages 80 and older, with generational projection using scale MP-2019.
 - Females: 87% of the rates prior to age 80 and 107% of the rates for ages 80 and older, with generational projection using scale MP-2019.
- The mortality tables described above are generational mortality tables developed on a head-count weighted basis.

2019 changes

• There were no changes made to actuarial methods or assumptions.

2018 changes

There were no changes made to actuarial methods or assumptions.

2017 changes

There were no changes made to actuarial methods or assumptions.

2016 changes

- The following methodology change was made:
 - The Entry Age Normal actuarial cost method allocation basis has been changed from a level dollar amount to a level percentage of pay.
- The following changes were made to the actuarial assumptions:
 - The investment rate of return assumption decreased from 7.50% to 7.25%.
 - The price inflation assumption decreased from 2.80% to 2.40%.
 - The wage inflation assumption decreased from 3.90% to 3.50%.
 - The mortality assumption for active members was changed to RP-2014 White Collar Employee Mortality
 Table, a table specifically developed for actively working people. To allow for an appropriate margin of
 improved mortality prospectively, the mortality rates incorporate a 70% factor applied to male rates and a
 55% factor applied to female rates.
 - The post-retirement mortality assumption for healthy lives for the State and Local Government Divisions
 was changed to the RP-2014 Healthy Annuitant Mortality Table with adjustments for credibility and gender
 adjustments of a 73% factor applied to ages below 80 and a 108% factor applied to age 80 and above,



Notes to the Required Supplementary Information (unaudited) (tabular dollar amounts are in thousands)

projected to 2018, for males, and a 78% factor applied to ages below 80 and a 109% factor applied to age 80 and above, projected to 2020, for females.

- For disabled retirees, the mortality assumption was changed to reflect 90% of RP-2014 Disabled Retiree Mortality Table.
- The assumed rates of withdrawal, retirement and disability have been adjusted to more closely reflect experience.
- The assumed rates of PERACare participation have been revised to reflect more closely actual experience.
- Initial per capita health care costs for those PERACare enrollees under the PERA benefit structure who are
 expected to attain age 65 and older ages and are not eligible for premium-free Medicare Part A benefits
 have been updated to reflect the change in costs for the 2017 plan year.
- The percentage of PERACare enrollees who will attain age 65 and older ages and are assumed to not qualify for premium-free Medicare Part A coverage have been revised to reflect more closely actual experience.
- The percentage of disabled PERACare enrollees who are assumed to not qualify for premium-free Medicare Part A coverage has been revised to reflect more closely actual experience.
- The health care cost trend rates for Medicare Part A premiums have been revised to reflect the then current expectation of future increases in rates of inflation applicable to Medicare Part A premiums.
- Assumed election rates for the PERACare coverage options that would be available to future PERACare
 enrollees who will qualify for the "No Part A Subsidy" when they retire have been revised to more closely
 reflect actual experience.
- Assumed election rates for the PERACare coverage options that will be available to those current PERACare enrollees, who qualify for the "No Part A Subsidy" but have not reached age 65, have been revised to more closely reflect actual experience.
- The rates of PERACare coverage election for spouses of eligible inactive members and future retirees was revised to reflect more closely actual experience.
- The assumed age differences between future retirees and their participating spouses have been revised to reflect more closely actual experience.



supplemental information

financing the places where people live and work

Colorado Housing and Finance Authority Combining Schedule - Statement of Net Position

As of December 31, 2022

(with summarized financial information for December 31, 2021)

