NEW ISSUE - Book-Entry Only

In the opinion of Sherman & Howard L.L.C., Bond Counsel, assuming continuous compliance with certain covenants described herein, interest on the 2019 Series B Bonds (other than interest on any 2019 Series B Bond for any period during which it is held by a "substantial user" of the facilities financed with the 2019 Series B Bonds or a "related person" as such terms are used in Section 147(a) of the Internal Revenue Code of 1986, as amended to the date of delivery of the Bonds (the "Tax Code")) is excluded from gross income under federal income tax laws pursuant to Section 103 of the Tax Code; further, interest on the 2019 Series B Bonds is excluded from alternative minimum taxable income as defined in Section 55(b)(2) of the Tax Code. Also, in the opinion of Bond Counsel, the 2019 Series B Bonds, their transfer and the income therefrom shall at all times be free from taxation by the State of Colorado under Colorado law in effect on the date of delivery of the 2019 Series B Bonds as described herein. See "Part I—TAX MATTERS."



\$42,325,000 COLORADO HOUSING AND FINANCE AUTHORITY Multi-Family/Project Bonds

\$20,110,000 Class I Bonds 2019 Series B-1 (Non-AMT) \$22,215,000 Class I Bonds 2019 Series B-2 (Non-AMT)

Due: As shown on inside front cover

Dated: Date of Delivery

The 2019 Series B Bonds shown above are being issued by the Colorado Housing and Finance Authority as fully registered bonds pursuant to a Master Indenture of Trust dated as of March 1, 2000, as amended, and a 2019 Series B Indenture dated as of August 1, 2019, each between the Authority and Wells Fargo Bank, National Association, as Trustee. Proceeds of the 2019 Series B Bonds, together with other available funds, are expected to be used to finance a portion of the costs of the acquisition, construction, rehabilitation and equipping of a rental housing facility providing independent living for seniors, to make deposits to certain funds and to pay certain costs of issuance in accordance with the 2019 Series B Indenture.

The 2019 Series B Bonds will bear interest at the fixed rates shown on the inside front cover. Interest on the 2019 Series B Bonds will be payable on each April 1 and October 1, commencing on October 1, 2019, on any redemption date and at maturity. Principal of the 2019 Series B Bonds is payable in the amounts and on the dates shown on the inside front cover, subject to prior redemption and purchase.

The 2019 Series B Bonds, when issued, will be registered in the name of Cede & Co., as holder of the 2019 Series B Bonds and nominee of The Depository Trust Company, New York, New York. One fully registered bond equal to the principal amount of the 2019 Series B Bonds of each maturity will be registered in the name of Cede & Co. Individual purchases of 2019 Series B Bonds will be made in book-entry form only, and beneficial owners of the 2019 Series B Bonds will not receive physical delivery of bond certificates representing their interest in the 2019 Series B Bonds, except as described herein. Payments of principal of and interest on the 2019 Series B Bonds will be made directly to DTC or its nominee, Cede & Co., by the Paying Agent, so long as DTC or Cede & Co. is the sole registered owner. Upon receipt of payments of principal and interest, DTC is to remit such payments to the DTC participants for subsequent disbursement to the beneficial owners of the 2019 Series B Bonds. Disbursement of such payments to DTC participants is the responsibility of DTC, and disbursement of such payments to the beneficial owners of the 2019 Series B Bonds is the responsibility of the DTC participants and the indirect participants, as more fully described herein.

SEE MATURITY SCHEDULES ON INSIDE FRONT COVER

The 2019 Series B Bonds are subject to redemption prior to their respective stated maturities, at the times, under the conditions and at the prices set forth herein. For further details, see "PART I – TERMS OF THE 2019 SERIES B BONDS."

The Master Indenture provides for four classes of Obligations (which may be Bonds or Derivative Products) thereunder – Class I, Class II, Class III and Class IV Obligations. The 2019 Series B Bonds are Class I Obligations, payable from the revenues, assets and moneys pledged under the Indenture as described herein on an equal and ratable basis with all other Class I Obligations now or hereafter outstanding under the Master Indenture. Additional Obligations may be issued by the Authority under the Master Indenture in each of the four Classes and as general obligations of the Authority upon delivery of a Cash Flow Statement and satisfaction of certain other conditions as set forth in the Master Indenture. In no event shall the 2019 Series B Bonds constitute an obligation or liability of the State of Colorado or any political subdivision thereof other than the Authority. The Authority has no taxing power nor does it have the power to pledge the general credit or taxing power of the State of Colorado or any other political subdivision thereof (other than the general credit of the Authority, which general credit is not being pledged for the payment of the 2019 Series B Bonds).

This cover page contains only a brief description of the Authority, the 2019 Series B Bonds and the security therefor. It is not intended to be a summary of material information with respect to the 2019 Series B Bonds. Potential investors should read this entire Official Statement to obtain information necessary to make an informed investment decision and should pay particular attention to the discussion in "Part II—CERTAIN BONDOWNERS' RISKS."

The 2019 Series B Bonds are offered when, as and if issued and delivered to the Underwriters, subject to approval by Sherman & Howard L.L.C., Denver, Colorado, Bond Counsel, and certain other conditions. Certain legal matters will be passed on for the Authority by Charles K. Knight, Esq., its General Counsel, and by Kutak Rock LLP, Disclosure Counsel to the Authority. The Underwriters are being represented in connection with the purchase of the 2019 Series B Bonds by their counsel, Tiber Hudson LLC. CSG Advisors Incorporated is serving as financial advisor to the Authority in connection with the issuance of the 2019 Series B Bonds. It is expected that the 2019 Series B Bonds will be delivered (through DTC) in New York, New York on or about August 7, 2019.

Jefferies

Stifel Wells Fargo Securities

Dated: July 31, 2019

MATURITY SCHEDULE

COLORADO HOUSING AND FINANCE AUTHORITY Multi-Family/Project Bonds

(CUSIP 6-digit issuer no. 196480[†])

\$20,110,000 Class I Bonds 2019 Series B-1 Bonds (Non-AMT)

\$3,000,000 Serial Bonds (Price of each Maturity: 100%)

Maturity (April 1)	Principal Amount	Interest Rate	CUSIP [†]	Maturity (October 1)	Principal Amount	Interest Rate	CUSIP†
2022				2022	\$145,000	1.50%	BS5
2023	\$145,000	1.55%	BT3	2023	145,000	1.60	BU0
2024	145,000	1.65	BV8	2024	150,000	1.70	BW6
2025	150,000	1.75	BX4	2025	150,000	1.80	BY2
2026	155,000	1.85	BZ9	2026	155,000	1.90	CA3
2027	155,000	1.95	CB1	2027	160,000	2.00	CC9
2028	160,000	2.05	CD7	2028	165,000	2.10	CE5
2029	165,000	2.20	CF2	2029	165,000	2.25	CG0
2030	170,000	2.30	CH8	2030	170,000	2.35	CJ4
2031	175,000	2.45	CK1	2031	175,000	2.50	CL9

\$1,125,000 of 2.75% Class I Term Bonds due October 1, 2034 - Price: 100%; CUSIP†: CM7

\$2,150,000 of 3.00% Class I Term Bonds due October 1, 2039 - Price: 100%; CUSIP†: CN5

\$2,560,000 of 3.15% Class I Term Bonds due October 1, 2044 - Price: 100%; CUSIP†: CP0

\$3,080,000 of 3.25% Class I Term Bonds due October 1, 2049 - Price: 100%; CUSIP†: CQ8

\$3,710,000 of 3.40% Class I Term Bonds due October 1, 2054 - Price: 100%; CUSIP†: CR6

\$4,485,000 of 3.50% Class I Term Bonds due October 1, 2059 - Price: 100%; CUSIP†: CS4

\$22,215,000 Class I Bonds 2019 Series B-2 Bonds (Non-AMT)

\$22,215,000 of 1.35% Class I Term Bonds due February 1, 2022 - Price: 100%; CUSIP†: CT2

[†] Neither the Authority nor the Underwriters take any responsibility for the accuracy of the CUSIP numbers, which are being provided solely for the convenience of the owners of the 2019 Series B Bonds.

No dealer, broker, salesman or other person has been authorized by the Authority or by the Underwriters to give any information or to make any representations, other than those contained in this Official Statement, and, if given or made, such other information or representations must not be relied upon as having been authorized by any of the foregoing. The information in this Official Statement is subject to change without notice, and neither the delivery of this Official Statement nor any sale hereunder, under any circumstance, creates any implication that there has been no change in the affairs of the Authority or otherwise since the date hereof. This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of the 2019 Series B Bonds by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale.

The information set forth in this Official Statement has been furnished by the Authority and obtained from other sources believed to be reliable. This Official Statement contains, in part, estimates and matters of opinion which are not intended as statements of fact, and no representation or warranty is made as to the correctness of such estimates and opinions, or that they will be realized. All information regarding the Authority and the 2019 Series B Bonds is contained in this Official Statement. While the Authority maintains an Internet website for various purposes, none of the information on this website is intended to assist investors in making any investment decision or to provide any continuing information (except in the case of the limited information provided in the section entitled "For Investors") with respect to the Bonds (including the 2019 Series B Bonds), the Borrowers, the Authority Projects, the Loans, or any other bonds or obligations of the Authority.

The Underwriters have reviewed the information in this Official Statement in accordance with, and as a part of, their responsibilities to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Underwriters do not guarantee the accuracy or completeness of the information.

THE PRICES AT WHICH THE 2019 SERIES B BONDS ARE OFFERED TO THE PUBLIC BY THE UNDERWRITERS (AND THE YIELDS RESULTING THEREFROM) MAY VARY FROM THE INITIAL PUBLIC OFFERING PRICES APPEARING ON THE INSIDE FRONT COVER PAGE HEREOF. IN ADDITION, THE UNDERWRITERS MAY ALLOW CONCESSIONS OR DISCOUNTS FROM SUCH INITIAL PUBLIC OFFERING PRICES TO DEALERS AND OTHERS. IN CONNECTION WITH THIS OFFERING, THE UNDERWRITERS MAY OVERALLOT OR EFFECT TRANSACTIONS WHICH STABILIZE OR MAINTAIN THE MARKET PRICES OF THE 2019 SERIES B BONDS AT A LEVEL ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

The 2019 Series B Bonds have not been approved or disapproved by the Securities and Exchange Commission or any state securities commission nor has the Commission or any state securities commission passed upon the accuracy or adequacy of this Official Statement. Any representation to the contrary is a criminal offense.

This Official Statement contains statements relating to future results that are "forward-looking statements" as defined in the Private Securities Litigation Reform Act of 1995. When used in this Official Statement, the words "estimate," "forecast," "intend," "expect," "project," "budget," "plan" and similar expressions identify forward-looking statements.

THE ACHIEVEMENT OF CERTAIN RESULTS OR OTHER EXPECTATIONS CONTAINED IN SUCH FORWARD-LOOKING STATEMENTS INVOLVE KNOWN AND UNKNOWN RISKS, UNCERTAINTIES AND OTHER FACTORS WHICH MAY CAUSE ACTUAL RESULTS, PERFORMANCE OR ACHIEVEMENTS DESCRIBED TO BE MATERIALLY DIFFERENT FROM ANY FUTURE RESULTS, PERFORMANCE OR ACHIEVEMENTS EXPRESSED OR IMPLIED BY SUCH FORWARD-LOOKING STATEMENTS. THE AUTHORITY DOES NOT PLAN TO ISSUE ANY UPDATES OR REVISIONS TO THOSE FORWARD-LOOKING STATEMENTS IF OR WHEN ITS EXPECTATIONS, OR EVENTS, CONDITIONS OR CIRCUMSTANCES ON WHICH SUCH STATEMENTS ARE BASED OCCUR.



This Official Statement is comprised of the front cover page, Parts I and II and the Appendices. OFFICIAL STATEMENT

PART I TABLE OF CONTENTS

INTRODUCTION	1
Colorado Housing and Finance Authority	1
Authority for Issuance	1
Purposes of the 2019 Series B Bonds	2
Description of the 2019 Series B Bonds	2
Security and Sources of Payment	2
Investment Considerations	3
TERMS OF THE 2019 SERIES B BONDS	3
General	3
Interest Rates and Payment of Interest on 2019 Series B Bonds	3
Book-Entry System	4
Defeasance and Discharge	4
Prior Redemption	4
Purchase in Lieu of Redemption	8
PLAN OF FINANCE	9
Sources and Uses of Funds	9
Disbursements from the Restricted Loan Subaccount	9
CERTAIN PROGRAM ASSUMPTIONS	9
The 2019B Loan	9
Debt Service Reserve Fund	11
Investments	11
TAX MATTERS	13
UNDERWRITING	14
LITIGATION	15
RATINGS	15
FINANCIAL ADVISOR	16
LEGAL MATTERS	16
AVAILABILITY OF CONTINUING INFORMATION	16
CERTAIN RELATIONSHIPS OF PARTIES	16
NO IMPAIRMENT OF CONTRACT BY THE STATE	17
LEGALITY FOR INVESTMENT AND SECURITY FOR DEPOSITS	17
INDEPENDENT AUDITORS	17
MISCELLANEOUS	17

PART II TABLE OF CONTENTS

COLORADO HOUSING AND FINANCE AUTHORITY	1
Background	1
Board of Directors and Staff Officers	1
Employees and Pension Information	4
Insurance Coverage	4
Authority Financial Statements	4
The General Fund	7
Authority Policy Regarding Swaps	9
Programs to Date	9
Obligations of the Authority	12
SECURITY FOR THE OBLIGATIONS	17
Pledge of Trust Estate	17
Revenues	18
The Loans and Authority Projects	18
Debt Service Reserve Fund	19
Liquidity Facilities	19
Derivative Products	20
Issuance of Additional Bonds	20
CERTAIN BONDOWNERS' RISK	21
Limited Security	21
Origination of New Loans	21
Considerations Regarding Redemption	21
Tax Exempt Status of Tax-Exempt Bonds	22
Conditions to Payment of FHA Insurance	22
Risks Related to Derivative Products	22
Risks Related to Liquidity Providers and Liquidity Facilities	23
Information Security and Privacy Risks	24
Expiration of HAP Contracts	24
Enforcement of Regulatory Agreements	24

This Official Statement is comprised of the front cover page, Parts I and II and the Appendices.

APPENDICES

Annual Financial Report	A-1
Outstanding Master Indenture Obligations	B-1
Summary of Certain Provisions of the Indenture	C-1
Class Asset Requirements	D-1
Form of Bond Counsel Opinion	E-1
Book-Entry System	F-1
Certain Information Regarding the 2019B Loan	G-1-1
Certain Information about the Master Indenture Loan	
Portfolio, Authority Projects and Fund Balances	G-2-1
Federal Insurance Programs	H-1
Description of Section 8 Subsidy Program	I-1
Form of Authority Continuing Disclosure Undertaking	J-1
Remarketing Agents under Master Indenture	K-1
	Annual Financial Report Outstanding Master Indenture Obligations Summary of Certain Provisions of the Indenture Class Asset Requirements Form of Bond Counsel Opinion Book-Entry System Certain Information Regarding the 2019B Loan Certain Information about the Master Indenture Loan. Portfolio, Authority Projects and Fund Balances Federal Insurance Programs Description of Section 8 Subsidy Program Form of Authority Continuing Disclosure Undertaking Remarketing Agents under Master Indenture



OFFICIAL STATEMENT

\$42,325,000 COLORADO HOUSING AND FINANCE AUTHORITY Multi-Family/Project Bonds

\$20,110,000 Class I Bonds 2019 Series B-1 (Non-AMT) \$22,215,000 Class I Bonds 2019 Series B-2 (Non-AMT)

PART I

INTRODUCTION

This Official Statement, which includes the front cover page, this Part I, Part II and the Appendices hereto, provides certain information concerning the Colorado Housing and Finance Authority (the "Authority") and otherwise in connection with the offer and sale of the above-captioned Multi-Family/Project Class I Bonds, 2019 Series B-1 (the "2019 Series B-1 Bonds") and Multi-Family/Project Class I Bonds, 2019 Series B-2 (the "2019 Series B-2 Bonds" and, together with the 2019 Series B-1 Bonds, the "2019 Series B Bonds"). The 2019 Series B Bonds are being issued pursuant to the Master Indenture of Trust dated as of March 1, 2000, as amended (the "Master Indenture"), and the 2019 Series B Indenture dated as of August 1, 2019 (the "2019 Series B Indenture," and together with the Master Indenture, the "Indenture"), each between the Authority and Wells Fargo Bank, National Association, Denver, Colorado, as Trustee (the "Trustee"). Capitalized terms used herein and not defined have the meanings specified in the Indenture. See Appendix C—"SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE."

This introduction is not a summary of this Official Statement. It is only a brief description of and guide to, and is qualified by the information contained in, the entire Official Statement, including the front cover page, this Part I, Part II hereof and the Appendices hereto, and the documents summarized or described herein. A full review should be made of the entire Official Statement. The offering of 2019 Series B Bonds to potential investors is made only by means of the entire Official Statement. This Official Statement does not constitute a contract between the Authority or the Underwriters, and any one or more owners of the 2019 Series B Bonds.

Colorado Housing and Finance Authority

The Authority is a body corporate and political subdivision of the State of Colorado (the "State") established by the Colorado General Assembly for the purposes, among others, of increasing the supply of decent, safe and sanitary housing for low and moderate income families and promoting economic growth and development in the State. In order to achieve its authorized purposes, the Authority currently operates numerous housing, rental and business finance programs. See "Part II—COLORADO HOUSING AND FINANCE AUTHORITY—Programs to Date." The Authority is governed by a Board of Directors and is authorized to issue its bonds, notes and other obligations in order to provide sufficient funds to achieve its purposes. For financial information concerning the Authority, see "Part II—COLORADO HOUSING AND FINANCE AUTHORITY—Authority Financial Statements" and "—The General Fund," and the financial statements of the Authority attached as Appendix A hereto.

Authority for Issuance

The 2019 Series B Bonds are authorized to be issued pursuant to the Colorado Housing and Finance Authority Act, being Part 7 of Article 4 of Title 29 of the Colorado Revised Statutes, as amended

(the "Act") and the Supplemental Public Securities Act, being Part 2 of Article 57 of Title 11 of the Colorado Revised Statutes. The 2019 Series B Bonds are being issued and secured under the Indenture.

Purposes of the 2019 Series B Bonds

Proceeds of the 2019 Series B Bonds, together with other available funds, are expected to be used to (i) fund a loan (the "2019B Loan") to DMV Partnership LLLP (the "2019B Borrower") made by the Authority to the 2019B Borrower pursuant to a Loan Agreement (the "Loan Agreement") to finance, together with other funds available to the 2019B Borrower, the acquisition, construction, rehabilitation and equipping of a 210-unit rental housing facility providing independent living for seniors located in Denver, Colorado expected to be known as Denver Metro Village (the "2019B Facility"), as described in "Part I—CERTAIN PROGRAM ASSUMPTIONS—The 2019B Loan" and in Appendix G-1—"CERTAIN INFORMATION REGARDING THE 2019B LOAN"; and (ii) to make deposits to certain funds and accounts in accordance with the 2019 Series B Indenture, including the payment of costs of issuance, funding all or a portion of the debt service reserve fund requirement and funding the 2019B subaccount of the Negative Arbitrage Account, as described in "Part I—PLAN OF FINANCE—Sources and Use of Funds."

Description of the 2019 Series B Bonds

Interest Rates and Payments; Authorization Denominations. Interest on the 2019 Series B Bonds is payable at the rates shown on the inside front cover hereof on October 1, 2019 and thereafter semiannually on April 1 and October 1 of each year, to be computed on the basis of a 360-day year of twelve 30-day months. See "Part I—TERMS OF THE 2019 SERIES B BONDS—General." The 2019 Series B Bonds are to be issued in denominations of \$5,000 and any integral multiple thereof. Principal of the 2019 Series B Bonds is payable in the amounts and on the dates shown on the inside front cover hereof, subject to prior redemption.

Redemption and Tender. Certain of the 2019 Series B Bonds are subject to special, optional and mandatory sinking fund redemption prior to maturity, as described under "Part I—TERMS OF THE 2019 SERIES B BONDS." See "Part II—CERTAIN BONDOWNERS' RISKS—Considerations Regarding Redemption."