	General	Single	Multifamily/			Summarize
	Programs	Family	Business	Eliminations	2022	2021
Assets		•				
Current assets:						
Cash (Note 2)						
Restricted	\$ 160,605	\$ -	\$ -	\$ -	\$ 160,605	\$ 233,66
Unrestricted	13,013	-	-	-	13,013	83,23
Investments (Note 2)	34,307	363,004	94,594	-	491,905	336,78
Loans receivable (Note 3)	20,083	5,824	19,775	(1,326)	44,356	40,14
Loans receivable held for sale (Note 3)	95,836	-	_	-	95,836	224,42
Accrued interest receivable	10,009	5,472	2,429	(235)	17,675	14,24
Other assets	20,581	208	21		20,810	21,05
Due (to) from other programs	(13,775)	1,801	11,974	-	· -	
Total current assets	340,659	376,309	128,793	(1,561)	844,200	953,54
Noncurrent assets:	-			, , ,		
Investments (Note 2)	15,836	26,301	34,246	-	76,383	87,6
Program investments (MBS)	-	1,442,159	_	-	1,442,159	1,454,22
Loans receivable, net (Note 3)	582,396	168,901	573,487	(38,467)	1,286,317	1,164,10
Derivative instruments	(205)	63,883	5,351	-	69,029	
Capital assets - nondepreciable (Note 4)	2,149	-	-	_	2,149	2,4
Capital assets - depreciable, net (Note 4)	9,782	_	_	_	9,782	10,0
Other real estate owned, net	931	43	-	-	974	2
Other assets	104,651	-	_	_	104.651	67,18
Total noncurrent assets	715,540	1,701,287	613.084	(38,467)	2,991,444	2,785,9
Total assets	1,056,199	2,077,596	741,877	(40,028)	3,835,644	3,739,5
Deferred outflows of resources			,	, , ,		, ,
Accumulated increase in fair value of hedging derivatives	_	1,471	23,042		24,513	80,2
Pension and OPEB contributions and investment earnings	3,328	1,471	25,042	-	3,328	4,8
Refundings of debt	3,320	200	696	_	896	9:
Total deferred outflows of resources	3,328	1,671	23,738		28,737	86,0
	0,020	1,071	20,100		20,101	00,0
Liabilities						
Current liabilities:	400.000					
Short-term debt (Note 5)	162,998	-	-	-	162,998	206,9
Bonds payable (Note 6)	-	116,572	68,792	-	185,364	105,0
Notes payable (Note 6)	58	-	-	-	58	
Hybrid instrument borrowings (Note 8)		340	434	-	774	1,0
Accrued interest payable	259	8,472	4,389	(235)	12,885	11,0
Federally assisted program advances	630	-	-	-	630	3
Accounts payable and other liabilities	131,608	383	365	-	132,356	220,5
Total current liabilities	295,553	125,767	73,980	(235)	495,065	544,9
Noncurrent liabilities:						
Bonds payable (Note 6)	-	1,930,521	576,660	-	2,507,181	2,304,9
Derivative instruments	-	-	-	-	-	66,8
Hybrid instrument borrowings (Note 8)	-	1,284	1,622	-	2,906	3,6
Net pension and OPEB liability - proportionate share	(463)	-	-	-	(463)	14,6
Notes payable (Note 6)	40,288	-	-	(39,793)	495	5
Other liabilities (Note 6)	54,238	-	-	-	54,238	49,3
Total noncurrent liabilities	94,063	1,931,805	578,282	(39,793)	2,564,357	2,440,0
Total liabilities	389,616	2,057,572	652,262	(40,028)	3,059,422	2,985,0
Deferred inflows of resources						
Accumulated decrease in fair value of hedging derivatives	-	60,102	28,453	-	88,555	13,1
Pension and OPEB investment differences	15,254	, -	-	-	15,254	11,7
Total deferred inflows of resources	15,254	60,102	28,453	-	103,809	24,9
Net position			-			,
	44.004	_	_	(9,793)	2,138	2,4
	11 931				2,100	۷,4
Investment in capital assets, net of related debt	11,931 6 283			(-,,	6 282	2 2
Investment in capital assets, net of related debt Restricted by grants	6,283	- (38 407)	-	-	6,283 39,415	
Investment in capital assets, net of related debt		(38,407)	84,900 -	(30,000) 39,793	6,283 39,415 653,314	2,36 224,76 586,16



Colorado Housing and Finance Authority Combining Schedule - Statement of Revenues, Expenses and Changes in Net Position

For the year ended December 31, 2022

(with summarized financial information for the year ended December 31, 2021)

	General	Single	Mι	ultifamily/				Su	mmarized
	Program	Family	В	usiness	Elim	inations	2022		2021
Interest income and expense:									
Interest on loans receivable	\$ 16,986	\$ 6,284	\$	25,895	\$	(997)	\$ 48,168	\$	47,602
Interest on investments	450	48,454		2,603		-	51,507		50,532
Interest on debt	(5,825)	(45,991)		(20,768)		997	(71,587)		(68,552)
Net interest income	11,611	8,747		7,730		-	28,088		29,582
Other operating income (loss):									
Loan servicing income	48,225	-		-		-	48,225		48,143
Gain on sale of loans	51,997	-		-		-	51,997		114,892
Investment derivative activity gain (loss)	(1,582)	5,461		862		-	4,741		6,568
Net decrease in the fair value									
of investments	(1,450)	(197,453)		(5,919)		-	(204,822)		(36,339)
Other revenues	16,932	423		-		-	17,355		16,058
Total other operating income	114,122	(191,569)		(5,057)		-	(82,504)		149,322
Total operating income	125,733	(182,822)		2,673		-	(54,416)		178,904
Operating expenses:									
Salaries and related benefits	19,555	-		-		-	19,555		25,251
General operating	36,660	6,532		336		-	43,528		85,411
Depreciation	1,075	-		-		-	1,075		799
Provision for losses	2,083	531		(369)		-	2,245		550
Total operating expenses	59,373	7,063		(33)		-	66,403		112,011
Net operating income (expense)	66,360	(189,885)		2,706		-	(120,819)		66,893
Nonoperating income and expenses:									
Grant revenues	194,227	-		-		-	194,227		169,334
Grant expenses	(187,944)	-		-		-	(187,944)		(166,973)
Total nonoperating income and expenses, net	6,283	=		-		-	6,283		2,361
Income (loss) before transfers	72,643	(189,885)		2,706		_	(114,536)		69,254
Transfers from (to) other programs	4,751	(87)		(4,664)		-	•		-
Change in net position	77,394	(189,972)		(1,958)		-	(114,536)		69,254
Net position:									
Beginning of year	577,263	151,565		86,858		-	815,686		746,432
End of year	\$ 654,657	\$ (38,407)	\$	84,900	\$	-	\$ 701,150	\$	815,686



Colorado Housing and Finance Authority Combining Schedule - Statement of Cash Flows

For the year ended December 31, 2022

(with summarized financial information for the year ended December 31, 2021)

(in thousands of dollars)

	General	Single	Multifamily/	Fliminations	2022	Summarized 2021
Cook flows from angusting activities.	Program	Family	Business	Eliminations	2022	2021
Cash flows from operating activities:						
Principal payments received on loans receivable	040.005	Φ 00.000	A 57.545 A		700 700 0	070 407
& receipts from dispositions of other real estate owned \$	616,385	. ,		•	703,782 \$	672,167
Interest payments received on loans receivable	14,339	6,471	25,811	(998)	45,623	44,833
Payments for loans receivable	(2,729,953)	(12,209)	(45,894)	(346)	(2,788,402)	(3,244,888)
Receipts from sales of Ginnie Mae securities	2,135,838	-	-	-	2,135,838	2,605,266
Changes in servicing escrows	(94,768)	-	-	-	(94,768)	9,296
Receipts from other revenues	64,260	-	-	-	64,260	64,024
Payments for salaries and related benefits Payments for goods and services	(34,596) (71,092)	(6,622)	(1,130)	-	(34,596) (78,844)	(29,675) (98,236)
All other, net	7,253	422	(1,130)	-	(70,0 44) 7,675	1,651
<u>'</u>	,				,	,
Net cash provided by (used in) operating activities	(92,334)	17,944	36,302	(1,344)	(39,432)	24,438
Cash flows from noncapital financing activities:						
Net increase (decrease) in short-term debt	(43,924)	-	-	-	(43,924)	29,031
Proceeds from issuance of bonds	-	649,970	-	-	649,970	521,305
Receipts from federal grant programs	202,380	-	-	-	202,380	167,173
Payments for federal grant programs	(187,944)	(000,000)	(77.400)	-	(187,944)	(166,973)
Principal paid on bonds	- (57)	(296,869)	(77, 198)	-	(374,067)	(443,841)
Principal paid on notes payable	(57)	-	-	-	(57)	(58)
Interest paid on short-term debt	(3,572)	(0.055)	(F. 700)	-	(3,572)	(1,617)
Interest rate swap settlements	-	(2,655)	(5,769)	-	(8,424)	(21,418)
Interest paid on bonds	17	(34,786)	(16,222)	-	(50,991)	(35,537)
Interest paid on notes payable	(1,256)	- 0.404	(11 770)	-	(1,256)	(1,247)
Transfers to (from) other programs	9,348	2,424	(11,772)	-	· · · · · · · · · · · · · · · · · · ·	
Net cash provided by (used in) noncapital financing activities	(25,008)	318,084	(110,961)	-	182,115	46,818
Cash flows from capital and related financing activities:						
Purchase of capital assets	(467)	-	-	-	(467)	(735)
Principal paid on capital-related debt	(346)	-	-	346	-	-
Interest paid on capital-related debt	(998)	-	-	998	•	-
Net cash provided by (used in) capital and related financing activities	(1,811)	-	-	1,344	(467)	(735)
Cash flows from investing activities:						
Proceeds from maturities and sales of investments	1,566,807	1,605,930	316,588	-	3,489,325	4,785,517
Purchase of investments	(1,588,093)	(1,989,911)	(244,580)	-	(3,822,584)	(4,896,025)
Income received from investments	(2,850)	47,953	2,651	-	47,754	57,722
Net cash provided by (used in) investing activities	(24, 136)	(336,028)	74,659	-	(285,505)	(52,786)
Net increase (decrease) in cash	(143,289)	-	-	-	(143,289)	17,735
Cash at beginning of year	316,907	-	-	-	316,907	299,172
Cash at end of year \$	173,618	\$ -	\$ - \$	- \$	173,618 \$	316,907
Restricted \$	160,605	\$ -	\$ - \$	- \$	160,605 \$	233,669
Unrestricted	13,013	-	· •	- *	13,013	83,238
Cash, end of year \$		\$ -	\$ - \$	- \$	173,618 \$	316,907