For a more complete description of the 2019 Series B Bonds and the Indenture pursuant to which such 2019 Series B Bonds are being issued, see "Part I—TERMS OF THE 2019 SERIES B BONDS" and Appendix C—"SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE."

Security and Sources of Payment

All Obligations under the Master Indenture (which may be Bonds or Derivative Products and may be outstanding as Class I, Class II, Class III or Class IV Obligations) will be secured by and payable from all of the Authority's rights and interests in and to the revenues, assets and moneys pledged under the Master Indenture, in particular the Revenues, the Loans and the moneys held in the Debt Service Reserve Fund, the Revenue Fund and the other funds and accounts under the Master Indenture (collectively, the "Trust Estate") with each class secured by a first, second, third and fourth priority lien, respectively. See "Part II—SECURITY FOR THE OBLIGATIONS" and Appendix G-2—"CERTAIN INFORMATION ABOUT THE MASTER INDENTURE LOAN PORTFOLIO, AUTHORITY PROJECTS AND FUND BALANCES." In accordance with the Indenture, Obligations may also be designated as General Obligations of the Authority. As of April 1, 2019, Bonds issued under the Master Indenture were outstanding in an aggregate principal amount of \$371,140,000†, with \$205,455,000† outstanding as Class I Bonds and \$165,685,000 outstanding as Class II Bonds. There are no Class III or Class IV Obligations

[†] Certain of such Bonds were refunded by a portion of the 2019 Series A Bonds issued on July 30, 2019.

outstanding under the Master Indenture. Subsequently, the Authority issued under the Master Indenture its Multi-Family/Project Bonds, 2019 Series A Bonds as Class I Bonds in the principal amount of \$28,125,000 on July 30, 2019 and expects to issue its Multi-Family/Project Bonds, 2019 Series C Bonds as Class II Bonds in the estimated principal amount of \$40,000,000 in September 2019. See "Part II—COLORADO HOUSING AND FINANCE AUTHORITY—Obligations of the Authority—Summary of Certain Authority Obligations" and **Appendix B**—"OUTSTANDING MASTER INDENTURE OBLIGATIONS."

The 2019 Series B Bonds as described on the front cover page hereof are being issued as Class I Obligations pursuant to the Indenture and will only be secured by and payable from the Trust Estate as described herein. The Trust Estate is pledged under the Indenture to secure the Class I Obligations as a first priority lien, as described in "Part II-SECURITY FOR THE OBLIGATIONS-Pledge of Trust Estate." None of the 2019 Series B Bonds are being issued as Class II Obligations, Class III Obligations or Class IV Obligations, which are secured by a second, third, and fourth priority lien, respectively, on the Trust Estate. The 2019 Series B Bonds are **not** being designated as General Obligations of the Authority. As part of the Trust Estate, the 2019 Series B Bonds are secured by the Debt Service Reserve Fund established under the Master Indenture. The Debt Service Reserve Fund Requirement for the 2019 Series B Bonds will be satisfied as described in "Part I—PLAN OF FINANCE—Sources and Uses of Funds." See also "Part I—CERTAIN PROGRAM ASSUMPTIONS—Debt Service Reserve Fund" and "Part II— SECURITY FOR THE OBLIGATIONS." In no event shall the 2019 Series B Bonds constitute an obligation or liability of the State or any political subdivision thereof. The Authority has no taxing power nor does it have the power to pledge the general credit or the taxing power of the State or any political subdivision thereof (other than the general credit of the Authority, which general credit is not being pledged for payment of the 2019 Series B Bonds).

Investment Considerations

The purchase and ownership of the 2019 Series B Bonds involve investment risks. Prospective purchasers of the 2019 Series B Bonds being offered by this Official Statement are urged to read this Official Statement in its entirety. For a discussion of certain such risks relating to the 2019 Series B Bonds, see "Part II—CERTAIN BONDOWNERS' RISKS."

TERMS OF THE 2019 SERIES B BONDS

General

The 2019 Series B Bonds, to be dated the date of delivery thereof, will mature, subject to prior redemption as described in "Prior Redemption" under this caption, in the amount and on the dates as shown on the inside front cover page of this Official Statement. The principal or redemption price of the 2019 Series B Bonds is payable to Cede & Co. as long as it is the registered owner of each of the 2019 Series B Bonds. The 2019 Series B Bonds are issuable in denominations of \$5,000 and any integral multiple thereof. Interest on the 2019 Series B Bonds will be computed on the basis of a 360-day year of twelve 30-day months.

Interest Rates and Payment of Interest on 2019 Series B Bonds

The 2019 Series B Bonds will bear interest at the rates per annum shown on the inside front cover of this Official Statement. Interest on the 2019 Series B Bonds will be payable on each Interest Payment Date to Cede & Co. as long as it is the registered owner of each of the 2019 Series B Bonds, commencing on October 1, 2019, and at maturity.

Book-Entry System

The Depository Trust Company, New York, New York ("DTC") will act as securities depository for the 2019 Series B Bonds. The ownership of one fully registered Bond for each maturity as set forth on the inside front cover page of this Official Statement, each in the aggregate principal amount of such maturity, will be registered in the name of Cede & Co., as nominee for DTC. Information concerning the book-entry system provided by DTC is set forth in Appendix F—"BOOK-ENTRY SYSTEM." So long as the 2019 Series B Bonds are registered in the DTC book-entry form described in Appendix F hereto, each Beneficial Owner (as defined in Appendix F) of a 2019 Series B Bond should make arrangements with a Participant (as defined in Appendix F) in DTC to receive notices or communications with respect to matters concerning the 2019 Series B Bonds.

Defeasance and Discharge

The Indenture provides the Authority with the right to discharge the pledge and lien created by the Indenture with respect to any 2019 Series B Bonds by depositing with the Trustee or the Paying Agent sufficient moneys or Defeasance Securities to pay when due the principal or Redemption Price of, if applicable, and interest due or to become due on such 2019 Series B Bonds at the maturity or redemption thereof. See **Appendix C**—"SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE—Discharge of Indenture; Defeasance of Bonds."

Prior Redemption

Special Redemption

<u>Unexpended Proceeds</u>. The 2019 Series B Bonds are subject to special redemption prior to maturity, in whole or in part at any time on or before October 1, 2021 (or such later date as may be selected in accordance with the Indenture), pursuant to an Authority Request filed with the Trustee, at a Redemption Price equal to 100% of the Aggregate Principal Amount of the 2019 Series B Bonds or portions thereof to be so redeemed, together with accrued interest to the date of redemption, from any unexpended proceeds of the 2019 Series B Bonds in the Restricted Loan Subaccount.

Loan Repayments and Prepayments and Excess Revenues. The 2019 Series B Bonds are subject to special redemption prior to maturity pursuant to an Authority Request filed with the Trustee confirming that such redemption is consistent with the most recently filed Cash Flow Statement, in whole or in part at any time, at a Redemption Price equal to 100% of the Aggregate Principal Amount of the 2019 Series B Bonds or portions thereof to be so redeemed, together with accrued interest to the date of redemption, from and to the extent there are moneys and/or Investment Securities in the 2019 Series B subaccount of the Class I Special Redemption Account and/or in the 2019 Series B subaccount of the Revenue Fund and available to be transferred to the 2019 Series B subaccount of the Class I Special Redemption Account on or before the day that notice of redemption is given pursuant to the Indenture, but not including moneys or Investment Securities in such subaccounts from the proceeds of refunding bonds or from other moneys of the Authority deposited in the Revenue Fund, at the option of the Authority in accordance with the Master Indenture. Amounts on deposit in the Revenue Fund, including Loan Repayments and Prepayments and amounts in excess of the applicable Debt Service Reserve Fund Requirement transferred to the Revenue Fund from the applicable account of the Debt Service Reserve Fund, are to be transferred to the applicable Special Redemption Account of the Redemption Fund at the election of the Authority and as otherwise required in accordance with the provisions of the Master Indenture described in Appendix C—"SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE—Revenue Fund." See "Part II—CERTAIN BONDOWNERS' RISKS—Considerations Regarding Redemption."

<u>Cross-Calls and Recycling</u>. Pursuant to the Master Indenture, the Authority may, by delivery of an Authority Request to the Trustee, instruct the Trustee to transfer moneys on deposit in any Series

subaccount of a Class Account of the Redemption Fund to any other Series subaccount of the same Class Account to be applied to the redemption of the same Class of Bonds of a different Series. Any such Authority Request is to (i) certify that it is consistent with the most recently filed Related Cash Flow Statement and not prohibited by the Related Series Indenture, and (ii) be accompanied by evidence of satisfaction of all Asset Requirements for the 2019 Series B Bonds. The 2019 Series B Indenture does not prohibit cross calls, but does restrict the use of certain Loan Repayments and Prepayments as discussed in "Loan Repayments and Prepayments and Excess Revenues" under this caption. In addition, the Master Indenture permits the Authority, by delivery of an Authority Request to the Trustee at any time prior to the giving of notice of redemption, to instruct the Trustee to transfer moneys on deposit in a subaccount of an Account in the Revenue Fund to a Related subaccount of the Loan Recycling Account to be used to finance or refinance Loans as permitted by the Master Indenture. See Appendix C— "SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE—Revenue Fund." The Authority may transfer Prepayments or Loan Repayments to the Loan Recycling Account of the Program Fund to finance Loans or transfer such Prepayments or Loan Repayments to the Special Redemption Accounts of the Redemption Fund at any time in accordance with the Master Indenture. See "Part II—CERTAIN BONDOWNERS' RISKS—Considerations Regarding Redemption."

Optional Redemption

The 2019 Series B-1 Bonds maturing on and after October 1, 2028 are subject to redemption at the option of the Authority, from any source in whole or in part, in Authorized Denominations on any date on or after April 1, 2028, at a Redemption Price equal to 100% of the principal amount thereof plus accrued interest, if any, to the date of redemption.

The 2019 Series B-2 Bonds are subject to redemption at the option of the Authority, from any source in whole or in part, in Authorized Denominations on any date on or after August 1, 2021, at a Redemption Price equal to 100% of the principal amount thereof plus accrued interest, if any, to the date of redemption.

Mandatory Sinking Fund Redemption

The 2019 Series B-1 Bonds maturing on October 1, 2034 shall be redeemed prior to their maturity, in part, by payment of 2019 Series B Class I Sinking Fund Installments, upon notice as provided in the Indenture and described in "Notice of Redemption" under this caption, on each of the dates set forth below and in the respective principal amounts set forth opposite each such date, in each case at a Redemption Price equal to 100% of the principal amount of such 2019 Series B-1 Bonds or portions thereof to be so redeemed, plus accrued interest to the redemption date as follows:

	Class I		Class I
Date	Sinking Fund	Date	Sinking Fund
(April 1)	<u>Installments</u>	(October 1)	<u>Installments</u>
2032	\$180,000	2032	\$185,000
2033	185,000	2033	190,000
2034	190,000	$2034^{(1)}$	195,000

⁽¹⁾ Final maturity

The 2019 Series B-1 Bonds maturing on October 1, 2039 shall be redeemed prior to their maturity, in part, by payment of 2019 Series B Class I Sinking Fund Installments, upon notice as provided in the Indenture and described in "Notice of Redemption" under this caption, on each of the dates set forth below and in the respective principal amounts set forth opposite each such date, in each case at a Redemption Price equal to 100% of the principal amount of such 2019 Series B-1 Bonds or portions thereof to be so redeemed, plus accrued interest to the redemption date as follows:

	Class I		Class I
Date	Sinking Fund	Date	Sinking Fund
(April 1)	<u>Installments</u>	(October 1)	<u>Installments</u>
2035	\$200,000	2035	\$200,000
2036	205,000	2036	210,000
2037	215,000	2037	215,000
2038	220,000	2038	225,000
2039	230,000	$2039^{(1)}$	230,000

⁽¹⁾ Final maturity

The 2019 Series B-1 Bonds maturing on October 1, 2044 shall be redeemed prior to their maturity, in part, by payment of 2019 Series B Class I Sinking Fund Installments, upon notice as provided in the Indenture and described in "Notice of Redemption" under this caption, on each of the dates set forth below and in the respective principal amounts set forth opposite each such date, in each case at a Redemption Price equal to 100% of the principal amount of such 2019 Series B-1 Bonds or portions thereof to be so redeemed, plus accrued interest to the redemption date as follows:

	Class I		Class I
Date	Sinking Fund	Date	Sinking Fund
(April 1)	<u>Installments</u>	(October 1)	<u>Installments</u>
2040	\$235,000	2040	\$240,000
2041	245,000	2041	250,000
2042	255,000	2042	260,000
2043	265,000	2043	265,000
2044	270,000	$2044^{(1)}$	275,000

⁽¹⁾ Final maturity

The 2019 Series B-1 Bonds maturing on October 1, 2049 shall be redeemed prior to their maturity, in part, by payment of 2019 Series B Class I Sinking Fund Installments, upon notice as provided in the Indenture and described in "Notice of Redemption" under this caption, on each of the dates set forth below and in the respective principal amounts set forth opposite each such date, in each case at a Redemption Price equal to 100% of the principal amount of such 2019 Series B-1 Bonds or portions thereof to be so redeemed, plus accrued interest to the redemption date as follows:

	Class I		Class I
Date	Sinking Fund	Date	Sinking Fund
(April 1)	<u>Installments</u>	(October 1)	<u>Installments</u>
2045	\$280,000	2045	\$290,000
2046	295,000	2046	300,000
2047	305,000	2047	310,000
2048	315,000	2048	320,000
2049	330,000	$2049^{(1)}$	335,000

⁽¹⁾ Final maturity

The 2019 Series B-1 Bonds maturing on October 1, 2054 shall be redeemed prior to their maturity, in part, by payment of 2019 Series B Class I Sinking Fund Installments, upon notice as provided in the Indenture and described in "Notice of Redemption" under this caption, on each of the dates set forth below and in the respective principal amounts set forth opposite each such date, in each case at a Redemption Price equal to 100% of the principal amount of such 2019 Series B-1 Bonds or portions thereof to be so redeemed, plus accrued interest to the redemption date as follows:

	Class I		Class I
Date	Sinking Fund	Date	Sinking Fund
(April 1)	<u>Installments</u>	(October 1)	<u>Installments</u>
2050	\$340,000	2050	\$345,000
2051	355,000	2051	360,000
2052	365,000	2052	375,000
2053	380,000	2053	390,000
2054	395,000	$2054^{(1)}$	405,000

⁽¹⁾ Final maturity

The 2019 Series B-1 Bonds maturing on October 1, 2059 shall be redeemed prior to their maturity, in part, by payment of 2019 Series B Class I Sinking Fund Installments, upon notice as provided in the Indenture and described in "Notice of Redemption" under this caption, on each of the dates set forth below and in the respective principal amounts set forth opposite each such date, in each case at a Redemption Price equal to 100% of the principal amount of such 2019 Series B-1 Bonds or portions thereof to be so redeemed, plus accrued interest to the redemption date as follows:

	Class I		Class I
Date	Sinking Fund	Date	Sinking Fund
(April 1)	<u>Installments</u>	(October 1)	<u>Installments</u>
2055	\$410,000	2055	\$420,000
2056	425,000	2056	435,000
2057	445,000	2057	450,000
2058	460,000	2058	470,000
2059	480,000	$2059^{(1)}$	490,000

⁽¹⁾ Final maturity

Upon any purchase pursuant to the Indenture or redemption (other than mandatory sinking fund redemption) of the 2019 Series B Bonds for which 2019 Series B Class I Sinking Fund Installments have been established, there shall be credited toward each 2019 Series B Class I Sinking Fund Installment thereafter to become due an amount bearing the same ratio to such 2019 Series B Class I Sinking Fund Installment as (i) the total principal amount of such 2019 Series B Bonds so purchased or redeemed bears to (ii) the total amount of all such Class I Sinking Fund Installments to be credited. If, however, there shall be filed with the Trustee an Authority Request specifying a different method for crediting 2019 Series B Class I Sinking Fund Installments upon any such purchase or redemption of 2019 Series B Bonds and certifying that such request is consistent with the most recently filed Cash Flow Statement and the 2019 Series B Indenture, then such 2019 Series B Class I Sinking Fund Installments shall be so credited as shall be provided in such Authority Request.

Selection of 2019 Series B Bonds for Partial Redemption

In the event of a partial redemption of 2019 Series B Bonds, except as otherwise directed by an Authority Request that certifies that such request is consistent with the most recently filed Related Cash Flow Statement, the Bond Registrar shall select a pro rata amount of 2019 Series B Bonds of each maturity for redemption. If less than all of the 2019 Series B Bonds of like maturity are to be redeemed, the particular 2019 Series B Bonds or the respective portions thereof to be redeemed shall be selected randomly by lot by the Bond Registrar in such manner as the Bond Registrar in its discretion deems fair and appropriate.

Notice of Redemption

When any of the 2019 Series B Bonds are to be redeemed, the Bond Registrar is to cause notice of such redemption to be mailed by first class mail, or transmitted in such other manner (such as by readily available electronic means) as may be customary for the industry as directed in writing by the Authority, not more than 60 days nor less than 20 days prior to the redemption date with respect to the 2019 Series B Bonds, to the registered Owner of each 2019 Series B Bond to be redeemed at such Owner's address as it appears in the registration records of the Bond Registrar or at such other address as is furnished in writing by such Owner to the Bond Registrar. However, failure to give any such notice to any Owner, or any defect therein, shall not affect the validity of the redemption proceedings for any 2019 Series B Bond with respect to which no such failure or defect has occurred. So long as the 2019 Series B Bonds are registered in the DTC book-entry system described in Appendix F hereto, such notices will be sent only to DTC's nominee.

Purchase in Lieu of Redemption

If Bonds of any particular Series, Class and maturity are called for redemption, upon Authority Request the Bonds so called shall be purchased in lieu of such redemption by the Trustee or Paying Agent for the account of the Authority on the date upon which such Bonds were to have been redeemed, at a purchase price not to exceed the applicable Redemption Price thereof, plus accrued interest, if any, thereon to, but not including, such date, or at any higher purchase price consistent with the most recent Cash Flow Statement. At the election of the Authority, but not otherwise, such Bonds shall be canceled by the Trustee upon such purchase in lieu of redemption. The Authority shall deliver any such Authority Request not later than the Business Day preceding the date upon which such Bonds were to have been redeemed, which Authority Request shall state the aggregate principal amount of each Series, Class and maturity of Bonds for which an election to purchase in lieu of redemption pursuant to the Master Indenture is being made, and the source of payment for such purchase in lieu of redemption. Any such purchase in lieu of redemption may be made from any moneys designated by the Authority, and, upon receipt thereof if such moneys are not already held in the Trust Estate, the Trustee shall use such moneys for such purpose. The Authority is expressly authorized to tender, and to direct the Trustee and the Paying Agent to purchase from the Authority, any Bonds for cancellation in lieu of redemption. Neither the Trustee nor the Paying Agent shall be required to advance any of their own money to make any such purchase or purchases.

Unless the Authority shall designate a different source, the Trustee shall apply, or cause the Paying Agent to apply, available moneys in the Redemption Fund in lieu of redemption to pay the purchase price (exclusive of accrued interest) of Bonds purchased in lieu of redemption pursuant to the Master Indenture. Unless the Authority shall designate a different source, the Trustee shall apply, or cause the Paying Agent to apply, available moneys from the Revenue Fund in accordance with the Master Indenture, from the Class I Debt Service Fund in accordance with the Master Indenture, from the Class III Debt Service Fund in accordance with the Master Indenture, or from the Class IV Debt Service Fund in accordance with the Master Indenture to pay accrued interest on such Bonds purchased pursuant to the Master Indenture.

PLAN OF FINANCE

Sources and Uses of Funds

The following are the estimated sources and uses of funds relating to the 2019 Series B Bonds.

SOURCES OF FUNDS:	Estimated Amounts
Proceeds of 2019 Series B Bonds	\$42,325,000.00
Other available funds	595,000.00
TOTAL SOURCES OF FUNDS	\$ <u>42,920,000.00</u>
USES OF FUNDS:	
For Deposit to 2019B Restricted Loan Subaccount	\$41,565,000.00
For Deposit to 2019B subaccount of the Debt Service Reserve Fund (1)	760,000.00
For Deposit to 2019B subaccount of the Negative Arbitrage Account (2)	90,000.00
For Deposit to 2019B subaccount of the Revenue Fund	10,000.00
For Deposit to 2019B Costs of Issuance Account (3)	495,000.00
TOTAL USES OF FUNDS	\$ <u>42,920,000.00</u>

Under the Indenture, the Authority may at any time replace such cash with a Qualified Surety Bond to satisfy the Debt Service Reserve Fund Requirement.