Continued on the next page.



Colorado Housing and Finance Authority Combining Schedule - Statement of Cash Flows (continued)

For the year ended December 31, 2022

(with summarized financial information for the year ended December 31, 2021)

	General	Single	Multifamily/			Summarized
	Program	Family	Business	Eliminations	2022	2021
Reconciliation of operating income (loss) to net cash provided by (used in) operating activities:						
Net operating income (loss) \$	66,360 \$	(189,885) \$	2,706 \$	- \$	(120,819) \$	66,893
Adjustments to reconcile operating income (loss) to						
net cash provided by (used in) operating activities:						
Depreciation expense	1,075	-	-	-	1,075	799
Amortization and fair value adjustments of service release premiums	(3,132)	-	-	-	(3,132)	28,264
Proportionate share of net pension and OPEB expense	(10,104)	-	-	-	(10,104)	(1,787)
Amortization of imputed debt associated with swaps	-	(412)	(630)	-	(1,042)	(1,827)
Provision for losses	2,083	531	(369)	-	2,245	550
Interest on investments	(450)	(48,454)	(2,603)	-	(51,507)	(50,532)
Interest on debt	5,825	46,404	21,397	(998)	72,628	70,379
Unrealized (gain) loss on investment derivatives	1,582	(5,461)	(862)	-	(4,741)	(6,568)
Unrealized loss on investments	1,450	197,453	5,919	-	204,822	36,339
Gain on sale of real estate owned	(47)	-	-	-	(47)	-
Gain on sale of loans	(51,997)	-	-	-	(51,997)	(114,892)
Changes in assets and liabilities:						
Loans receivable and other real estate owned	25,449	17,673	11,621	(346)	54,397	4,282
Accrued interest receivable on loans and investments	(2,647)	187	(84)	-	(2,544)	(2,769)
Other assets	(36,056)	(92)	-	-	(36,148)	(19,377)
Accounts payable and other liabilities	(91,725)		(793)	-	(92,518)	14,684
Net cash provided by (used in) operating activities \$	(92,334) \$	17,944 \$	36,302 \$	(1,344) \$	(39,432) \$	24,438

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Colorado Housing and Finance Authority Schedule of Adjusted Net Worth At December 31, 2022

A	Adjusted net worth calculation: Net position per statement of				
	net position at end of			ф	701 150
	reporting period Less:			\$	701,150
	Itemized unacceptable assets				
	1. Other assets	\$	125,461		
	2.	*	0,.0.		
	3.				
	Total unacceptable assets				125,461
	Adjusted net worth			\$	575,689
В.	Required net worth calculation: Unpaid principal balance (UPB) of securities outstanding			\$	7,231,151
	(Note: number of pools = 1,296)			Ψ	1,201,101
	Plus:				
	Outstanding balance of available commitment authority and				
	pools funded				695,504
	Total outstanding portfolio, commitment				
	authority and pools funded			\$	7,926,655
	Required net worth			\$	30,243
C.	Excess net worth			\$	545,446
	(Adjusted net worth - required net worth)				

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Colorado Housing and Finance Authority Schedule of Other Assets At December 31, 2022

A.	Accrued interest income	\$ 17,675
В.	Deferred debt cost of issuance	-
C.	Other real estate owned	974
	Total other asset included in adjusted net worth	\$ 18,649
D.	Other assets excluded from adjusted net worth	 125,461
	Total current and noncurrent other assets	\$ 144,110



Colorado Housing and Finance Authority Liquid Asset Requirement Calculation for Issuers At December 31, 2022

A.	Liquid asset calculation:					
	Required net worth (Schedule of Adjusted Net Wo	orth, se	ction B)	\$	30,243	
	Acceptable liquid assets					
	Unrestricted cash	\$	13,013			
	2.	Ψ	10,010			
	3.					
	4.					
	5.					
	6.			_		
	Total liquid assets			\$	13,013	
B.	Required liquid asset:					
						Meets requirements?
	Single family issuer liquidity requirement			\$	7,231	Yes) No
	(Greater of \$1 million or 0.10% of outstanding single family securities)					



Colorado Housing and Finance Authority Capital Requirement Calculation for Issuer At December 31, 2022

	(in thou	sands of do	llars)					
A	Capital requirement for depository institutions:	not appl	icable to (CHFA	Ą			
	Tier 1 capital			\$_		_		
	Total capital			\$_		_		
	Risk-based assets			\$				
	Total assets			\$		_		
	Tier 1 capital/total assets						C	%
	Tier 1 capital/risk-based assets							%
	Total capital/risk-based assets							%
						Meets req	ıuiremer	ıt?
	5% of tier 1 capital/total assets	\$					/No	
	6% of tier 1 capital/risk-based assets	\$		=		Yes	/ No	
	10% of total capital/risk-based assets	\$		-		Yes	/ No	
В.	Capital requirement for nondepository institution	ons:						
	Total adjusted net worth			\$	575,689			
	Total assets			\$_ \$_	3,835,644	- -		
	Total adjusted net worth/total assets		15.01	<u></u> %		Meets req		ıt?

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Colorado Housing and Finance Authority Schedule of Insurance Requirement At December 31, 2022

(in thousands of dollars)

Α.	Identification of affiliated Ginnie Mae Issuers Affiliated Ginnie Mae issuers:		None
В.	Required insurance calculation: Servicing portfolio: Ginnie Mae Fannie Mae Freddie Mac Conventional (other)	\$	7,231,151 1,235,411 232,089 1,436,925
	Total servicing portfolio	\$	10,135,576
	Required fidelity bond coverage	\$	10,661
	Required mortgage servicing errors and omissions coverage	\$	10,661
C.	Verification of insurance coverage:		
	Fidelity bond coverage at end of reporting period	\$	12,000
	Mortgage servicing errors and omissions coverage at end of reporting period	\$	12,000
D.	Excess insurance coverage:		
	Fidelity bond coverage	_\$	1,339
	Required mortgage servicing errors and omissions coverage	\$	1,339
E.	Policies contain the required elements		
	Fidelity bond coverage		Yes No
	Mortgage servicing errors and omissions coverage	(Yes No

The Authority certifies that it is in good standing with FHA, Fannie Mae and Freddie Mac, and has not been the subject of any adverse actions.





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Report on Compliance for the Major HUD Program and Report on Internal Control Over Compliance Required by the Consolidated Audit Guide for Audits of HUD Programs

Independent Auditor's Report

Board of Directors Colorado Housing and Finance Authority

Report on Compliance for the Major HUD Program

Opinion on the Major HUD Program

We have audited Colorado Housing and Finance Authority's (the Authority) compliance with the compliance requirements described in the *Consolidated Audit Guide for Audits of HUD Programs* (the Audit Guide) that could have a direct and material effect on the Authority's major U.S. Department of Housing and Urban Development (HUD) program for the year ended December 31, 2022.

The Authority's major HUD program and the related direct and material compliance requirements are as follows:

Name of Major HUD Program

Government National Mortgage Association issuers of mortgage-backed securities

Direct and Material Compliance Requirements

- Federal financial reports
- Eligibility to issue mortgage-backed securities
- · Review of custodial documents
- Issuer's administration of pooled mortgages
- Review of monthly accounting reports and quarterly submissions
- Securities marketing and trading practices
- Adjusted net worth
- Issuer capital, liquid asset and insurance requirements

In our opinion, the Authority complied, in all material respects, with the compliance requirements referred to above that could have a direct and material effect on the Authority's major HUD program for the year ended December 31, 2022.

Basis for Opinion on the Major HUD Program

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America (GAAS); the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States (GAS); and the Audit Guide. Our responsibilities under those standards and the Audit Guide are further described in the "Auditor's Responsibilities for the Audit of Compliance" section of our report.