Disbursements from the Restricted Loan Subaccount

Amounts on deposit in the Restricted Loan Subaccount are to be disbursed from time to time by the Trustee, to pay costs of the 2019B Project that are first approved by the Authority pursuant to the terms, conditions and provisions of the Loan Agreement. Amounts on deposit in the Restricted Loan Subaccount will be invested prior to disbursement as described in "Part I—CERTAIN PROGRAM ASSUMPTIONS—Investments." Upon an event of default under the Loan Agreement, the Authority may direct that amounts in the Restricted Loan Subaccount be transferred to the Redemption Fund to be applied as described in "Part I—TERMS OF THE 2019 SERIES B BONDS—Prior Redemption—Special Redemption." See "Part I—CERTAIN PROGRAM ASSUMPTIONS—2019B Loan—The Loan Agreement."

CERTAIN PROGRAM ASSUMPTIONS

The 2019B Loan

Generally. Proceeds of the 2019 Series B Bonds are expected to be used to fund a non-recourse loan by the Authority to the 2019B Borrower. The proceeds deposited to the Restricted Loan Subaccount are to be disbursed as described in "Part I—PLAN OF FINANCE—Disbursements from the Restricted Loan Subaccount." The 2019B Borrower plans to use such proceeds of the 2019B Loan deposited to the Restricted Loan Subaccount, together with certain other moneys available to such 2019B Borrower, to finance the 2019B Facility, as described in further detail in **Appendix G-1** hereto. Following completion

⁽²⁾ Available funds of the Authority will be deposited to the Negative Arbitrage Account in the Program Fund.

⁽³⁾ Available funds of the Authority will be deposited to the Costs of Issuance Account in the Program Fund and used to pay costs of issuance and Underwriter's compensation relating to the 2019 Series B Bonds. For information concerning the Underwriter's compensation, see "Part I—UNDERWRITING."

of the 2019B Project and satisfaction of conditions required by the Authority, the Authority expects to request the U.S. Department of Housing and Urban Development ("HUD") to endorse the 2019B Loan as a permanent loan with Risk-Share Insurance. For further information about Risk-Share Insurance, see **Appendix H** hereto. The 2019B Loan will be secured by a Deed of Trust, Security Agreement, Fixture Filing, Assignment of Leases and Rents and Financing Statement delivered by the 2019B Borrower in favor of the Authority (a "**Deed of Trust**"), encumbering the 2019B Facility. Certain restrictions on the rental and occupancy of the 2019B Facility will be imposed on the 2019B Borrower, as described in "The Regulatory Agreement" under this caption.

The Loan Agreement. The Loan Agreement provides for the terms under which the Authority shall provide the loan to the 2019B Borrower. The 2019B Loan is expected to be payable monthly in interest-only payments during the construction period (the "Construction Phase") anticipated to commence on the date of closing of the 2019B Loan and to end on a date which is twenty-four (24) months following the closing at which time the Authority anticipates the 2019B Loan will be endorsed by HUD as a permanent loan eligible for Risk-Share Insurance ("Conversion"). The Authority will commence amortization of the principal on the 2019B Loan upon Conversion. Upon any event of default under the Loan Agreement, such 2019B Loan shall be subject to acceleration, and the Authority shall also have the right to exercise any other remedy under the Loan Agreement. See "Part I—TERMS OF THE 2019 SERIES B BONDS—Prior Redemption—Special Redemption." See also "Part II—CERTAIN BONDOWNERS' RISKS—Considerations Regarding Redemption—Loan Conversion Redemption Considerations."

Modification of Loan Terms. In the Master Indenture, the Authority has agreed that it shall not consent or agree to permit any amendment or modification of the financial terms of any Loan or any security thereof in any manner materially adverse to the interests of the Owners of the Bonds, as determined in good faith by the Authority. See **Appendix C**—"SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE—Covenants Relating to Loans.

Servicing by the Authority. The Authority will service the 2019B Loan, handling the receipt and disbursement of funds related to such loan. This includes receiving payments, monitoring and disbursing escrowed funds for taxes and insurance and managing delinquencies and claims. The Authority will oversee compliance by the borrower with requirements of the 2019B Loan, including occupancy and rental restrictions with respect to such 2019B Loan and the facilities, and will review the financial status of the projects. The Authority similarly oversees compliance for certain other loans outstanding under the Master Indenture. The Authority believes that, through its in-house servicing operations, the Authority is servicing the loans in accordance with servicing practices or standards as required to maintain any applicable insurance with respect to such loans. For more information concerning the Authority, see "Part II—COLORADO HOUSING AND FINANCE AUTHORITY."

The Regulatory Agreement. The 2019B Borrower will enter into a regulatory agreement with the Authority (a "CHFA Regulatory Agreement") relating to the 2019 Series B Bonds and the facilities. Pursuant to the provisions of the CHFA Regulatory Agreement, the 2019B Borrower will agree, among other things, to rent the units in the 2019B Facility so as to comply with applicable provisions of the Tax Code, State and federal law, and CHFA regulatory requirements. In particular, the 2019B Borrower will agree (i) that each individual rental unit (except for management units) in the 2019B Facility will be rented or held for rental to the general public on a continuous basis and (ii) not to discriminate against tenants receiving Housing Assistance Payments Program under Section 8 of the United States Housing Act of 1937, as amended, or discriminate on the basis of race, creed, color, sex, sexual preference, source of income, physical disability, religion, national origin, marital status, familial status or political opinion or affiliation in the rental, lease, use or occupancy of the 2019B Facility or in connection with the employment or application for employment of persons for the operation and management of the 2019B Facility. In addition, the 2019B Borrower will agree to certain occupancy requirements based on county

area median income limits and certain federal limitations, where applicable, and to certain rental restrictions.

If any violation by the 2019B Borrower of the CHFA Regulatory Agreement is not corrected to the satisfaction of the Authority within the period of time specified by the Authority (which shall be at least 60 days after the date any notice to or by the 2019B Borrower is mailed, or within such further time (as may be approved in an opinion of Bond Counsel addressed to the 2019B Borrower and the Authority) as is necessary to correct the violation without loss of the exclusion from gross income for federal income tax purposes of interest on the 2019 Series B Bonds, not to exceed any limitations set by applicable Treasury Regulations), without further notice, the Authority may declare a default under the CHFA Regulatory Agreement, and upon such default, the Authority may apply to any court, state or federal, for specific performance of the CHFA Regulatory Agreement or an injunction against any violation of the CHFA Regulatory Agreement. Such a breach by the Borrower may result in interest on the 2019 Series B Bonds being included in gross income of the Owners of such 2019 Series B Bonds for purposes of federal income taxation and will not result in a mandatory redemption of such 2019 Series B Bonds under the Indenture as described in "Part II—CERTAIN BONDOWNERS' RISKS—Enforcement of Regulatory Agreements."

Debt Service Reserve Fund

The Debt Service Reserve Fund Requirement for the 2019 Series B Bonds will be, as of any date of calculation, an amount equal to two-thirds of the maximum principal and interest payment due for any period of twelve consecutive calendar months on the portion of the 2019B Loan that is insured or guaranteed by the United States of America and any agency or instrumentality thereof or anticipated to be so insured or guaranteed. See "Part I—PLAN OF FINANCE—Sources and Uses of Funds." See also "Part II—SECURITY FOR THE OBLIGATIONS—Debt Service Reserve Fund."

Investments

Amounts in the 2019 Series B subaccounts of the Acquisition Account, Negative Arbitrage Account, Revenue Fund, Rebate Fund, Debt Service Reserve Fund, Class I Debt Service Funds and Class I Special Redemption Account will be invested by the Trustee at the direction of the Authority in certain permitted Investment Securities (the "2019B Investments") pursuant to the terms of the Master Indenture. See Appendix C—"SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE—Definitions—Investment Securities" for a description of the permitted Investment Securities in which such amounts may be invested.

In connection with the prior issuance of certain Multi-Family/Project Bonds outstanding under the Master Indenture, the Authority has invested certain amounts in Series subaccounts of Funds related to such Obligations in investment agreements with the investment providers and at the rates set forth in the table below. As of April 1, 2019, the total amounts in Funds held under the Master Indenture invested with respective investment providers were as follows: \$540,168 with GE Funding Capital Market Services, Inc. and \$9,773,637 with Natixis Funding Corp.

Outstanding Investment Agreements (as of April 1, 2019)

	Funds Invested		Amounts		Termination
Series	(in related Series subaccounts)	Investment Provider (1)	Invested	Rate	_Date_
2000A	Revenue Fund	GE Funding Capital Market Services, Inc. (2)	\$540,168	6.00%	10/1/2032
2007B	Revenue Fund	Natixis Funding Corp.	3,804,432	4.46%/ one month LIBOR minus 10 bps	10/1/2038
2007B	Loan Recycling (3)	Natixis Funding Corp.	241,303	4.46%/ one month LIBOR minus 10 bps	10/1/2038
2007B	Debt Service Reserve Fund (3)	Natixis Funding Corp.	2,468,658	5.27%	10/1/2038
2008A	Revenue Fund	Natixis Funding Corp.	803,531	3.61%/ one month LIBOR minus 10 bps	4/1/2043
2008A	Debt Service Reserve Fund	Natixis Funding Corp.	1,376,862	4.33%	4/1/2043
2008B	Revenue Fund	Natixis Funding Corp.	1,078,851	4.71%	5/1/2052

⁽¹⁾ Neither the Authority nor the Underwriters make any representation about the financial condition or creditworthiness of the investment providers listed in this chart. Prospective investors are urged to make their own investigation into the financial condition and creditworthiness of the Investment Providers. See "Part II—SECURITY FOR THE OBLIGATIONS."

In accordance with the terms of the Master Indenture, the Authority has also from time to time instructed the Trustee to invest certain moneys held by the Trustee in Funds and Accounts relating to prior Obligations in permitted Investment Securities. Information about such investments is available in filings with EMMA that the Authority makes quarterly and annually in connection with certain outstanding Bonds under the Master Indenture.

The assumptions made by the Authority as to projected cash flows include the assumption that the investment rates provided by the 2019B Investments and by the investment agreements on the preceding table will be available as described. However, in the event that the 2019B Investments or any investment agreement shown on the preceding table is terminated as a result of default by the respective investment provider or for any other reason, it may not be possible to reinvest such proceeds and deposits at these assumed rates and the cash flows may be adversely affected. Neither the Authority nor the Underwriters make any representation about the financial condition or creditworthiness of any of the investment providers shown on the preceding table. Prospective investors are urged to make their own investigation into the financial condition and creditworthiness of the investment providers shown in the preceding table.

⁽²⁾ GE Funding Capital Market Services, Inc. was originally known as FGIC Capital Market Services, Inc. The name of FGIC Capital Market Services, Inc. was changed to GE Funding Capital Market Services, Inc. after General Electric Corporation sold its interests in Financial Guaranty Insurance Company to outside investors in 2003. The obligations of GE Funding Capital Market Services, Inc. under the applicable investment agreements are unconditionally guaranteed by General Electric Capital Corporation.

⁽³⁾ These funds are invested under a master repurchase agreement entered with Natixis Funding Corp. on January 29, 2010 (the "Master Repurchase Agreement"). The Master Repurchase Agreement replaced the investment agreements previously in effect, and provides for the delivery of securities to the Trustee at a collateralization level of 105%.

TAX MATTERS

In the opinion of Sherman & Howard L.L.C., Bond Counsel, assuming continuous compliance with certain covenants described below, interest on the 2019 Series B Bonds (other than interest on any 2019 Series B Bond for any period during which it is held by a "substantial user" of the facilities financed with the 2019 Series B Bonds or a "related person" as such terms are used in Section 147(a) of the Internal Revenue Code of 1986, as amended to the date of delivery of the Bonds (the "**Tax Code**"), is excluded from gross income under federal income tax laws pursuant to Section 103 of the Tax Code; further, interest on the 2019 Series B Bonds is excluded from alternative minimum taxable income as defined in Section 55(b)(2) of the Tax Code.

The Tax Code imposes several requirements which must be met with respect to the 2019 Series B Bonds in order for the interest thereon to be excluded from gross income and alternative minimum taxable income to the extent described above. Certain of these requirements must be met on a continuous basis throughout the term of the 2019 Series B Bonds. These requirements include: (a) limitations as to the use of proceeds of the 2019 Series B Bonds and as to the use of the facilities financed thereby; (b) limitations on the extent to which proceeds of the 2019 Series B Bonds may be invested in higher yielding investments; and (c) a provision, subject to certain limited exceptions, that requires all investment earnings on the proceeds of the 2019 Series B Bonds above the yield on the Bonds to be paid to the United States Treasury. The Authority will covenant and represent in the Indenture that it will take all steps to comply with the requirements of the Tax Code (in effect on the date of delivery of the 2019 Series B Bonds) to the extent necessary to maintain the exclusion of interest on the 2019 Series B Bonds from gross income and alternative minimum taxable income under such federal income tax laws. Bond Counsel's opinion as to the exclusion of interest on the 2019 Series B Bonds from gross income and alternative minimum taxable income is rendered in reliance on these covenants, and assumes continuous compliance therewith. The failure or inability of the Authority to comply with these requirements could cause the interest on the 2019 Series B Bonds to be included in gross income or in alternative minimum taxable income, or a combination thereof, from the date of issuance. Bond Counsel's opinion is also rendered in reliance upon certifications of the Authority and other certifications furnished to Bond Counsel. Bond Counsel has not undertaken to verify such certifications by independent investigation.

The Tax Code contains numerous provisions which may affect an investor's decision to purchase the 2019 Series B Bonds. Owners of the 2019 Series B Bonds should be aware that the ownership of taxexempt obligations by particular persons and entities, including, without limitation, financial institutions, insurance companies, recipients of Social Security or Railroad Retirement benefits, taxpayers who may be deemed to have incurred or continued indebtedness to purchase or carry tax-exempt obligations, foreign corporations doing business in the United States and certain "subchapter S" corporations may result in adverse federal tax consequences. Under Section 3406 of the Tax Code, backup withholding may be imposed on payments on the 2019 Series B Bonds made to any Owner who fails to provide certain required information, including an accurate taxpayer identification number, to certain persons required to collect such information pursuant to the Tax Code. Backup withholding may also be applied if the Owner underreports "reportable payments" (including interest and dividends) as defined in Section 3406, or fails to provide a certificate that the Owner is not subject to backup withholding in circumstances where such a certificate is required by the Tax Code. Under certain circumstances, an initial owner of such bonds (if any) may realize a taxable gain upon their disposition, even though such bonds are sold or redeemed for an amount equal to the owner's acquisition cost. Bond Counsel's opinion relates only to the exclusion of interest on the 2019 Series B Bonds from gross income and alternative minimum taxable income, will state that no opinion is expressed regarding other federal tax consequences arising from the receipt or accrual of interest on or ownership of the 2019 Series B Bonds. Owners of the 2019 Series B Bonds should consult their own tax advisors as to the applicability of these consequences.

The Internal Revenue Service (the "Service") has an ongoing program of auditing tax-exempt obligations to determine whether, in the view of the Service, interest on such tax-exempt obligations is

includable in the gross income of the owners thereof for federal income tax purposes. No assurances can be given as to whether or not the Service will commence an audit of the 2019 Series B Bonds. If an audit is commenced, the market value of the 2019 Series B Bonds may be adversely affected. Under current audit procedures the Service will treat the Authority as the taxpayer and the Owners may have no right to participate in such procedure. The Authority has covenanted in the Indenture not to take any action that would cause the interest on the 2019 Series B Bonds to lose its exclusion from gross income for federal income tax purposes or lose its exclusion from alternative minimum taxable income for the Owners thereof for federal income tax purposes. None of the Authority, the Underwriter nor Bond Counsel is responsible for paying or reimbursing any Owner with respect to any audit or litigation costs relating to the 2019 Series B Bonds.

Also, in the opinion of Bond Counsel, the 2019 Series B Bonds, their transfer and the income therefrom shall at all times be free from taxation by the State of Colorado under Colorado law in effect on the date of delivery of the 2019 Series B Bonds.

The opinions expressed by Bond Counsel are based on existing law as of the delivery date of the 2019 Series B Bonds. No opinion is expressed as of any subsequent date nor is any opinion expressed with respect to pending or proposed legislation. Amendments to federal or state tax laws may be pending now or could be proposed in the future that, if enacted into law, could adversely affect the value of the 2019 Series B Bonds, the exclusion of interest on the 2019 Series B Bonds from gross income or alternative minimum taxable income, or both, from the date of issuance of the 2019 Series B Bonds or any other date, the tax value of that exclusion for different classes of taxpayers from time to time, or that could result in other adverse tax consequences. In addition, future court actions or regulatory decisions could affect the tax treatment or market value of the 2019 Series B Bonds. Owners of the 2019 Series B Bonds are advised to consult with their own tax advisors with respect to such matters.

UNDERWRITING

The 2019 Series B Bonds are to be purchased from the Authority by the underwriters listed on the front cover page of this Official Statement (the "Underwriters"). See "Part I—CERTAIN RELATIONSHIPS OF PARTIES." The Underwriters have agreed, subject to certain conditions, to purchase all but not less than all of the 2019 Series B Bonds at a price equal to \$42,325,000.00 (being the par amount of the 2019 Series B Bonds). The Underwriters are being paid a fee of \$281,976.59 with respect to the offering of the 2019 Series B Bonds. The initial public offering prices of the 2019 Series B Bonds purchased by the Underwriters may be changed from time to time by the Underwriters.

The following language has been provided by the Underwriters. The Authority takes no responsibility as to the accuracy or completeness thereof.

Certain of the Underwriters have entered into distribution agreements with other broker-dealers (that have not been designated by the Authority as Underwriters) for the distribution of the 2019 Series B Bonds at the original issue prices. Such agreements generally provide that the relevant Underwriter will share a portion of its underwriting compensation or selling concession with such broker-dealers.

Jefferies LLC ("**Jefferies**"), an Underwriter of the 2019 Series B Bonds, has entered into an agreement with E*TRADE Securities LLC ("E*TRADE") for the retail distribution of municipal securities. Pursuant to the agreement, Jefferies will sell 2019 Series B Bonds to E*TRADE and will share a portion of its selling concession compensation with E*TRADE.

Wells Fargo Bank, National Association, acting through its Municipal Products Group ("WFBNA"), one of the underwriters of the 2019 Series B Bonds, has entered into an agreement (the "WFA Distribution Agreement") with its affiliate, Wells Fargo Clearing Services, LLC (which uses the trade name "Wells Fargo Advisors") ("WFA"), for the distribution of certain municipal securities offerings, including the 2019 Series B Bonds. Pursuant to the WFA Distribution Agreement, WFBNA will share a portion of its underwriting or remarketing agent compensation, as applicable, with respect to the 2019 Series B Bonds with WFA. WFBNA has also entered into an agreement (the "WFSLLC Distribution Agreement") with its affiliate Wells Fargo Securities, LLC ("WFSLLC"), for the distribution of municipal securities offerings, including the 2019 Series B Bonds. Pursuant to the WFSLLC Distribution Agreement, WFBNA pays a portion of WFSLLC's expenses based on its municipal securities transactions. WFBNA, WFSLLC, and WFA are each wholly-owned subsidiaries of Wells Fargo & Company.

Wells Fargo Securities is the trade name for certain securities-related capital markets and investment banking services of Wells Fargo & Company and its subsidiaries, including Wells Fargo Bank, National Association, which conducts its municipal securities sales, trading and underwriting operations through the Wells Fargo Bank, NA Municipal Products Group, a separately identifiable department of Wells Fargo Bank, National Association, registered with the Securities and Exchange Commission as a municipal securities dealer pursuant to Section 15B(a) of the Securities Exchange Act of 1934.

The Underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include sales and trading, commercial and investment banking, advisory, investment management, investment research, principal investment, hedging, market making, brokerage and other financial and non-financial activities and services. Under certain circumstances, the Underwriters and their affiliates may have certain creditor and/or other rights against the Authority and its affiliates in connection with such activities. In the course of their various business activities, the Underwriters and their affiliates, officers, directors and employees may purchase, sell or hold a broad array of investments and actively trade securities, derivatives, loans, commodities, currencies, credit default swaps and other financial instruments for their own account and for the accounts of their customers, and such investment and trading activities may involve or relate to assets, securities and/or instruments of the Authority (directly, as collateral securing other obligations or otherwise) and/or persons and entities with relationships with the Authority. The Underwriters and their affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such assets, securities or instruments and may at any time hold, or recommend to the clients that they should acquire, long and/or short positions in such assets, securities and instruments.

LITIGATION

At the time of the delivery of and payment for the 2019 Series B Bonds, the Authority will deliver an opinion of its General Counsel, Charles K. Knight, Esq., to the effect that no litigation before any court is pending or, to his knowledge, threatened against the Authority in any way affecting the existence of the Authority or the titles of its officers to their respective offices, or seeking to restrain or to enjoin the issuance, sale or delivery of the 2019 Series B Bonds, or which would materially adversely affect the financial condition of the Authority, or in any way contesting or affecting the validity or enforceability of the 2019 Series B Bonds, the Indenture, the contract for the purchase of the 2019 Series B Bonds.

RATINGS

Moody's Investors Service ("Moody's") and S&P Global Ratings, a division of Standard & Poor's Financial Services LLC ("S&P") have assigned the 2019 Series B Bonds ratings of "Aaa" and

"AAA" respectively. Such ratings reflect only the views of Moody's and S&P, respectively, at the time such ratings are given, and are not a recommendation to buy, sell or hold the 2019 Series B Bonds. The Authority makes no representation as to the appropriateness of such ratings. An explanation of the significance of and the methodology with respect to the ratings given by Moody's and S&P, respectively, may be obtained from Moody's and S&P, respectively. Generally, a rating agency bases its rating on the information and materials furnished it and on investigations, studies and assumptions of its own. There is no assurance that any such rating will continue for any given period of time or that any such rating will not be revised downward or withdrawn entirely by Moody's or S&P, respectively, if, in the judgment of the issuing rating agency, circumstances so warrant. Therefore, after the date hereof, investors should not assume that such ratings are still in effect. Any such downward revision or withdrawal of any such rating may have an adverse effect on the marketability or market price of the 2019 Series B Bonds. The Authority has no obligation to oppose, or to provide Owners of the 2019 Series B Bonds with notice of, any such revision or withdrawal of a rating, except in connection with the reporting of events as provided in the Continuing Disclosure Undertaking (see Appendix J hereto).

FINANCIAL ADVISOR

The Authority has retained CSG Advisors Incorporated as its financial advisor (the "Financial Advisor") in connection with the issuance of the 2019 Series B Bonds. The Financial Advisor is not obligated to undertake, and has not undertaken to make, an independent verification or to assume responsibility for the accuracy, completeness, or fairness of the information contained in this Official Statement. The Financial Advisor will act as an independent advisory firm and will not be engaged in the business of underwriting, trading or distributing the 2019 Series B Bonds.

LEGAL MATTERS

In connection with the issuance and sale of the 2019 Series B Bonds, Sherman & Howard L.L.C., as Bond Counsel, will deliver the opinion included as **Appendix E** hereto. Kutak Rock LLP will pass upon certain legal matters relating to the 2019 Series B Bonds as Disclosure Counsel to the Authority. Certain legal matters relating to the 2019 Series B Bonds will be passed upon for the Authority by Charles K. Knight, Esq., its General Counsel. Tiber Hudson LLC will pass upon certain matters for the Underwriters.

Neither Sherman & Howard L.L.C., Kutak Rock LLP nor Tiber Hudson LLC have participated in any independent verification of the information concerning the financial condition or capabilities of the Authority contained in this Official Statement.

AVAILABILITY OF CONTINUING INFORMATION

In connection with the issuance of the 2019 Series B Bonds, the Authority will deliver a Continuing Disclosure Undertaking, in the form attached as **Appendix J** hereto, by which the Authority will agree to make available by filing with the Municipal Securities Rulemaking Board's Electronic Municipal Market Access System ("EMMA"), in compliance with Rule 15c2-12 of the Securities Exchange Act of 1934 ("Rule 15c2-12"), certain annual financial information and audited financial statements, commencing with the fiscal year ending December 31, 2019, and notice of certain events.

CERTAIN RELATIONSHIPS OF PARTIES

Wells Fargo Bank, National Association is serving as an Underwriter of the 2019 Series B Bonds and as Trustee for the 2019 Series B Bonds and will be compensated separately for serving in each capacity.

NO IMPAIRMENT OF CONTRACT BY THE STATE

Pursuant to the provisions of Section 29-4-731 of the Act, the Authority has included in the Indenture the pledge and agreement of the State of Colorado that the State of Colorado will not limit or alter the rights vested by the Act in the Authority to fulfill the terms of any agreements made with Bond Owners, or in any way impair the rights and remedies of such Owners until the Bonds, together with the interest thereon and all costs and expenses in connection with any action or proceedings by or on behalf of such Owners, are fully met and discharged.

LEGALITY FOR INVESTMENT AND SECURITY FOR DEPOSITS

Pursuant to Section 29-4-723 of the Act and Title 24, Article 75, Part 6 of the Colorado Revised Statutes (C.R.S. 24-74-601.2), that the 2019 Series B Bonds are eligible for investment in the State by all public officers, public bodies and political subdivisions of the State, banking associations, savings and loan associations, trust companies, investment companies and insurance companies, and all executors, administrators, trustees and other fiduciaries of funds in their control or belonging to them; provided that, at the time of purchase by a public entity, such Bonds carry at least two credit ratings at or above "A" or its equivalent from nationally recognized statistical rating organizations and the period from the date of settlement of the Bonds to their maturity date or dates of optional redemption that has been exercised as of the date the Bonds are purchased is no more than five years. The Act makes the 2019 Series B Bonds securities which may properly and legally be deposited with and received by any municipal officer or any agency or political subdivision of the State for any purpose for which the deposit of bonds, notes or obligations of the State is authorized by law.

INDEPENDENT AUDITORS

The most recent audited financial statements of the Authority, included in **Appendix A** hereto, have been audited by RSM US LLP, independent auditors, as stated in their report appearing therein. RSM US LLP has not performed any procedures related to this Official Statement.

MISCELLANEOUS

This Official Statement speaks only as of its date, and the information contained herein is subject to change. All quotations from, and summaries and explanations of the statutes, regulations and documents contained herein do not purport to be complete and reference is made to said laws, regulations and documents for full and complete statements of their provisions. Copies, in reasonable quantity, of such laws, regulations and documents, including the Indenture, may be obtained, during the offering period, upon request to the Authority and upon payment to the Authority of a charge for copying, mailing and handling, at 1981 Blake Street, Denver, Colorado 80202, Attention: Chief Financial Officer.

[Remainder of page left blank intentionally]

The distribution of this Official Statement has been duly authorized by the Authority. Any statements in this Official Statement involving matters of opinion, whether or not expressly so stated, are intended as such and not as representations of fact. This Official Statement is not to be construed as an agreement or contract between the Authority and the purchasers or owners of any 2019 Series B Bonds.

COLORADO HOUSING AND FINANCE AUTHORITY

By: /s/ Thomas Bryan
Chief Financial Officer

(End of Part I)

PART II

COLORADO HOUSING AND FINANCE AUTHORITY

This Part II provides general background information about the Authority, a description of the assets and moneys in the Trust Estate pledged to secure all of the Obligations issued, and which in the future may be issued, under the Master Indenture (including the 2019 Series B Bonds), and certain risks associated with such Obligations and Trust Estate. For a description of the terms of the 2019 Series B Bonds, the sources and uses of funds in connection with the 2019 Series B Bonds, certain program assumptions and other matters specifically related to the offering and issuance of the 2019 Series B Bonds, see Part I to this Official Statement.

Background

In 1973, upon a finding that there existed in the State a shortage of decent, safe and sanitary housing available within the financial capabilities of low- and moderate-income families, the Colorado General Assembly established the Colorado Housing Finance Authority, since renamed the Colorado Housing and Finance Authority, as a body corporate and a political subdivision of the State for the purpose of increasing the supply of decent, safe and sanitary housing for such families. The Authority is not an agency of State government and not subject to administrative direction by any department, commission, board, bureau or agency of the State. The Act authorizes the Authority, among other things, to make loans to individuals and sponsors to finance the construction, reconstruction, rehabilitation or purchase of housing facilities for low- and moderate-income families and to purchase mortgage loans from, and lend moneys to, qualified mortgage lenders under terms and conditions which provide for loans to finance housing facilities for low- and moderate-income families. The Act was amended in 1982 to authorize the Authority to finance project and working capital loans to commercial and industrial enterprises of small and moderate size.

In order to achieve its authorized purposes, the Authority currently operates both Qualified (tax exempt) and Non-Qualified (taxable) Single Family Mortgage Programs and various rental and business finance programs. See "Programs To Date" under this caption. The Act authorizes the Authority to issue its bonds, notes and other obligations in order to provide sufficient funds to achieve its purposes as set forth in the Act. Bonds or notes issued with respect to such programs are and will be separately secured from other bonds of the Authority, including the Bonds, except as described in "Part II—SECURITY FOR THE OBLIGATIONS."

Board of Directors and Staff Officers

The Board of Directors of the Authority consists of the Colorado State Auditor, a member of the Colorado General Assembly appointed jointly by the Speaker of the House and the Majority Leader in the Senate, an executive director of a principal department of State government appointed by the Governor of Colorado and eight public members appointed by the Governor with the consent of the Senate. Members of the Board of Directors hold office for their terms and until a successor has been duly appointed and confirmed. Any Board Member shall be eligible for reappointment, but Board Members may not serve more than two consecutive full terms. The present members of the Board of Directors of the Authority are set forth in the following table:

Present Board of Directors of the Authority

Name	Affiliation	End of Current Term		
Max Tyler, Chair ⁽¹⁾	Retired; Lakewood, Colorado	July 1, 2023		
Julie Brewen, Chair, pro tem ⁽²⁾	Executive Director; Fort Collins Housing Authority dba Housing Catalyst; Fort Collins, Colorado	July 1, 2023		
Amber Hills, Secretary/Treasurer ⁽³⁾	President, Lakewood Market, FirstBank; Lakewood, Colorado	July 1, 2021		
KC Becker ⁽⁴⁾	Speaker of the House of Representatives; Boulder, Colorado	January 4, 2021		
Rick M. Garcia	Executive Director, Colorado Department of Local Affairs; Denver, Colorado	At the pleasure of the Governor		
Steven Hutt	Executive Director, Denver, Employees Retirement Plan; Denver, Colorado	July 1, 2021		
Jody Kole	Executive Director, Grand Junction Housing Authority; Grand Junction, Colorado	July 1, 2021		
Jennifer Lopez	President, Project Moxie, a Colorado limited liability company; Durango, Colorado	July 1, 2021		
Dianne Ray	Colorado State Auditor; Denver, Colorado	Standing		
Michelle G. Miles	Mayor Pro Tem, Trinidad, Colorado	July 1, 2023		
Paul Washington	Market Director, Rocky Mountain Region, Jones Lang LaSalle, Inc.; Denver, Colorado	July 1, 2021		

⁽¹⁾ This Board member was elected as Chair of the Board effective March 28, 2019.

The Authority employs a staff of approximately 173 persons, including persons who have experience and responsibilities in the areas of finance, accounting, law, mortgage loan underwriting, loan servicing, housing development, market analysis, construction, marketing, government relations and asset management. The executive officers and select senior staff of the Authority are as follows:

Cris A. White, Executive Director and CEO, was appointed as Executive Director and CEO in March 2010, after serving as Chief Operating Officer since February 2002. Mr. White joined the staff in 1988 and served in various capacities until January 1996. He rejoined the staff in September of 1996 as the Director of Asset Management, after serving in the interim as a business development executive with an international equipment and real estate mortgage lender. Mr. White has a Bachelor's Degree in Business Administration from Regis University.

Jaime G. Gomez, Deputy Executive Director and Chief Operating Officer, joined the staff in August 1999. Prior to his appointment as Chief Operating Officer in March 2010, Mr. Gomez served as the Director of Commercial Lending following a corporate reorganization in July 2003 which merged the Authority's Business Finance and Rental Finance Divisions, forming the Commercial Lending Division (now referred to as the Community Development Division). Prior to that position, Mr. Gomez served as the Director of Business Finance. Mr. Gomez is a graduate of the University of Colorado with a degree in

⁽²⁾ This Board member was elected as Chair, pro tem, of the Board effective March 28, 2019.

⁽³⁾ This Board member was appointed as Secretary/Treasurer of the Board effective March 28, 2019.

⁽⁴⁾ This Board member serves for the legislative biennium and the position is appointed at the beginning of the regular legislative session held in odd-numbered years.

Finance. Mr. Gomez has prior experience working in both the public and private sector, including five-and-a-half years as director of finance and business development for the Colorado Office of Economic Development. Mr. Gomez was also designated as a certified bank examiner by the Federal Reserve Board of Governors in February of 1991. Mr. Gomez was appointed as Deputy Executive Director on January 31, 2017.

Charles K. Knight, General Counsel and Assistant Secretary, joined the staff in April 2016, following a nationwide search. Prior to joining the Authority, Mr. Knight served as the founder of Venture Law Advisors, LLC ("Venture") a law firm representing emerging growth companies. Prior to forming Venture, Mr. Knight served as President and Chief Executive Officer of AmeriVest Properties Inc., a publicly held real estate investment trust based in Denver, and held senior executive and legal positions with other public and private companies. Mr. Knight also served on the Board of Directors of the Authority from July 2011 through March 2016. Mr. Knight received a Bachelor's Degree in experimental psychology from the University of California at Santa Barbara and Master of Business Administration and Juris Doctor Degrees from the University of California at Los Angeles. The Authority maintains risk management, internal audit, information security and compliance functions under the direction of the General Counsel. On June 27, 2019, Mr. Knight announced his intention to step down as General Counsel and Assistant Secretary of the Authority effective August 16, 2019. The Authority intends to conduct a nationwide search and name a replacement as soon as is reasonably practical.

Charles L. Borgman, Interim General Counsel and Assistant Secretary, joined the Authority in September 2004 and served as General Counsel and Assistant Secretary until April 2016. On July 25, 2019, the Board of Directors of the Authority appointed Charles L. Borgman as Assistant Secretary effective August 5, 2019 and interim General Counsel effective August 17, 2019. Mr. Borgman will continue to serve in such capacities until a successor General Counsel and Assistant Secretary is appointed. Mr. Borgman is a graduate of the University of Iowa and the University of Iowa College of Law and has over 30 years' experience in private practice and as in-house counsel in the areas of real estate, mortgage finance, commercial transactions, title insurance, banking and work-outs. Mr. Borgman is currently Of Counsel with the law firm of Ireland Stapleton Pryor & Pascoe assisting developers, investors, lenders, housing authorities and nonprofits in the development, financing and operation of real estate projects, with an emphasis on affordable housing projects.

Thomas Bryan, Chief Financial Officer was appointed in May 2019 as Chief Financial Officer, following a nationwide search, after serving as Director of Accounting/Controller since February 2014. Prior to joining the Authority, Mr. Bryan served as the Controller for the City of Centennial, Colorado from 2010-2014 and as the Accounting Manager for the Town of Parker, Colorado from 2006 – 2010. He graduated with a Bachelor of Science degree in Business and Accounting from the University of Phoenix and earned his Master of Business Administration degree from DeVry University's Keller Graduate School of Management. Mr. Bryan is a Certified Public Accountant with an active license in the State of Colorado and has obtained the designation of Certified Public Funds Investment Manager through the Association of Public Treasurers of the United States and Canada.

Steve Johnson was appointed as Director of Community Development in July 2010. Mr. Johnson began working for the Authority in 1996 as a Business Finance Loan Officer. In 1999, he was promoted to Manager of Business Lending Production. Most recently, Mr. Johnson has led the Authority's small business team's efforts to diversify and expand the products available to help small businesses access capital. Mr. Johnson is the vice chair of the Colorado Enterprise Fund, and a board member of the Council of Development Finance Agencies (CDFA). He graduated from Hillsdale College in Michigan with a Bachelor of Arts degree in marketing and finance.

D. Brian Miller was appointed as Director of Asset Management in October 2006. Prior to his current position, Mr. Miller served as the Manager of Multifamily Loan Compliance Department, as well

as various other positions within the Asset Management Division since joining the Authority in November 1998. Mr. Miller has over fifteen years' experience in financial services and asset management. Mr. Miller is a graduate of the University of Northern Colorado with a Bachelor's Degree in Finance.

Dan McMahon was named Director of Home Finance on February 5, 2013 after serving as Interim Director of Home Finance since November 27, 2012. Mr. McMahon joined the Authority in March 2000 and most recently served as Manager of Home Finance Loan Production. Mr. McMahon received a Bachelor of Arts Degree and a Master's Degree in Non-Profit Management from Regis University in Denver, Colorado.

Employees and Pension Information

As of April 1, 2019, the Authority had approximately 169 full time and 4 part time employees, all of whom were members of the Public Employees' Retirement Association of Colorado ("PERA"). The Authority provides its employees with pension benefits through both a defined benefit and defined contribution pension plan as administered by PERA. State statutes required the Authority to contribute 12.68% of each participating employee's gross salary to PERA in 2018. In 2018, the Authority's PERA contribution totaled approximately \$2.1 million.

In accordance with generally accepted accounting principles, the Authority recognizes pension liabilities based on its proportionate share of the collective net pension liability of the PERA pension trust. The Authority has no legal obligation to fund any of PERA's unfunded pension liability beyond its required annual contribution to the trust nor does it have any ability to affect funding, benefit, or annual required contribution decisions made by PERA or the General Assembly. For more information with respect to the Authority's participation in PERA, see footnote (12) of the audited 2018 financial statements of the Authority, attached as **Appendix A**.

Insurance Coverage

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 insurance coverage.

Authority Financial Statements

The following are the Statement of Net Position at December 31, 2018 and Statement of Revenues, Expenses and Changes in Net Position for the year ended December 31, 2018, which are from the audited financial statements of the Authority for the year ended December 31, 2018 attached as Appendix A hereto. The audited financial statements of the Authority also provide certain financial information about the Authority on a fund accounting basis, including a description of its General Fund. See "Part I—INDEPENDENT AUDITORS." This information has been included solely for purposes of providing a general overview for potential purchasers of the financial status of the Authority given that the Authority operates the programs which result in the Loans securing Obligations under the Master Indenture and also services such Loans. See "Obligations of the Authority" and "The General Fund" under this caption. The 2019 Series B Bonds are limited obligations of the Authority secured by and payable only from the Trust Estate, except in the limited case of those Bonds and Derivative Products designated as general obligations of the Authority. The overall financial status of the Authority does not indicate and will not necessarily affect whether amounts will be available in the Trust Estate to pay principal and interest on 2019 Series B Bonds when due.

Colorado Housing and Finance Authority Combining Schedule—Statement of Net Position December 31, 2018 (in thousands of dollars)

Colorado Housing and Finance Authority Statement of Net Position

As of December 2018 and 2017

	2018	2017
Assets		
Current assets:		
Cash		
Restricted	\$ 117,566	\$ 112,42
Unrestricted	41,287	47,530
Investments (partially restricted, see note 2)	249,890	331,78
Loans receivable (partially restricted, see note 3)	33,666	34,10
Loans receivable held for sale	214,557	149,69
Other current assets	13,875	12,67
Total current assets	670,841	688,21
Noncurrent assets:		
Investments (partially restricted, see note 2)	575,045	372,70
Loans receivable, net (partially restricted, see note 3)	976,294	988,999
Capital assets, net	13,887	14,19
Other assets	52,999	35,25
Total noncurrent assets	1,618,225	1,411,158
Total assets	2,289,066	2,099,377
Deferred outflows of resources		
Accumulated increase in fair value of hedging derivatives	54,733	81,94
Pension and OPEB contributions and investment earnings	7,101	7,40
Refundings of debt	4,088	3,657
Total deferred outflows of resources	65,922	93,000
Liabilities		
Current liabilities:		
Short-term debt	237,500	92,78
Bonds payable	79,612	117,38
Notes payable	105	10-
Other current liabilities	134,081	161,927
Total current liabilities	451,298	372,19
Noncurrent liabilities:		
Bonds and notes payable	1,279,599	1,256,400
Derivative instruments	55,028	71,043
Hybrid instrument borrowing	16,059	21,113
Net pension and OPEB liability - proportionate share	31,646	32,53
Other liabilities	41,442	15,674
Total noncurrent liabilities	1,423,774	1,396,76
Total liabilities	1,875,072	1,768,96
Deferred inflows of resources		
Accumulated decrease in fair value of hedging derivatives	5,698	6,36
Pension and OPEB investment differences	6,728	49
Total deferred inflows of resources	12,426	6,410
Net position		
Investment in capital assets, net of related debt	2,789	2,80
Restricted primarily by bond indentures	158,709	160,81
Unrestricted	305,992	253,383
Total net position	\$ 467,490	\$ 417,000

See accompanying notes to basic financial statements.