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We are required to be independent of the Authority and to meet our other ethical responsibilities, in accordance with relevant ethical requirements relating to our audit. We believe that our audit provides a reasonable basis for our opinion on compliance for the major HUD program. Our audit does not provide a legal determination of the Authority's compliance.

Responsibilities of Management for Compliance

Management is responsible for compliance with the requirements referred to above and for the design, implementation, and maintenance of effective internal control over compliance with the requirements of laws, statutes, regulations, rules and provisions of contracts, or grant agreements applicable to its HUD programs.

Auditor's Responsibilities for the Audit of Compliance

Our objectives are to obtain reasonable assurance about whether material noncompliance with the compliance requirements referred to above occurred, whether due to fraud or error, and express an opinion on the Authority's compliance based on our audit. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS, GAS, and the Audit Guide will always detect material noncompliance when it exists. The risk of not detecting material noncompliance resulting from fraud is higher than for that resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Noncompliance with the compliance requirements referred to above is considered material if there is a substantial likelihood that, individually or in the aggregate, it would influence the judgment made by a reasonable user of the report on compliance about the Authority's compliance with the requirements of the major HUD program as a whole.

In performing an audit in accordance with GAAS, GAS, and the Audit Guide, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material noncompliance, whether due to fraud or error, and design
 and perform audit procedures responsive to those risks. Such procedures include examining, on a
 test basis, evidence regarding the Authority's compliance with the compliance requirements referred
 to above and performing such other procedures as we considered necessary in the circumstances.
- Obtain an understanding of the Authority's internal control over compliance relevant to the audit in
 order to design audit procedures that are appropriate in the circumstances and to test and report on
 internal control over compliance in accordance with the Audit Guide, but not for the purpose of
 expressing an opinion on the effectiveness of the Authority's internal control over compliance.
 Accordingly, no such opinion is expressed.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and any significant deficiencies and material weaknesses in internal control over compliance that we identified during the audit.

Report on Internal Control Over Compliance

A deficiency in internal control over compliance exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a HUD program on a timely basis. A material weakness in internal control over compliance is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a HUD program will not be prevented, or detected and corrected, on a timely basis. A significant deficiency in internal control over compliance is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a HUD program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the "Auditor's Responsibilities for the Audit of Compliance" section above and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses, as defined above. However, material weaknesses or significant deficiencies may exist that were not identified.

Our audit was not designed for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, no such opinion is expressed.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Audit Guide. Accordingly, this report is not suitable for any other purpose

RSM US LLP

Denver, Colorado March 23, 2023



RSM US LLP

Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance With Government Auditing Standards

Independent Auditor's Report

Board of Directors Colorado Housing and Finance Authority

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of the Colorado Housing and Finance Authority (the Authority) as of and for the year ended December 31, 2022, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements, and have issued our report thereon dated March 23, 2023.

Report on Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Authority's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Authority's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of This Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Authority's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Authority's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

RSM US LLP

Denver, Colorado March 23, 2023

what is chfa?

CHFA's mission is to strengthen Colorado by investing in affordable housing and community development. CHFA invests in loans, down payment assistance, and homebuyer education to support responsible homeownership. We provide loans and tax credits to developers of affordable rental housing, so all Coloradans may have access to a place to call home; and we help business owners access capital to help them grow and support jobs. CHFA strengthens local capacity through nonprofit and community partnerships providing technical assistance, grants, sponsorships, and donations.

CHFA's programs and services are informed by statewide community engagement. CHFA is self-funded. We are not a state agency. CHFA's operating revenues come from loan and investment income, program administration fees, loan servicing, and gains on sales of loans. CHFA receives no direct tax appropriations, and its net revenues are reinvested in its programs and used to support bond ratings. This document was designed and printed in house without the use of state general fund dollars.

CHFA's work revitalizes neighborhoods and creates jobs. We are proud to invest in Colorado's success. Visit www.chfainfo.com for more information.

With respect to its programs, services, activities, and employment practices, Colorado Housing and Finance Authority does not discriminate on the basis of race, color, religion, sex, age, national origin, disability, or any other protected classification under federal, state, or local law. Requests for reasonable accommodation, the provision of auxiliary aids, or any complaints alleging violation of this nondiscrimination policy should be directed to the Nondiscrimination Coordinator, 1.800.877.2432, TDD/TTY 800.659.2656, CHFA, 1981 Blake Street, Denver, Colorado 80202-1272, available weekdays 8:00am to 5:00pm.

Prepared by: CHFA Accounting Division

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