Colorado Housing and Finance Authority Combining Schedule Statement of Revenues, Expenses and Changes in Net Position For the year ended December 31, 2018 (in thousands of dollars)

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

For the years ended December 2018 and 2017

(in thousands of dollars)

	2018		2017	
Interest income and expense:				
Interest on loans receivable	\$ 5	5,876	\$	55,777
Interest on investments	2	3,962		17,068
Interest on debt	(6	6,597)		(56,033)
Net interest income	1	3,241		16,812
Other operating income:				
Gain on sale of loans	8	3,817		106,788
Investment derivative activity gain		780		3,143
Net increase in the fair value of investments		3,093		5,950
Other revenues	4	1, <mark>151</mark>		41,110
Total other operating income	12	8,841		156,991
Total operating income	14	2,082		173,803
Operating expenses:				
Salaries and related benefits	2	6,211		27,515
General operating	6	1,870		92,395
Depreciation		1,038		684
Provision for loan losses		261		698
Total operating expenses	8	9,380		121,292
Net operating income	5	2,702		52,511
Nonoperating income and expenses:				
Federal grant receipts	14	0,231		137,126
Federal grant payments	(14	0,231)		(137,126
Gain (loss) on sale of capital assets		18		19
Total nonoperating income and expenses	18			19
Change in net position	5	2,720		52,530
Net position:				
Beginning of year	41	7,000		364,470
Restatement due to GASB 75	(2,230)		
End of year	\$ 46	7,490	\$	417,000

See accompanying notes to basic financial statements.

The General Fund

Generally. CERTAIN OBLIGATIONS UNDER THE MASTER INDENTURE HAVE BEEN OR MAY IN THE FUTURE BE DESIGNATED AS GENERAL OBLIGATIONS OF THE AUTHORITY. SEE "PART II—SECURITY FOR THE OBLIGATIONS" AND APPENDIX B—"OUTSTANDING MASTER INDENTURE OBLIGATIONS." THE FOLLOWING INFORMATION REGARDING THE AUTHORITY'S GENERAL FUND IS INTENDED TO PROVIDE A GENERAL OVERVIEW OF THE OVERALL FINANCIAL STATUS OF THE AUTHORITY. THE GENERAL CREDIT OF THE AUTHORITY IS NOT BEING PLEDGED FOR THE PAYMENT OF THE 2019 SERIES B BONDS.

The General Fund is funded principally from gains achieved by selling mortgage backed securities; servicing fees payable to the Authority in connection with outstanding loans; fee income, including administrative fees payable by the federal government in connection with the Section 8 (defined below) housing assistance payments program, loan fees payable to the Authority by borrowers and contract management administrative fees; income on investments and mortgage loans held temporarily (for warehousing purposes) and permanently in the General Fund; and reimbursement of administrative expenses and other allowable transfers from other funds (including the transfer of assets in excess of specified parity levels from other bond issues). Uses of amounts in the General Fund include payment of general and other administrative expenses and payment of costs relating to those activities deemed necessary to fulfill the Authority's corporate purposes and not payable from other funds of the Authority. The General Fund itself is *not* subject to any pledge created under the Master Indenture.

The Authority's Board, in its discretion, has historically from time to time designated portions of the General Fund unrestricted net position to particular purposes, and may do so in the future, which may affect the availability of the General Fund for payments in connection with any Bonds or Derivative Products which have been designated as general obligations. The designations have been or may be for particular uses by means of annual appropriations to certain programs, the establishment of reserves in limited situations and the imposition of restrictions on the fund balance. Designations by the Authority's Board using each of these means may also be redesignated at any time in the Board's discretion. The Authority's Board also annually designates certain amounts of the unrestricted net position of the General Fund (net of amounts previously appropriated or restricted for various funds, debt service reserves, or operating reserves) for the benefit of the holders of certain bonds of the Authority in the event that no other moneys are legally available for debt service payments. As long as the Authority is not in default under the related indenture or resolution for such bonds, the Board may withdraw such designations at any time. For more information with respect to the designated portion of the Authority's General Fund unrestricted net position, see footnote (11) of the audited 2018 financial statements, attached as **Appendix A**.

Financial Information for the General Fund. The following table sets forth historical selected financial information for the General Fund for the five years ended December 31, 2018 as provided by the Authority.

[Remainder of page left blank intentionally]

Colorado Housing and Finance Authority General Fund Selected Financial Information Years Ended December 31 (in thousands of dollars)

	FY 2018	FY 2017	FY 2016	FY 2015	FY 2014
Interest and investment revenue:					
Loans receivable	\$13,430	\$10,284	\$8,145	\$7,191	\$6,461
Investments	1,203	480	570	724	184
Net increase (decrease) fair					
value of long-term					
investments	(1,372)	1,170	(106)	(210)	(46)
Total interest and					
investment revenue	13,261	11,934	8,609	7,705	6,599
Interest expense - bonds and notes					
payable	4,463	<u>2,310</u>	<u>1,395</u>	<u>1,307</u>	<u>1,485</u>
Net interest and investment revenue	8,798	9,624	7,214	6,398	5,114
Other revenue (expense):					
Fees and miscellaneous					
income	124,979	$143,175^{(1)}$	115,973 ⁽¹⁾	$76,810^{(1)}$	46,032
Hedging activity loss	(3,479)	(100)	2,572	250	(1,154)
Gain on sales of capital assets	<u> 18</u>	<u> </u>	(702)		(20)
Total other revenue	121,518	143,094	117,843	77,060	44,858
Net revenue	130,316	152,718	125,057	83,458	49,972
Operating expenses:					
Salaries and related benefits	26,211	$27,515^{(2)}$	22,207	1,994	33,631
General operating	56,750	$87,895^{(3)}$	$87,094^{(3)}$	49,641 ⁽³⁾	23,059
Provision for losses	619	569	662	429	(1,180)
Other interest expense- RAP	=	=	-	-	-
Transfers	(9,275)	(11,988)	2,414	605	(1,851)
Depreciation	1,038	<u>684</u>	932	1,109	1,197
Total operating expense	75,343	104,675	113,309	53,778	54,856
Change in net assets	54,973	48,043	11,748	29,680	4,884
Restatement due to GASB 68				(16,653)	
Restatement due to GASB 75	(2.230)				
Net Assets, end of year	\$ <u>316,263</u>	\$ <u>263,520</u>	\$ <u>215,477</u>	\$ <u>203,729</u>	\$ <u>190,702</u>
Bonds and Notes Payable	\$ <u>256,060</u>	\$ <u>117,225</u>	\$ <u>90,286</u>	\$ <u>100,079</u>	\$ <u>87,105</u>
Total Assets	\$ <u>762,550</u>	\$ <u>527,298</u>	\$ <u>442,363</u>	\$ <u>410,179</u>	\$ <u>349,559</u>

⁽¹⁾ The substantial increase in fee income in fiscal years 2015, 2016 and 2017 was the result of increased loan production and mortgage-backed securities sales during those fiscal years.

Sources: Derived based on the audited financial statements of the Authority for years ended December 31, 2014-2018. See the audited 2018 financial statements attached as **Appendix A** hereto.

⁽²⁾ Includes the Authority's contributions to PERA. See footnote (12) to the audited financial statements of the Authority attached as **Appendix A** for more information regarding the Authority's participation in PERA.

⁽³⁾ The increase in general operating expenses for fiscal years 2015, 2016 and 2017 resulted from the Authority's launch of a grant program to fund expenses, including down payment assistance.

Authority Policy Regarding Swaps

The Master Indenture permits the Authority to enter into "Derivative Products," which include interest rate exchange or swap contracts, cash flow exchange contracts, forward swaps, interest rate floors, caps or collars and other derivative products. See **Appendix B** hereto and "Part II—SECURITY FOR THE OBLIGATIONS—Derivative Products." Under the Master Indenture, the Authority is also permitted to, and has entered into, certain derivative products which are described in footnote (8) of the audited 2018 financial statements of the Authority included in **Appendix A** hereto.

Programs to Date

The following is a brief summary of the programs currently operated by the Authority. This summary has been included solely for purposes of providing information about the Authority's activities to assist a potential investor in evaluating the Authority and its programs. Except as otherwise described herein, the loans referred to below are not pledged in any way as security for the 2019 Series B Bonds. See "Part II—SECURITY FOR THE OBLIGATIONS." See also "Obligations of the Authority" under this caption.

Commercial Loan Programs. The Authority's Community Development Division encompasses the Authority's Low Income Housing Tax Credit allocation unit, and the Community Development Lending team, which is comprised of the Multifamily Affordable Housing Lending ("**Multifamily Lending**") and Business Finance Lending programs.

Multifamily Lending Programs. The Multifamily Lending programs work toward providing financing to sponsors of affordable rental housing properties. 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 Section 542(c) of the Housing and Community Development Act of 1992, as amended (the "Risk-Share Program"), 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. These insured loans have been funded by the Authority as described in "Obligations of the Authority-Commercial Loan Programs" under this caption. In the case of a claim under the Risk-Share Program, the Authority is responsible to reimburse the U.S. Department of Housing and Urban Development ("HUD") for 50% of any loss incurred by HUD as a result of and after settlement of such claim. See "Obligations of the Authority-General Obligations—Loans Backed by Authority General Obligation" under this caption. The Indenture may include loans insured by the Federal Housing Administration ("FHA") under its Multifamily Accelerated Processing, which requires payment by FHA of not less than 90% for such programs as the programs authorized under Sections 221(d)(3), 221(d)4 and 223(f) of the National Housing Act of 1934, as amended. For certain information regarding the Authority's outstanding insured multifamily rental loans, see footnote (3) to the audited 2018 financial statements of the Authority attached as **Appendix A** hereto. See Appendix G-2 hereto for a description of the insured rental loans included in the Trust Estate for the Bonds (which will include the 2019 Series B Bonds).

The Authority also makes uninsured multifamily loans to § 501(c)(3) nonprofit corporations, public housing authorities, and for profit borrowers. The Authority has made certain multifamily rental loans to for profit borrowers in support of certain rental housing facilities at Fort Carson Army Base and at the United States Air Force Academy in Colorado Springs, Colorado.

Uninsured multifamily loans have also been made by the Authority using funds from amounts in its General Fund designated as the Housing Opportunity Fund ("HOF"); specifically, 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. All HOF loans must conform to standard Authority diligence processes and underwriting criteria, unless waived in accordance with the Authority's standard process, and will be secured by either first or second mortgages on real estate (maximum combined Loan to Value/Cost of 95% for non-profits and 90% for all others). Loan terms on HOF loans may range up to 40 years.

Under its Rental Acquisition Program, the Authority has in the past acquired and rehabilitated apartment buildings located throughout Colorado for rental to persons and families of low and moderate income. At the present time, the Authority does not own any facilities under this Program. The Authority may in the future seek opportunities to acquire other rental properties in underserved areas within the State of Colorado at such time as such transactions support the goals of the Authority with respect to affordable rental housing in Colorado.

Business Finance Programs. The Authority originates uninsured loans as part of its direct business loan programs, including the CHFA Direct Loan Program, the Non-Profit Real Estate Loan Program, the U.S. Small Business Administration 504 Program (the "SBA 504 Program"), the CHFA Rural Loan Program and the Rural Development Loan Program ("RDLP") described below. These business loans must meet certain economic development or job creation/retention objectives under the Act and are typically made to Colorado businesses to provide long-term, fixed rate financing for real estate and equipment. Generally, the uninsured direct business loans are secured by a first lien on the real estate or 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 30 years for real estate loans and seven years for equipment, and in the case of for-profit businesses, 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.

- Under the CHFA Direct Loan Program, the Authority provides loans to for profit businesses to acquire, construct and/or rehabilitate and equip commercial, retail or manufacturing facilities.
- Under the Non Profit Real Estate Loan Program, the Authority provides loans to non profit organizations to fund real estate acquisition.
- Under the SBA 504 Program, the Authority provides direct loans to for-profit businesses to finance owner-occupied real estate and/or equipment. The Program provides a direct loan option (where the Authority originates the first mortgage loan which generally finances 50% of the project costs). An SBA-approved Certified Development Company provides a second mortgage for up to 40% of the total project costs, with the Borrower providing the remaining 10% of the costs. The Authority may also fund an SBA-approved subordinate mortgage on a short-term basis in conjunction with its first mortgage lien. This structure may be necessary in instances when interim financing is not in place by the borrower. The Authority's subordinate mortgage loan is taken out by the SBA following the sale of the agency's debentures typically occurring within 45-60 days. The underwriting of these interim mortgages must conform to the Authority's small business loans underwriting criteria and program guidelines.

• RDLP was created through a partnership with the USDA Intermediary Relending Program to provide financing for community and economic development projects based in rural areas of Colorado. Rural communities are defined as those with populations of less than 25,000. Under the program, the Authority originates direct loans for small businesses to finance real estate, machinery, and equipment providing the borrower with a long term, fixed interest rate throughout the term of the loan. The maximum loan size is \$500,000.

Contract Management. The Authority provides contract management administration by serving as fund administrator to third party organizations whose activities align with its mission. The contracts range from overseeing programs that are designed to increase access to capital for small business lending to managing revolving loan funds and loan programs. The Authority's role may include registration of third party originated loans, underwriting loans on behalf of a funder, and/or closing and servicing responsibilities. In exchange for these services, the Authority earns a fee either through the collection of an administrative fee and/or spread income on loans serviced.

One of the contract management administration roles performed by the Authority is with HUD for the provision of Performance-Based Contract Administration ("PBCA") services under Section 8 of the United States Housing Act of 1937, as amended ("Section 8"). The Authority entered into an annual contribution contract ("ACC") with HUD in 2001 (the "Colorado ACC"), which was renewed until 2011. A solicitation issued by HUD at that time for PBCA services and subsequent actions were protested by numerous states and the protests were supported by the U.S. Government Accountability Office ("GAO"). The GAO determination was appealed by HUD and numerous suits and countersuits followed. In the meantime, the Colorado ACC has been extended until September 30, 2019, and the Authority has continued to perform the PBCA services and receive significant fees.

In May 2019, HUD notified the Authority that it was drafting contract amendments to the ACC which would position the contracts for the anticipated transition to Federal Acquisition Regulation compliant contract vehicles. The Authority was advised that the amendments would include: an 18 month extension until December 31, 2020, subject to the availability of appropriations; provisions for a 90-day transition period to accommodate the execution of new housing assistance payment support service contracts late in 2020, was well as an early termination clause; and a HUD option to extend the ACC for an additional 12 months as needed. Additional changes in compensation rates were also proposed.

Single Family Mortgage Program. Under the Authority's single-family mortgage programs (collectively, the "Single Family Mortgage Program"), the Authority may make mortgage loans for single-family residential dwellings directly to individual borrowers or may purchase such mortgage loans from qualified originating mortgage lenders.

Under its Qualified Single Family Mortgage Program, the Authority may make or purchase mortgage loans made to Eligible Borrowers meeting certain income limit requirements, for property meeting all applicable requirements under the Single Family Mortgage Program (each an "Eligible Property") not exceeding certain Purchase Price limits, and subject to certain other restrictions imposed, in some cases, by the Code. The Authority also requires Eligible Borrowers under its Non-Qualified Single Family Mortgage Program to meet certain income limits, among other applicable requirements under such program. Proceeds of a mortgage loan under the Non-Qualified Single Family Mortgage Program may also be used under the Authority's refinancing programs to refinance existing mortgage loans. In many other respects, the eligibility requirements for the Authority's Non-Qualified Single Family Mortgage Program are similar to the requirements for a Qualified Single Family Mortgage Program. For certain information regarding the outstanding mortgage loans acquired under the Single Family Mortgage Program, see footnote (3) to the audited 2018 financial statements of the Authority attached as Appendix A hereto.

A significant number of the Authority's single-family mortgage loans include down payment assistance in the form of grants or second mortgage loans to borrowers.

Obligations of the Authority

The following is a summary of certain obligations incurred by the Authority to provide funds for and otherwise operate the Authority and the programs described in "Programs to Date" under this caption. This summary has been included solely for purposes of providing information to assist a potential investor in evaluating the Authority's financial status. See also footnote (6) to the audited 2018 financial statements of the Authority included in **Appendix A** hereto.

Commercial Loan Programs. The Authority has financed multifamily rental loans with proceeds of its Federally Insured Multi-Family Housing Loan Program Pass-Through Revenue Bonds under a Master Indenture of Trust dated as of June 1, 2013 (the "Federally Insured Multifamily Housing Loan Program Master Indenture") by and between the Authority and The Bank of New York Mellon Trust Company, N.A., as trustee, outstanding as of April 1, 2019 in an aggregate principal amount of \$134,371,947. Since 2000, the Authority has financed rental and business loans, and participation interests representing the guaranteed portions of certain loans, with proceeds of its Multi-Family/Project Bonds under the Master Indenture which were outstanding as of April 1, 2019 in an aggregate principal amount of \$371,140,000. Certain of the Multi-Family/Project Bonds are secured by the full faith and credit of the Authority, as described in "General Obligations—Multi-Family/Project Bonds" under this caption.

Bonds secured by a pledge of loan revenues as well as bonds secured by loan revenues and the general obligation of the Authority have also been privately placed to institutional purchasers by the Authority in order to finance multifamily rental loans. See "General Obligations—Privately Placed Bonds" under this caption. See footnote (6) of the audited 2018 financial statements of the Authority included in **Appendix A** hereto for more information regarding these outstanding bonds and notes.

The Authority has also acted as a conduit issuer of bonds, including industrial development revenue bonds, to finance certain mortgage loans on behalf of housing developers and nonprofit 501(c)(3) entities and to finance manufacturing facilities and solid waste disposal facilities on behalf of companies. The Authority is only obligated to make payments on these conduit bonds to the extent it receives funds for that purpose from the conduit borrower or some other party, such as a third-party credit enhancer. As the Authority's credit is not part of these transactions, these conduit bonds are not reported as obligations of the Authority on its financial statements. See footnote (7) of the audited 2018 financial statements of the Authority included in **Appendix A** hereto.

Business loans and participation interests have also been financed by the Authority with the proceeds of the general obligation bonds described in "General Obligations—General Obligation Ratings" and privately placed bonds, secured by loan and participation revenues as well as the full faith and credit of the Authority. See "General Obligations—Privately Placed Bonds" under this caption.

Except for the Bonds outstanding under the Master Indenture, the revenue bonds described above and on the Authority's website are secured separately from and are not on parity with the 2019 Series B Bonds and are issued and secured under resolutions or indentures of the Authority other than the Master Indenture.

Single Family Mortgage Program. In connection with its Single Family Mortgage Program, the Authority has issued its Single Family Mortgage Bonds and Notes under a master indenture dated as of October 1, 2001 (the "**Single Family Master Indenture**"), payable from the revenues of mortgage loans held thereunder, outstanding as of April 1, 2019 in the aggregate principal amount of \$687,513,537.

In connection with its Single Family Mortgage Program, the Authority has also issued its Single Family Program Bonds (Homeownership Bonds) under a master indenture dated as of December 1, 2009 (the "**Homeownership Indenture**"), payable from the revenues of the mortgage loans held thereunder, outstanding as of April 1, 2019 in the aggregate principal amount of \$222,449,726.

The Authority's financing activities in connection with the Single Family Mortgage Program may also include the sale of certain single-family mortgage loans to Fannie Mae and Freddie Mac, and the issuance and/or sale of Fannie Mae Certificates, Freddie Mac Certificates and Ginnie Mae Certificates in order to finance certain first mortgage loans. See footnote (15) of the audited 2018 financial statements of the Authority attached as **Appendix A** hereto for a discussion of the Authority's obligation to advance funds to holders of such Ginnie Mae Certificates in the event of a defaulted mortgage loan and amounts so advanced in fiscal years 2017 and 2018. Proceeds of bonds under the Single Family Master Indenture may be used to finance second mortgage loans and/or down payment assistance grants relating to such first mortgage loans financed by and securing the Ginnie Mae Certificates, Fannie Mae Certificates or Freddie Mac Certificates.

For more detailed information concerning the outstanding bonds of the Authority issued in connection with its Single Family Mortgage Programs, see footnote (6) of the audited 2018 financial statements of the Authority attached as **Appendix A** hereto.

General Obligations. Many of the bonds and notes issued by the Authority to finance its programs are secured by a pledge of specific revenues, with an additional pledge of its full faith and credit, as described under this caption. Other obligations of the Authority entered in connection with its programs or its operations are not secured by specific revenues or assets other than the Authority's full faith and credit. The bonds, notes and other obligations which are general obligations of the Authority are described below.

Multi-Family/Project Bonds. The Authority has issued certain Class I Multi-Family/Project Bonds (outstanding as of April 1, 2019 in an aggregate principal amount of \$57,650,000) in order to finance certain rental and business loans which are payable not only from a senior lien on loan revenues under the Master Indenture but also as general obligations of the Authority. The Authority has also issued certain Class II Multi-Family Bonds (outstanding as of April 1, 2019 in an aggregate principal amount of \$17,145,000) in order to finance certain rental and business loans which are payable not only from a lien on loan revenues under the Master Indenture but also as general obligations of the Authority. These Class II Bonds are payable from loan revenues on a subordinate lien basis to the Class I Bonds.

Privately Placed Bonds. The Authority has issued general obligation bonds through private placements in order to finance multifamily rental loans. As of April 1, 2019, such privately placed bonds were outstanding in an aggregate principal amount of \$4,439,000.

Loans Backed by Authority General Obligation. The Authority has acquired or originated certain uninsured rental and business loans using proceeds of, and pledged to the repayment of, its Multi-Family/Project Bonds, outstanding as of April 1, 2019 in the aggregate principal amount of \$155,523,172. The Authority has pledged its full faith and credit to the payment of a substantial portion of such loans. The Authority has also assumed, as a general obligation, 50% risk of loss in the mortgage loans acquired by the Authority and insured by the FHA under the Risk-Share Program. As of April 1, 2019, such mortgage loans insured under the Risk-Share Program were outstanding in the amount of \$188,391,222 (\$54,044,011 held under the Master Indenture and \$134,347,211 held under the Federally Insured Multifamily Housing Loan Program Indenture).

In the case of a claim under the Risk-Share Program, the Authority is responsible, as a general obligation, to reimburse HUD for 50% of any loss incurred by the FHA as a result of and after the final settlement of such claim. See "Programs to Date—Commercial Loan Programs—Multifamily Lending

Programs" under this caption. The Authority has not incurred losses under the Risk-Share Program since 2014. Losses include the defaults on such insured mortgage loans, the foreclosure and sale of those projects and the settlement of the respective final insurance claims with HUD. Presently, the Authority has no risk-share loans in foreclosure.

Interest Rate Contracts; Derivative Products. The Authority has pledged its full faith and credit to secure its obligation to make termination payments under the Derivative Products relating to the Bonds under the Master Indenture and under the derivative products relating to the Single Family Bonds under the Single Family Master Indenture. See **Appendix B**—"OUTSTANDING MASTER INDENTURE OBLIGATIONS—Outstanding Derivative Products." See also "Authority Policy Regarding Swaps" under this caption and footnote (8) to the audited 2018 financial statements of the Authority attached as **Appendix A** hereto.

Other Borrowings. The Authority has entered into an agreement with the Federal Home Loan Bank of Topeka ("FHLB") for collateralized borrowings in an aggregate amount not to exceed the lending limit internally established by the FHLB, which is 40% of the Authority's total assets. Amounts drawn under this agreement bear interest at the same rates charged by the FHLB to its member banks and are collateralized by certain Mortgage Loans and investments. This line of credit is subject to annual renewal in November of each year. The Authority has also entered into an agreement with KeyBank National Association for an unsecured line of credit in an amount not to exceed \$150 million. Amounts drawn under this line of credit bear interest at a variable rate based upon the one-week or one-month LIBOR rate. This line of credit terminates on March 31, 2020. Amounts drawn under each of these agreements are used to support the Authority's various lending programs by purchasing loans pending the permanent financing of such loans and, with respect to amounts drawn under the FHLB agreement, for activities related to the Authority's volume cap preservation program. As of April 1, 2019, borrowings in the aggregate principal amount of \$211,900,000 were outstanding under these agreements. See footnote (5) to the audited 2018 financial statements of the Authority attached as Appendix A hereto.

The Authority also expects to enter into an agreement with an additional commercial bank for collateralized borrowings of up to \$40 million to support the Authority's single family loan production.

The Authority has also borrowed amounts evidenced by Rural Business Cooperative Service Notes (outstanding as of April 1, 2019 in the aggregate principal amount of \$862,751), which have been used to finance project or working capital loans or participations therein for small businesses in rural areas. The Authority has pledged its full faith and credit to the payment of such notes.

General Obligation Ratings. Moody's has assigned an "A1" rating and S&P has assigned an "A+" rating, both with a stable outlook, to the Authority's ability to repay its general obligation liabilities. The ratings have been assigned based on the Authority's management, financial performance and overall program performance. There is no assurance that any such rating will continue for any given period of time or that any such rating will not be revised downward or withdrawn entirely by Moody's or S&P, respectively, if, in the judgment of the issuing rating agency, circumstances so warrant.

Summary of Certain Authority Obligations. The following is a table which lists certain obligations of the Authority and sets forth the respective outstanding amount for such obligations as of April 1, 2019. Further detail regarding these items is provided under the other subcaptions of "Obligations of the Authority."

Summary of Certain Authority Obligations as of April 1, 2019

Certain Authority Obligations	Outstanding Amount (April 1, 2019)
Federally Insured Multi-Family Housing Loan Program Pass-Through	
Revenue Bonds (MF Pass-Through Indenture)	\$134,371,947
Multi-Family/Project Bonds (2000 Master Indenture) ⁽¹⁾	371,140,000
Single Family Program Bonds (Homeownership Indenture)	222,449,726
Single Family Mortgage Bonds (2001 Master Indenture)	687,513,537
Privately Placed Bonds:	4,439,000
Rental Finance	-0-
Business Finance	4,439,000

These Bonds include the Refunded Bonds but not the 2019 Series B Bonds.

[Remainder of page left blank intentionally]

The following table identifies the specific components of the Authority Obligations listed on the preceding table which are general obligations of the Authority as well as other general obligations of the Authority as of April 1, 2019. Further detail regarding these items is provided under the other subcaptions of "Obligations of the Authority."

General Obligations of the Authority as of April 1, 2019

General Obligations	Outstanding Amount (April 1, 2019)
Multi-Family/Project Bonds: Class I (with GO Pledge) Class II (with GO Pledge)	\$57,650,000 \$17,145,000
Privately Placed Bonds: Business Finance	\$4,439,000
Other Borrowings: Line of Credit Rural Business Cooperative Service Notes	\$211,900,000 862,751

[Remainder of page left blank intentionally]

SECURITY FOR THE OBLIGATIONS

Pledge of Trust Estate

All Obligations (which may be Bonds or Derivative Products) outstanding under the Master Indenture are secured by and payable from revenues, assets and moneys pledged for the payment thereof under the Master Indenture (the "Trust Estate"). The pledge and lien of the Master Indenture on the Trust Estate is created and established in the following order of priority: first, to secure the payment of the principal of and interest on the Class I Obligations; second, to secure the payment of the principal of and interest on the Class III Obligations; and fourth, to secure the payment of principal of and interest on the Class IV Obligations. Obligations may also be designated as General Obligations of the Authority. For a description of the Obligations presently outstanding under the Master Indenture, see Appendix B—"OUTSTANDING MASTER INDENTURE OBLIGATIONS." Notes and bonds heretofore or hereafter issued to provide funds for programs of the Authority (other than the Obligations under the Master Indenture) are and will be authorized and secured by resolutions and indentures of the Authority other than the Master Indenture, are not and will not be secured by the pledge of the Master Indenture and do not and will not rank on a parity with the Bonds. See "Part II—COLORADO HOUSING AND FINANCE AUTHORITY—Programs to Date."

Under the Master Indenture, the Trust Estate pledged to secure the Obligations includes:

- (i) the proceeds of Bonds issued under the Master Indenture;
- (ii) the Revenues (as described in "Revenues" under this caption) and all moneys and securities in the Funds and Accounts from time to time held by the Trustee under the terms of the Master Indenture (except moneys and securities in the Rebate Fund, the Excess Earnings Fund and a Bond Purchase Fund) and investments, if any, thereof (other than the Rebate Requirement which is to be deposited in the Rebate Fund and any Excess Earnings which are to be deposited in the Excess Earnings Fund);
- (iii) the rights and interests of the Authority in the Loans and the Financing Documents (except for certain rights and interest expressly retained by the Authority therein) described in "The Loans and Authority Projects" under this caption;
- (iv) the proceeds of mortgage insurance, guaranty benefits and other security related to Loans received by the Authority; and
- (v) all right, title and interest of the Authority in any Credit Enhancement Facility, Liquidity Facility, Derivative Product and Reciprocal Payments.

In no event shall the 2019 Series B Bonds constitute an obligation or liability of the State or any political subdivision thereof (except the Authority). The Authority has no taxing power nor does it have the power to pledge the general credit or the taxing power of the State or any political subdivision thereof (other than the general credit of the Authority, which general credit is not pledged for the payment of the Bonds except in the case of Bonds specifically designated as general obligations of the Authority).

Revenues

Under the Master Indenture, "Revenues" means (a) all Loan Repayments, Prepayments and, except insofar as such payments may constitute Servicing Fees, any penalty payments on account of overdue Loan Repayments, (b) payments to be made by the Authority for deposit to the Revenue Fund with respect to Authority Projects in accordance with the most recently filed Cash Flow Statement, (c) Investment Revenues, and (d) all other payments and receipts received by the Authority with respect to Loans. "Revenues" does <u>not</u> include (i) Servicing Fees, unless such fees are specifically pledged to the Trustee, or (ii) any commitment, reservation, extension, or application fees charged by the Authority in connection with a Loan, or (iii) accrued interest received in connection with the purchase of any Investment Securities, or (iv) amounts collected with respect to Loans representing housing assistance payments under any applicable agreement with the U.S. Department of Housing and Urban Development.

Pursuant to the Master Indenture, all Revenues related to each Series of Bonds, in addition to other amounts, are to be deposited into the subaccount of the Revenue Fund related to such Series of Bonds. On the last business day prior to each Bond Payment Date, the Trustee is required to make certain transfers of amounts from each Series subaccount of the Revenue Fund, to the extent moneys are available, to various Funds and Accounts in a certain priority, as provided in the Master Indenture. See **Appendix C**—"SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE—Revenue Fund—Allocation of Revenues from the Revenue Fund." Among these transfers, the Trustee is to deposit into: (i) the <u>related</u> subaccount of the related Class Special Redemption Account, the Loan Recycling Account (at the election of the Authority), or any combination of the two, the amount needed, if any, to ensure that the Class Asset Requirement for the related Series of Bonds will be met on such Bond Payment Date; and (ii) each <u>unrelated</u> subaccount of the related Class Special Redemption Account, on a proportionate basis with all such unrelated subaccounts, the amount of any deficiency resulting from the lack of moneys sufficient to make the deposit described in (i).

The Class Asset Requirements applicable to each Series of Bonds are set forth in each Related Series Indenture. See **Appendix D**—"CLASS ASSET REQUIREMENTS."

The Loans and Authority Projects

Master Indenture Requirements. The Trust Estate pledged under the Master Indenture to secure Obligations issued thereunder includes the rights and interests of the Authority in the Loans and the Financing Documents (except for certain rights and interests expressly retained by the Authority therein), and in the Authority Projects. Under the Master Indenture, "Loan" means a loan of money, including advances, in the form of a construction loan, a permanent loan or a combined construction and permanent loan made by the Authority to a Borrower with the proceeds of Bonds or obligations refunded by Bonds or with Prepayments for the financing of a portion of the costs of a Housing Facility or Project, which Loan is evidenced by a Note pursuant to a Loan Agreement. "Housing Facility" means a facility designed and financed for the primary purpose of providing dwelling accommodations in accordance with the Act. "Project" means a work or improvement located in the State designed to provide facilities for manufacturing, warehousing, commercial, recreational, hotel, office, research and development or other business purpose (not including a Housing Facility). "Financing Documents" include, with respect to any Loan, the Loan Agreement, the Note, the Mortgage and any insurance guaranties and other security for the repayment of the Loan. The Authority is permitted by the Master Indenture to apply the proceeds of Obligations issued under the Master Indenture to make or purchase (as Loans) mortgage loans which are insured or guaranteed by an agency or instrumentality of the United States under an insurance program such as the programs described in Appendix H—"FEDERAL INSURANCE PROGRAMS." The Authority is also permitted by the Master Indenture to apply the proceeds of Obligations issued under the Master Indenture to make or purchase (as Loans) uninsured mortgage loans made for housing facilities which are secured only by a mortgage on the related housing facilities or made for certain commercial Projects (as defined above). The Authority is also permitted by the Master Indenture to apply

proceeds to Bonds for the financing of a portion of the costs of an Authority Project. An "Authority Project" means a housing facility or other asset intended to be owned and operated by the Authority, or the financing and refinancing of designated expenditures and/or obligations of the Authority, or any combination thereof.

Outstanding Loans, Authority Projects and Fund Balances. For information concerning the Outstanding Loans, Authority Projects and Fund balances securing the Obligations issued now and hereafter under the Master Indenture, see Appendix G-2 hereto.

Debt Service Reserve Fund

Each Series Indenture establishes a subaccount of the Debt Service Reserve Fund for the related Series of Bonds. The Debt Service Reserve Fund Requirement for each Series of Bonds is established by the Related Series Indenture. See generally "Part I – CERTAIN PROGRAM ASSUMPTIONS—Debt Service Reserve Fund." The Debt Service Reserve Fund Requirement for any Series of Bonds is based on the maximum principal and interest due for a particular period on Loans related to a Series of Bonds and does not directly relate to the aggregate principal amount of such Bonds outstanding.

Amounts in the Debt Service Reserve Fund are to be transferred to the Debt Service Fund and applied by the Trustee to the payment of principal and interest on the Bonds issued under the Master Indenture, in order of Class, in the event that amounts on deposit in the Debt Service Fund for the Related Class are insufficient to make such payments on any Bond Payment Date. When making such payments, the Trustee is to transfer amounts first from the Series subaccount of the Debt Service Reserve Fund related to the Bonds for which the payment will be made and, second, from any unrelated Series subaccounts.

For further information with respect to the Debt Service Reserve Fund, see **Appendix C**—"SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE—Debt Service Reserve Fund."

Liquidity Facilities

Pursuant to the respective Series Indenture, the Authority has entered into, and expects in the future to enter into, Liquidity Facilities in connection with Adjustable Rate Bonds issued under the Master Indenture. See Appendix B—"OUTSTANDING MASTER INDENTURE OBLIGATIONS—Outstanding Liquidity Facilities" for a description of the outstanding Liquidity Facilities under the Master Indenture. The Authority may elect to replace any Liquidity Facility with an Alternate Liquidity Facility. The Authority shall promptly notify the Trustee, the Remarketing Agent with respect to the applicable series of the Adjustable Rate Bonds and the Paying Agent of the Authority's intention to deliver an Alternate Liquidity Facility at least 45 days prior to such delivery. Upon receipt of such notice, if the Alternate Liquidity Facility is to be provided by an entity other than the provider of a then current Liquidity Facility, the Trustee will promptly mail a notice of the anticipated delivery of an Alternate Liquidity Facility, including the name of the provider of such Alternate Liquidity Facility, by first-class mail (or transmitted in such other manner as may be customary for the industry as directed in writing by the Authority) to the related Remarketing Agent, and to each Owner of the Adjustable Rate Bonds at such Owner's registered address, at least 30 days prior to delivery of the Alternate Liquidity Facility.

Any Alternate Liquidity Facility must be an irrevocable letter of credit and related reimbursement agreement, line of credit, standby bond purchase agreement or similar agreement, providing for direct payments to or upon the order of the Paying Agent of amounts up to the principal of the Adjustable Rate Bonds when due upon purchase pursuant to a tender and the interest portion of the purchase price of the Adjustable Rate Bonds consisting of accrued interest for the number of days required by each Rating Agency then rating the Adjustable Rate Bonds in order to ensure that the rating of the Adjustable Rate

Bonds will not be adversely affected, as evidenced in writing from each such Rating Agency to the Trustee, at the Maximum Rate as defined in each Series Indenture.

An Alternate Liquidity Facility (along with the requisite favorable opinions of counsel) must be delivered to the Trustee no later than the applicable expiration date of the then-current Liquidity Facility.

Derivative Products

In connection with the issuance of certain Adjustable Rate Bonds, the Authority has entered, and expects in the future to enter, into interest rate swap agreements (the "Derivative Products") with a counterparty with respect to such Adjustable Rate Bonds. See "Part II—COLORADO HOUSING AND FINANCE AUTHORITY—Obligations of the Authority—General Obligations—Derivative Products; Interest Rate Contracts," "Part II—CERTAIN BONDOWNERS' RISKS—Risks Related to Derivative Products" and Appendix B—"OUTSTANDING MASTER INDENTURE OBLIGATIONS— Outstanding Derivative Products." Any payments or receipts received by the Authority under the Derivative Products will be pledged as Revenues, as described in Appendix C—"SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE—Authorization and Issuance of Bonds and Derivative Products." The Authority's obligation to make regular interest payments to the counterparty under each of the Derivative Products has constituted, and is expected in the future to constitute, a Class I Obligation under the Master Indenture, secured on parity with the lien on the Trust Estate of the other Class I Obligations, other than as indicated in **Appendix B** hereto. The Authority's obligation to make termination payments under each of the Derivative Products in the event of early termination, and in the future is expected to be, a general obligation of the Authority and not an Obligation under the Master Indenture. See "Part II—CERTAIN BONDOWNERS' RISKS—Risks Related to Derivative Products" and "Part II—COLORADO HOUSING AND FINANCE AUTHORITY—Obligations of the Authority —General Obligations."

Issuance of Additional Bonds

The Master Indenture permits the Authority to issue additional Bonds thereunder from time to time, without limitation as to amount, secured on an equal lien with the outstanding Bonds of the respective class, upon delivery of a Cash Flow Statement and satisfaction of certain other conditions. The Authority may not issue additional Bonds if such issuance would result in a lowering, suspension or withdrawal of the ratings then applicable to any Bonds issued under the Master Indenture. See **Appendix C**—"SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE—Issuance of Additional Bonds" and "—Issuance of Refunding Bonds." The Authority expects to issue additional Bonds in the future under the Master Indenture. See "Pledge of Trust Estate" under this caption. For a description of the Bonds presently outstanding under the Master Indenture, see **Appendix B**—"OUTSTANDING MASTER INDENTURE OBLIGATIONS—Outstanding Bonds."

CERTAIN BONDOWNERS' RISKS

Limited Security

The Bonds are special limited obligations of the Authority payable by Class priority and solely from the Trust Estate (except in the case of Bonds which have been specifically designated as general obligations of the Authority). See "Part II—SECURITY FOR THE OBLIGATIONS—Pledge of Trust Estate." There is no assurance that the Loans in or expected to be in the Trust Estate will perform in accordance with the assumptions made and that Revenues will be sufficient to pay debt service on the Bonds when due. See **Appendix C**—"SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE—Revenue Fund." Additional Obligations may be issued by the Authority under the Master Indenture on a parity with each Class of Bonds outstanding, upon satisfaction of certain conditions set forth in the Master Indenture.

Origination of New Loans

There are numerous reasons why the entire amount deposited to the subaccount of the Acquisition Account of the Program Fund for a particular Series of Bonds might not be used to originate new Loans as expected and within the required timeframes. Proceeds of a Series of Bonds and exchanged amounts relating thereto in the related subaccount of the Acquisition Account which have not been used to make new Loans or finance new Authority Projects must be used to redeem Bonds of such Series at par as set forth in Part I.

Considerations Regarding Redemption

A significant portion of the outstanding Loans are now subject to voluntary prepayment by the respective Borrowers at any time and, additionally, numerous loans will become subject to voluntary prepayment by the Borrowers prior to the optional redemption date. Voluntary prepayments may result from a refinancing provided by any source, including the Authority. Involuntary prepayments may also be made on the Loans as a result of damage or destruction of the housing facilities, or acceleration or sale of a Loan in the event of a Borrower default. Any Loan or Authority Project is also subject without restriction to voluntary sale, assignment or other disposition.

PURSUANT TO THE SPECIAL REDEMPTION PROVISIONS OF THE INDENTURE, EXCEPT AS OTHERWISE PROVIDED IN THE RELATED SERIES INDENTURE, THE BONDS MAY BE REDEEMED PRIOR TO THEIR STATED MATURITY FROM ANY MONEYS AND/OR INVESTMENT SECURITIES ON DEPOSIT IN THE RESPECTIVE ACCOUNTS OF THE REDEMPTION FUND, INCLUDING UNEXPENDED BOND PROCEEDS, EXCESS REVENUES FROM REGULAR LOAN PAYMENTS, VOLUNTARY OR INVOLUNTARY PREPAYMENTS AND AMOUNTS DEPOSITED AS A RESULT OF ANY OTHER EVENT AS DESCRIBED HEREIN. THE TIME OR RATE OF SUCH PREPAYMENTS OR DEPOSITS CANNOT BE PREDICTED. However, it is assumed that a substantial portion of each Series of Bonds subject to such special redemption under the Indenture will be redeemed prior to their respective stated maturities at a redemption price equal to the principal amount of such Series of Bonds to be redeemed, without premium (except in limited circumstances). The 2019 Series B Bonds are subject to redemption as described in "Part I—TERMS OF THE 2019 SERIES B BONDS—Prior Redemption."

Loan Insurance Redemption Considerations

Conversion of the 2019B Loan to a permanent 2019B Loan requires endorsement by HUD for Risk-Share Insurance. The Authority must, in accordance with HUD regulations, submit a closing docket with required documentation, including certain representations and certificates, to HUD for approval.

HUD will provide such endorsement only after review of the closing docket and other materials and its determination that all required documentation has been submitted. If the 2019B Project is not completed or the closing docket does not otherwise comply with HUD's requirements for endorsement, the 2019B Loan will not be endorsed by HUD as a permanent loan for Risk-Share Insurance and Conversion will not occur. If a Conversion does not occur by a date which is 24 months following the closing of the 2019B Loan (or such later date to which the Authority may consent in writing), or if the 2019B Borrower does not make deposits to the Revenue Fund to pay interest on the 2019B Loan at the times and in the amounts required by the Loan Agreement the 2019 Series B Bonds will become subject to redemption as described in "Part I—TERMS OF THE 2019 SERIES B BONDS—Prior Redemption." See also **Appendix G-1**—"CERTAIN INFORMATION REGARDING THE 2019B LOAN."

Tax Exempt Status of Tax-Exempt Bonds

Any opinion to be delivered by Bond Counsel concurrently with delivery of any tax-exempt Bonds will assume compliance by the Authority with certain requirements of the Tax Code that must be met subsequent to the issuance of such Bonds. The Authority will certify, represent and covenant to comply with such requirements. Failure to comply with such requirements could cause the interest on the tax-exempt Bonds to be included in gross income, or could otherwise adversely affect such opinions, retroactive to the date of issuance of such Bonds. Furthermore, the opinion of Bond Counsel is rendered as of the date of delivery of the particular Series of Bonds and speaks only to laws in effect as of such date. Amendments to federal and state tax laws are proposed from time to time and could be enacted in the future. There can be no assurance that any such future amendments will not adversely affect the value of such Series of Bonds, the exclusion of interest on the tax-exempt Bonds from gross income, alternative minimum taxable income, state taxable income, or any combination from the date of issuance of the particular Series of Bonds or any other date, or that such changes will not result in other adverse federal or state tax consequences.

Conditions to Payment of FHA Insurance

The failure to maintain adequate casualty insurance on any Housing Facility insured under an FHA program may result in the loss of FHA mortgage insurance benefits in the event of damage to or destruction of such Project. FHA mortgage insurance benefits may also be impaired as a result of the failure to pay required mortgage insurance premiums to the FHA and failure of the mortgage to provide the FHA on a timely basis with required notice. As described in **Appendix H**—"FEDERAL INSURANCE PROGRAMS," the mortgagee is responsible for servicing the Loans and the maintenance of the FHA mortgage insurance in connection with insured Loans under the Multi-Family Housing Facility Loan Program. See "Part II—COLORADO HOUSING AND FINANCE AUTHORITY—Programs to Date."

Risks Related to Derivative Products

Each of the Derivative Products exposes the Authority to certain risks including, but not limited to, the risk that payments received by the Authority from the applicable counterparty could be substantially less than the floating rate interest payments due on the related Series of Bonds. Pursuant to each of the Derivative Products, the Authority will pay interest to the counterparty at a fixed rate and will receive interest from the counterparty at a variable rate which will be based on a LIBOR or SIFMA Index. To the extent counterparty payments are based on a LIBOR or SIFMA Index, the amount of actual interest payments due on the respective Adjustable Rate Bonds may differ from the amount of such interest payments to be made by the counterparty and the Trust Estate may not be sufficient to pay interest as due.

The payment obligations of the Authority under the Derivative Products do not remove the obligations of the Authority to pay interest on the related Series of Bonds from the Trust Estate. A

negative change to the financial position of any of the counterparties (including bankruptcy or insolvency) at any time may negatively impact payments to the Authority pursuant to the applicable Interest Rate Contract to an extent that cannot be determined. In addition, each Interest Rate Contract is subject to termination upon the occurrence of certain events, and no assurance can be given that the Derivative Products, or any of them, will continue to be in effect. The Owners of the Bonds do not have any rights under any Interest Rate Contract or against any counterparty. See "Part II—SECURITY FOR THE OBLIGATIONS—Derivative Products" and **Appendix B**—"OUTSTANDING MASTER INDENTURE OBLIGATIONS—Outstanding Derivative Products." See also footnote (8) to the audited 2018 financial statements of the Authority for a description of certain further risks associated with the Derivative Products.

Risks Related to Liquidity Facility Providers and Liquidity Facilities

Creditworthiness of the Liquidity Facility Providers. The short-term credit ratings of the Adjustable Rate Bonds under the Master Indenture are based on the issuance of the respective Liquidity Facilities relating to such Adjustable Rate Bonds. Such ratings are based solely on the general credit of the respective Liquidity Facility Provider. Any downgrade in the ratings of the related Liquidity Facility Provider may impact the interest rate of the related Adjustable Rate Bonds.

Each Liquidity Facility provides the Trustee with the liquidity support necessary to purchase the applicable Adjustable Rate Bonds deemed tendered for purchase as described in the related Series Indenture. If remarketing proceeds are not sufficient to provide funds sufficient to pay the purchase price of tendered Adjustable Rate Bonds, the Trustee is required to draw funds under the applicable Liquidity Facility. The ability of the respective Liquidity Facility Provider to honor such drawings may be adversely affected by its financial condition at the time of such draws. No assurance is given as to the current or future financial condition of any Liquidity Facility Provider or the financial condition of any entity with which any Liquidity Facility Provider may merge or by which it may be acquired. For more information about the Liquidity Facility Providers and Outstanding Liquidity Facilities, see **Appendix B**—"OUTSTANDING MASTER INDENTURE OBLIGATIONS—Outstanding Liquidity Facilities." If a Liquidity Facility Provider becomes insolvent or otherwise becomes a debtor in bankruptcy, timely payment of the purchase price of related Adjustable Rate Bonds subject to tender for purchase might depend entirely on the sufficiency of the Trust Estate to pay such amounts.

Inability to Obtain Substitute Liquidity Facility. Each Liquidity Facility expires on a particular date which is much earlier than the maturity dates of the related Adjustable Rate Bonds. See Appendix B hereto. No assurances can be given that the Authority will be able to extend any of the Liquidity Facilities or obtain a Substitute Liquidity Facility with respect to any series of Adjustable Rate Bonds upon the terms required by the respective Series Indenture until and including the final maturity dates of such Adjustable Rate Bonds or until the interest rate on such Adjustable Rate Bonds is converted to a Fixed Rate. Failure to extend a Liquidity Facility or obtain a Substitute Liquidity Facility will result in a mandatory purchase of the related Adjustable Rate Bonds prior to maturity at a price of par. The mandatory purchase of such Adjustable Rate Bonds on such a mandatory bond purchase date may not be waived. As a result, related Adjustable Rate Bonds subject to such mandatory purchase will become Bank Bonds under the Master Indenture. See "Increased Costs Associated with Bank Bonds" under this caption.

Increased Costs Associated with Bank Bonds. Pursuant to the Liquidity Facilities, certain unpaid fees will bear interest at the "Default Rate" and Bank Bonds will bear interest at a rate as set forth in the related Liquidity Facilities. Those interest rates can be substantially higher than the variable rate that otherwise would apply to the calculation of interest on the Adjustable Rate Bonds; any increase in those interest rates increases the amount of interest payable by the Trust Estate under the Master Indenture and may affect its sufficiency to pay the Bonds. These outstanding Bank Bonds bear interest at rates substantially higher than the variable rate that would otherwise apply and, in connection with several

Series, principal and interest on such Bank Bonds will be payable under the accelerated amortization provisions of the related Liquidity Facility. Payments of interest and regularly scheduled principal, and such principal as may be redeemed prior to regularly scheduled payment dates, on such Bank Bonds are on parity with the lien of the related Adjustable Rate Bonds which have been purchased. Principal payments due on the Bank Bonds following any acceleration by the Liquidity Facility Provider will be Class III Obligations and constitute general obligations of the Authority. See "Inability to Obtain Substitute Liquidity Facility" under this caption.

Information Security and Privacy Risks

The Authority relies on a complex technology environment to conduct its operations. As a recipient and provider of personal, private and sensitive information, the Authority faces multiple cyber threats including, but not limited to, hacking, viruses, malware and other attacks on computers and other sensitive digital networks and systems. The Authority maintains an Information Security Plan and Incident Response Policy and Plan which are reviewed regularly and when necessary due to regulatory or legislative changes. Additionally the Authority regularly tests its Information Security Plan and reports on testing results to the Authority's Board of Directors. The Authority conducts regular information security and privacy awareness training that is mandatory for all Authority staff and regularly conducts phishing campaigns and penetration tests of its cybersecurity systems and infrastructure. No assurances can be given that the Authority's security and operational control measures will be successful in guarding against any and each cyber threat and attack. The results of any attack on the Authority's computer and information technology systems could impact its operations for an unknown period of time, damage the Authority's digital networks and systems, and damage the Authority's reputation, financial performance, and customer or vendor relationships. Such an attack could also result in litigation or regulatory investigations or actions, including regulatory actions by state and federal governmental authorities. The costs of remedying any such damage could be substantial and such damage to the Authority's reputation and relationships could adversely affect the Authority's ability to make loans and issue Bonds in the future.

Expiration of HAP Contracts

A portion of the insured and uninsured rental loans pledged to secure Obligations under the Master Indenture are secured in part by housing assistance payments ("HAP") contracts with terms expiring prior to expiration of the related insured and uninsured rental loan. Generally, these HAP contracts are renewals of previous HAP contracts, in some cases after "mark-to-market" mortgage restructurings, pursuant to the Multifamily Assisted Housing Reform and Affordability Act of 1997, as amended. The insured and uninsured rental loans typically require borrowers to renew the respective HAP contract for the longer of the minimum period that the related project is subject to low-income occupancy and rent restrictions under the CHFA Regulatory Agreement (15 or 20 years) or the period the insured or uninsured rental loan is outstanding. There is no assurance that such renewals will be provided by HUD, as they are subject, among other things, to the availability of Congressional appropriations. The failure or inability to renew the HAP contracts could adversely affect the sufficiency of revenues available to the development owners to make required payments on their loans, which loan payments are pledged under the Master Indenture for payment of the Bonds outstanding thereunder or increase the level of prepayments. See "Considerations Regarding Redemption" under this caption. For more information regarding the Section 8 Subsidy Program as it applies to the Loans securing the Bonds, see Appendix I hereto.

Enforcement of Regulatory Agreements

The CHFA Regulatory Agreements allow for enforcement by declaration of default under the Loans and an acceleration of the Loans at the discretion of the Authority. Such acceleration may, under certain circumstances, require HUD consent. Despite the authority granted under the Loan documents, it

may not be feasible to accelerate the debt evidenced by the Loans for a covenant default relating to the Projects, including a tax-related covenant default. There is no provision in the Bonds or the Indenture for an acceleration of the indebtedness evidenced by the Bonds or payment of additional interest in the event interest on the Bonds were declared taxable, and the Authority will not be liable under the Bonds or the Indenture for any such payment on the Bonds whatsoever.

(End of Part II)



APPENDIX A

ANNUAL FINANCIAL REPORT (WITH INDEPENDENT AUDITORS' REPORT THEREON) DECEMBER 31, 2018 AND 2017



homeownership



rental housing



business finance



colorado housing and finance authority

annual financial report

December 31, 2018 and 2017



COLORADO HOUSING AND FINANCE AUTHORITY – Annual Financial Report

Table of Contents

	Page(s)	
	i age(3)	
EXECUTIVE LETTER (Unaudited)	1 – 3	
INDEPENDENT AUDITOR'S REPORT	4 – 6	
MANAGEMENT'S DISCUSSION AND ANALYSIS (Unaudited)	7 – 18	
BASIC FINANCIAL STATEMENTS	19 – 23	
Statement of Net Position Statement of Revenues, Expenses and Changes in Net Position Statement of Cash Flows	20 21 22 – 23	
NOTES TO BASIC FINANCIAL STATEMENTS	24 – 76	
REQUIRED SUPPLEMENTAL INFORMATION (Unaudited)	77 – 79	
Schedules of Selected Pension Information Schedules of Selected OPEB Information	78 79	
SUPPLEMENTAL INFORMATION	80 – 89	
 Combining Schedule – Statement of Net Position Combining Schedule – Statement of Revenues, Expenses and Changes in Net Position 	81 82	
 Combining Schedule – Statement of Cash Flows Schedule of Adjusted Net Worth Schedule of Other Assets Liquid Asset Requirement Calculation for Issuers Capital Requirement Calculation for Issuer Schedule of Insurance Requirement 	83 – 84 85 86 87 88 89	
HUD REPORTING	90 – 94	
Independent Auditor's Report on Compliance With Requirements That Could Have a Direct and Material Effect on Each Major HUD Program and on Internal Control Over Compliance Based on an Audit in Accordance With the HUD Consolidated Audit Guide	91 – 92	
Independent Auditor's 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	93 – 94	





Message from Cris White, Executive Director and CEO March 28, 2019

CHFA was proud to invest \$2.4 billion into our mission in 2018. This investment supported affordable housing and community development throughout Colorado, as detailed below, and was estimated to spur \$4.2 billion in economic activity statewide.

Overall in 2018, CHFA supported:

- 8,355 Colorado households in obtaining home purchase loans, mortgage refinance loans, or mortgage credit certificates;
- the development or preservation of 40 affordable rental housing projects, supporting a total of 5,136 rental housing units; and
- 748 businesses and nonprofits with our capital access and business finance programs, which combined supported 4,287 jobs.

Homeownership

CHFA invested \$2.1 billion in first mortgage home loans in 2018, setting a record for highest annual production. Additionally, enrollment in statewide CHFA-sponsored homebuyer education classes remained strong with 13,022 households served. The need for CHFA's programs that promote responsible, affordable homeownership is apparent. The median single-family home price in Colorado was \$365,000, representing a 56 percent increase compared to five years ago. The median loan amount of CHFA homeownership customers was \$257,050.

Rental housing

CHFA invested \$277.2 million in multifamily loans and awarded \$42.9 million in federal and state Low Income Housing Tax Credits to support the development or preservation of affordable rental housing properties. This will result in the development or preservation of 5,136 units throughout Colorado. Affordable rental housing continues to be a much-needed option in communities statewide. Colorado's median rent remains high at \$1,381, while 50 percent of all Colorado renters are housing cost-burdened, paying more than 30 percent of their household income towards rent.

Business finance

To support businesses and nonprofits throughout Colorado, CHFA invested \$48.9 million through our business finance programs. CHFA-administered programs that provide access to capital, the Cash Collateral Support (CCS) and Colorado Credit Reserve (CCR) programs, both strengthened businesses statewide last year. CCS leveraged \$18.9 million in private-sector financing and CCR leveraged \$20.3 million.

Community Impact Fund

To help CHFA achieve its mission, our Community Impact Fund (CIF) remained an important resource. The total available CIF cash balance at the end of 2018 was \$48.2 million. During the year, \$76.5 million was contributed to the fund and \$79.7 million was deployed to homeownership and rental housing programs, which supported 4,900 single family borrowers and the development or preservation of 492 affordable rental housing units. In addition, \$8.8 million in CIF funding has been committed to support future projects. CIF has become an established, flexible source of funding that gives CHFA unique opportunities to further our investment in our mission.

CHFA's investment into our mission manifests in the lives of those we serve—homeowners, renters, business owners, and Colorado's workforce—and we continue to work towards ways to strengthen Colorado in the years to come.

Cris A. White

Executive Director and CEO

Cis a. white











RSM US LLP

Independent Auditor's Report

The Board of Directors
Colorado Housing and Finance Authority

Report on the Financial Statements

We have audited the accompanying financial statements of Colorado Housing and Finance Authority (the Authority) as of and for the years ended December 31, 2018 and 2017, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes 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.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with 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. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements 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 entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the Colorado Housing and Finance Authority as of December 31, 2018 and 2017, 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.

Emphasis of a Matter—Adoption of a Standard

As explained in Note 1 to the financial statements, the Authority adopted Governmental Accounting Standards Board (GASB) Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions (OPEB)*, which resulted in the Authority restating net position for recognition of the Authority's OPEB-related activity incurred prior to January 1, 2018. Our opinion is not modified with respect to this matter.

Other Matters

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 OPEB information, as listed in the table of contents, be presented to supplement the basic financial statements. Such information, 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 auditing standards generally accepted in the United States of America, 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 and Other 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 executive letter and the supplementary information, as listed in the table of contents, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The supplementary 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. Such 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 auditing standards generally accepted in the United States of America. In our opinion, the supplementary information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The executive letter has not been subjected to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated March 28, 2019, 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, and 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 28, 2019







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, 2018 and 2017. 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) Statement No. 34, Basic Financial Statements – and Management's Discussion and Analysis – for State and Local Governments.

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 or are guaranteed by the United States Department of Agriculture Rural Development or the Veterans Administration.

The Authority also participates in the Federal National Mortgage Association (Fannie Mae) Mortgage Backed Securities (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 mortgage-backed securities (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.



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 the 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 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 or "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 limits. 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. Proceeds of a mortgage loan under the Non-Qualified Single Family Mortgage Program can be used under the Authority's refinancing programs to refinance existing Mortgage Loans.

Multifamily Lending Programs – The Multifamily Lending programs provide financing to sponsors of affordable rental housing properties. 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 Program, the Rural Loan Program, the Rural Development Loan Program (RDLP) 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.



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 2018 financial report.

Condensed Summary of Net Position

(in thousands of dollars)

As of December 31,	2018	2017	2016
Assets			
Cash	\$ 158,853	\$ 159,957	\$ 161,081
Investments	824,935	704,495	537,674
Loans receivable, net	1,009,960	1,023,103	1,039,324
Loans receivable held for sale	214,557	149,694	128,425
Capital assets, net	13,887	14,194	4,441
Other assets	66,874	47,934	58,317
Total assets	2,289,066	2,099,377	1,929,262
Deferred outflows of resources			
Accumulated increase in fair value of hedging derivatives	54,733	81,942	95,952
Pension and OPEB contributions and investment earnings	7,101	7,404	6,507
Refundings of debt	4,088	3,657	5,741
Total deferred outflows of resources	65,922	93,003	108,200
Liabilities			
Bonds, notes payable and short-term debt	1,596,816	1,466,672	1,340,147
Derivative instruments and related borrowings	71,087	92,156	118,072
Net pension and OPEB liability - proportionate share	31,646	32,535	25,185
Other liabilities	175,523	177,601	184,462
Total liabilities	1,875,072	1,768,964	1,667,866
Deferred inflows of resources			
Accumulated decrease in fair value of hedging derivatives	5,698	6,367	4,830
Pension and OPEB investment differences	6,728	49	296
Total deferred inflows of resources	12,426	6,416	5,126
Net position			
Investment in capital assets, net of related debt	2,789	2,800	4,441
Restricted primarily by bond indentures	158,709	160,817	155,022
Unrestricted	 305,992	 253,383	 205,007
Total net position	\$ 467,490	\$ 417,000	\$ 364,470

chfa.

Management's Discussion and Analysis (unaudited)

Statement of Net Position

Total investments comprise 36.0% of the Authority's total assets. Total investments as of December 31, 2018 were \$824.9 million, an increase of \$120.4 million, or 17.1%, compared to the amount outstanding as of December 31, 2017. This increase was primarily the result of the Authority retaining Mortgage-backed Securities (MBS) as investments on its balance sheet, as opposed to selling these in the secondary market at a premium. These new MBS were pledged as collateral for bonds issued by the Authority during the year.

In 2017, investments increased \$166.8 million, or 31.0% when compared to 2016. This increase was primarily the result of the Authority retaining Mortgage-backed Securities (MBS) as investments on its balance sheet, as opposed to selling these in the secondary market at a premium. These new MBS 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, make up 53.5% of the Authority's total assets, and represents the Authority's largest asset class. These loan balances as of December 31, 2018 were \$1.2 billion; an increase of \$51.7 million, or 4.4%, compared to the amount outstanding as of December 31, 2017. This increase over the prior year was the result of larger Loans Held for Sale balances reported at year-end. During 2018 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 2018, \$1.4 billion in loans were sold in the to-beannounced (TBA) market through the issuance and sale of Ginnie Mae securities, of which \$402.9 million were placed into taxable and tax-exempt MBS-backed bond structures. Loans totaling \$613.3 million were either pooled and swapped for Fannie Mae mortgage backed securities and sold for a premium, or sold directly to Fannie Mae. Additionally, \$43.9 million in loans were sold directly to Freddie Mac.

In 2017, net loans receivable decreased by \$16.2 million, or 1.6% when compared to 2016. This was the result of loan repayments occurring without a corresponding increase in new whole loans retained, as the Authority continued in 2017 to sell the majority of its single family loan production through the TBA market.

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)	2018	2017	2016
GNMA - securities sold	\$3,595,005	\$ 2,728,478	\$ 1,918,340
FNMA - loans and securities sold	1,285,042	810,904	539,041
FHLMC - loans sold	117,370	86,743	25,732
Balance sheet loans (single family/multifamily/business)	1,229,927	1,178,672	1,174,131
Total Servicing Portfolio	\$6,227,344	\$ 4,804,797	\$ 3,657,244

Total loan portfolio delinquencies improved in 2018 when compared to the prior year. Overall, total single family past due loans decreased from 8.7% in 2017, to 7.6% in 2018. The Authority saw a similar trend in the multifamily program during the same period. However, delinquencies in the Business Finance portfolio increased due to one loan within the portfolio falling



into the 30 days delinquent category. The Authority's Asset Management team is actively working with the borrower to resolve the issue.

The delinquency figures represented below are calculated using industry best practices and are reported on the Authority's entire servicing portfolio, including loans that were sold, but the mortgage servicing rights were 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.

Single Family Portfolio Delinquency	2018	2017	2016
Current	92.5%	91.3%	90.1%
30 day	4.5%	4.9%	5.2%
60 day	1.1%	1.4%	1.4%
90 day	1.4%	1.3%	1.9%
Foreclosure	0.5%	1.1%	1.4%
Total past due	7.5%	8.7%	9.9%

Multifamily Portfolio Delinquency	2018	2017	2016
Current	99.4%	99.2%	98.9%
30 Day	0.5%	0.0%	1.1%
60 Day	0.0%	0.8%	0.0%
90 Day	0.1%	0.0%	0.0%
Foreclosure	0.0%	0.0%	0.0%
Total past due	0.6%	0.8%	1.1%

Business Finance Portfolio Delinquency	2018	2017	2016
Current	86.7%	98.1%	98.3%
30 Day	13.3%	0.6%	1.1%
60 Day	0.0%	1.3%	0.6%
90 Day	0.0%	0.0%	0.0%
Foreclosure	0.0%	0.0%	0.0%
Total past due	13.3%	1.9%	1.7%

Total deferred outflows as of December 31, 2018 were \$65.9 million, a decrease of \$27.1 million, or 29.1%, compared to the amount outstanding as of December 31, 2017. Deferred outflows for 2017 decreased \$15.2 million, or 14.0%, from those reported in 2016. These decreases were primarily the result of increases in market interest rates.

chfa.

Management's Discussion and Analysis (unaudited)

As of December 31, 2018, bonds, notes payable and short-term debt were \$1.6 billion, an increase of \$130.1 million, or 8.9%, compared to the balance at December 31, 2017. This increase is a direct result of several 2018 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 2018 occurred as follows:

- On February 2, 2018, the Authority issued \$73.1 million in tax-exempt Homeownership Class I Series 2018-AA
 Bonds to fund the acquisition of single family loans securitized as Ginnie Mae MBS and to refund certain
 Homeownership Bonds.
- On March 28, 2018, the Authority issued \$88.2 million in federally taxable Multifamily Project Class I Series 2018-A Bonds to refund certain Multifamily Project Bonds.
- On May 9, 2018, the Authority issued \$87.0 million in tax-exempt Single Family Mortgage Class I and Class II Series 2018-A & B Bonds to fund the acquisition of single family loans securitized as Ginnie Mae MBS and to refund certain Single Family Mortgage Bonds.
- On August 15, 2018, the Authority issued \$95.0 million in tax-exempt Single Family Mortgage Class I Series 2018-C Bonds to fund the acquisition of single family loans securitized as Ginnie Mae MBS.
- On September 26, 2018, the Authority issued \$38.0 million in taxable Single Family Mortgage Class I Series 2019-D Bonds to refund certain Single Family Mortgage Bonds.
- On October 31, 2018, the Authority issued \$89.5 million in Homeownership Class I Series 2018-BB Bonds to fund the acquisition of single family loans securitized as Ginnie Mae MBS.
- On October 31, 2018, the Authority reissued \$40.0 million of outstanding bonds under new credit support facilities.

During 2017, total liabilities increased \$101.1 million, or 6.1%, over the prior year. Bonds, notes payable and short-term debt increased \$126.5 million, or 9.4% over 2016, primarily due to the issuance of new Single Family and Multi-Family program bonds. Also in 2017, derivative instruments and related borrowings decreased \$25.9 million, or 21.9%, from the prior year due to an increase in market interest rates and a reduction in termination values.

The Authority's net position as of December 31, 2018 was \$467.5 million, an increase of \$50.5 million, or 12.1%, compared to the balance at December 31, 2017. Net position as a percent of total assets increased from 19.9% as of December 31, 2017 to 20.4% as of December 31, 2018.



Management's Discussion and Analysis (unaudited)

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

For the years ended December 31,		2018	2017	2016		
Interest income and expense:						
Interest on loans receivable	\$	55,876	\$ 55,777	\$	63,648	
Interest on investments		23,962	17,068		14,472	
Interest on debt		(66,597)	(56,033)		(53,367)	
Net interest income		13,241	16,812		24,753	
Other operating income (loss):						
Gain on sale of loans		83,817	106,788		86,527	
Investment derivative activity gain		780	3,143		2,651	
Net increase (decrease) in the fair value of investments		3,093	5,950		(5,032)	
Other revenues		41,151	41,110		29,504	
Total other operating income		128,841	156,991		113,650	
Total operating income		142,082	173,803		138,403	
Operating expenses:						
Salaries and related benefits		26,211	27,515		22,207	
General operating		61,870	92,395		90,306	
Depreciation		1,038	684		932	
Provision for loan losses		261	698		(180)	
Total operating expenses		89,380	121,292		113,265	
Net operating income		52,702	52,511		25,138	
Nonoperating expenses:						
Federal grant receipts		140,231	137,126		129,405	
Federal grant payments		(140,231)	(137, 126)		(129,405)	
Gain (loss) on sale of capital assets		18	19		(702)	
Total nonoperating income and expenses, net		18	19		(702)	
Change in net position		52,720	52,530		24,436	
Net position:						
Beginning of year		417,000	364,470		340,034	
Restatement due to GASB 75		(2,230)	-			
End of year	\$	467,490	\$ 417,000	\$	364,470	

chfa.

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 2018 was \$190 thousand or 0.4% more than the results at December 31, 2017. The increase in net position compared to the prior year was primarily composed of the following:

- A \$3.6 million decrease in net interest income. This decrease is primarily the result of higher interest on debt. During 2018 the Authority recognized a one-time adjustment to the deferred refunding portion of deferred outflows related to hedging activity for certain swaps nearing their option dates. A portion of the deferred outflows was being reported in error and the elimination of the incorrect balance was recognized by recording a charge to interest expense. Additionally, interest on debt increased as a result of the issuance of new bonds during the year. This increase was offset by an increase in interest on investments from new MBS being held as collateral for bonds issued during the year.
- A \$28.2 million decrease in other operating income as a result of the following:
 - \$23.0 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. While the total number of loans pooled into MBS during 2018 increased over 2017 levels, a greater number of those MBS were not sold at a premium in 2018, but rather held at par as collateral for bonds. 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 growth in Single Family loan sale volume is depicted in the table below.

Single Family Loans Sold (in thousands)	2018	2017	2016
GNMA	\$1,406,158	\$ 1,444,972	\$ 972,252
FNMA	613,261	408,157	269,039
FHLMC	43,993	69,746	25,455
Total Single Family Loans Sold	\$2,063,412	\$ 1,922,875	\$ 1,266,746

- \$2.4 million decrease in investment derivative activity
- \$2.9 million decrease in fair value of investments
- A \$31.9 million decrease in total operating expenses due almost entirely to decreases in down payment assistance grants provided to borrowers by the authority.

During 2017, total operating income increased by \$35.4 million, or 25.6%, compared to 2016. The following contributed to the increase:

- Interest on loans receivable decreased by \$7.9 million as a result of higher loan prepayments without a corresponding increase in new loan production retained.
- Interest on investments increased by \$2.6 million as a result of new program MBS being added to the balance sheet.
- Interest expense related to debt increased by \$2.7 million due to an increase in the amount of bonds outstanding at the end of 2017.
- Gain on sale of loans increased \$20.3 million due to increased loan activity related to the down payment assistance programs offered by the Authority in 2017.

chfa.

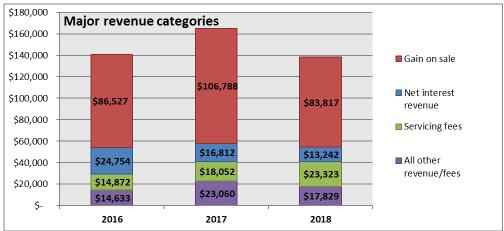
Management's Discussion and Analysis (unaudited)

- The fair value of investments and investment derivative activity collectively increased by \$11.5 million due primarily to changes in market rates during 2017.
- Other revenues increased \$11.6 million due primarily to higher servicing fee income collected.

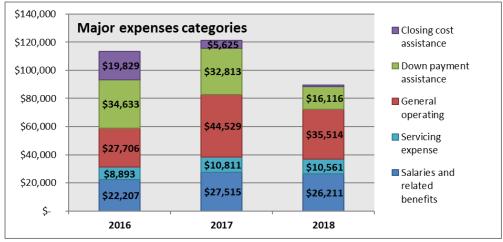
Total operating expenses in 2017 increased \$8.0 million, or 7.1%, compared to 2016. The increase was primarily due to expenses related to the down payment assistance grants and pension related expenses.

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

A review of select revenue and expense accounts depicts the growth the Authority has experienced over the past few years. Much of this growth is the result of increases in the Authority's single family loan production volume, the majority of which is ultimately sold for a premium in the secondary market.



Gain on sale represents the gain recognized on the sale of single family loans in the secondary market at a premium. The all other revenues/fees category 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 \$3.9 million, \$8.4 million and \$1.9 million for fiscal years, 2018, 2017 and 2016, respectively.



Management's Discussion and Analysis (unaudited)

Economic Factors and Next Year's Budget

The 2019 Budget was developed to provide desired products and services while maintaining financially responsible practices. While the Authority has been able to keep pace with the significant increase in loan volume, we remain cautious about the state economy over the next several years.

During 2019, the Authority's consolidated net interest revenue is projected to increase over amounts reported as of December 31, 2018. The Authority's loan portfolios are projected to increase in size in 2019 due to the continued efforts to add loans and investment securities to the balance sheet. Related debt is also projected to increase in 2019, but the result should be a net increase to net interest revenue overall. A contributor to this change is that the Authority anticipates adding over \$400 million in new loans and investment securities to the balance sheet as a result of single family and multifamily lending operations.

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 2019. The budget reflects a 'purchase and sell' model for 83% of the \$2.3 billion in budgeted Single Family loan production. The remaining 17% is budgeted to be bond-financed in an effort to continue rebuilding the Authority's loan portfolio, providing future net interest revenue. The 2019 budget projects single family production to increase when compared to the 2018 results, as demand for the Authority's down payment assistance (DPA) in the form of grants and second mortgages remains high.

The Authority's operating expenses are projected to increase slightly over amounts reported for 2018. This slight 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 spending on technology resources.

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 Controller/Director, Accounting at Colorado Housing and Finance Authority, 1981 Blake Street, Denver, Colorado 80202 (303-297-2432 or toll free, 800-877-2432).





Colorado Housing and Finance Authority Statement of Net Position

As of December 2018 and 2017

	2018	 2017
Assets		
Current assets:		
Cash		
Restricted	\$ 117,566	\$ 112,427
Unrestricted	41,287	47,530
Investments (partially restricted, see note 2)	249,890	331,787
Loans receivable (partially restricted, see note 3)	33,666	34,104
Loans receivable held for sale	214,557	149,694
Other current assets	13,875	12,677
Total current assets	670,841	688,219
Noncurrent assets:		
Investments (partially restricted, see note 2)	575,045	372,70
Loans receivable, net (partially restricted, see note 3)	976,294	988,999
Capital assets, net	13,887	14,194
Other assets	52,999	35,25
Total noncurrent assets	1,618,225	1,411,158
Total assets	2,289,066	2,099,37
Deferred outflows of resources		
Accumulated increase in fair value of hedging derivatives	54,733	81,94
Pension and OPEB contributions and investment earnings	7,101	7,40
Refundings of debt	4,088	3,65
Total deferred outflows of resources	65,922	93,000
Liabilities		
Current liabilities:		
Short-term debt	237,500	92,78
Bonds payable	79,612	117,380
Notes payable	105	104
Other current liabilities	134,081	161,927
Total current liabilities	451,298	372,196
Noncurrent liabilities:		
Bonds and notes payable	1,279,599	1,256,40
Derivative instruments	55,028	71,043
Hybrid instrument borrowing	16,059	21,113
Net pension and OPEB liability - proportionate share	31,646	32,535
Other liabilities	41,442	15,674
Total noncurrent liabilities	1,423,774	1,396,768
Total liabilities	1,875,072	1,768,964
Deferred inflows of resources		
Accumulated decrease in fair value of hedging derivatives	5,698	6,367
Pension and OPEB investment differences	6,728	49
Total deferred inflows of resources	12,426	6,416
Net position		
Investment in capital assets, net of related debt	2,789	2,80
Restricted primarily by bond indentures	158,709	160,817
Unrestricted	305,992	 253,383
Total net position	\$ 467,490	\$ 417,000

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 2018 and 2017

(in thousands of dollars)

	2018		2017
Interest income and expense:			
Interest on loans receivable	\$ 55,87	6 \$	55,777
Interest on investments	23,96	2	17,068
Interest on debt	(66,59	7)	(56,033)
Net interest income	13,24	1	16,812
Other operating income:			
Gain on sale of loans	83,81	7	106,788
Investment derivative activity gain	78	0	3,143
Net increase in the fair value of investments	3,09	3	5,950
Other revenues	41,15	1	41,110
Total other operating income	128,84	1	156,991
Total operating income	142,082	2	173,803
Operating expenses:			
Salaries and related benefits	26,21	1	27,515
General operating	61,87	0	92,395
Depreciation	1,03	В	684
Provision for loan losses	26	1	698
Total operating expenses	89,38)	121,292
Net operating income	52,70	2	52,511
Nonoperating income and expenses:			
Federal grant receipts	140,23	1	137,126
Federal grant payments	(140,23	1)	(137, 126)
Gain (loss) on sale of capital assets	18	В	19
Total nonoperating income and expenses	18	В	19
Change in net position	52,72)	52,530
Net position:			
Beginning of year	417,00	0	364,470
Restatement due to GASB 75	(2,23)	0)	-
End of year	\$ 467,49	0 \$	417,000

See accompanying notes to basic financial statements.

Colorado Housing and Finance Authority Statement of Cash Flows

For the years ended December 2018 and 2017

(in thousands of dollars)

		2018	2017
Cash flows from operating activities:			
Principal payments received on loans receivable			
and receipts from dispositions of other real estate owned	\$	851,650	\$ 665,834
Interest payments received on loans receivable		56,330	56,699
Payments for loans receivable	(2	2,332,571)	(2,091,449)
Receipts from sales of Ginnie Mae securities	•	1,512,737	1,527,338
Receipts from rental operations		5	4
Receipts from other revenues		41,198	41,241
Payments for salaries and related benefits		(29,616)	(19,740)
Payments for goods and services		(91,124)	(99,834)
All other, net		257	8,216
Net cash provided by operating activities		8,866	88,309
Cash flows from noncapital financing activities:			
Net increase in short-term debt		144,715	31,780
Proceeds from issuance of bonds		474,334	374,281
Receipts from federal grant programs		156,231	137,906
Payments for federal grant programs		(140,231)	(137, 127)
Principal paid on bonds		(497,254)	(281,824)
Principal paid on notes payable		(103)	(102)
Interest rate swap activity, net		12,523	(1,651)
Interest paid on short-term debt		(3,131)	(1,118)
Interest rate swap settlements		(21,173)	(34,827)
Interest paid on bonds		(40,745)	(22,240)
Interest paid on notes payable		(416)	(11)
Net cash provided by noncapital financing activities		84,750	65,067
Cash flows from capital and related financing activities:			
Purchase of capital assets		(713)	(10,419)
Net cash used in capital and related financing activities		(713)	(10,419)
Cash flows from investing activities:			
Proceeds from maturities and sales of investments	;	3,059,065	2,548,640
Purchase of investments		3,176,384)	(2,709,511)
Income received from investments	•	23,312	16,790
Net cash used in capital and related financing activities		(94,007)	(144,081)
Net decrease in cash		(1,104)	(1,124)
Cash at beginning of year		159,957	161,081
Cash at end of year	\$	158,853	\$ 159,957
Restricted	\$	117,566	\$ 112,427
Unrestricted		41,287	47,530
Cash, end of year	\$	158,853	\$ 159,957

Continued on the next page

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

For the years ended December 2018 and 2017

(in thousands of dollars)

	2018	2017
Reconciliation of operating income to net cash provided by operating activities:		
Net operating income	\$ 52,702	\$ 52,511
Adjustments to reconcile operating income to		
net cash provided by operating activities:		
Depreciation expense	1,038	684
Amortization and fair value adjustments of service release premiums	9,412	25,290
Proportionate share of net pension expense	3,862	6,207
Amortization of derivatives related borrowings	(6,272)	(5,573)
Provision for loan losses	261	698
Interest on investments	(23,962)	(17,068)
Interest on debt	72,869	61,607
Unrealized gain on investment derivatives	(780)	(3, 143)
Unrealized gain on investments	(3,093)	(5,950)
Loss on sale of REO	113	88
Gain on sale of loans receivable held for sale	(83,817)	(106,788)
Changes in assets and liabilities:	(, ,	(, ,
Loans receivable and other real estate owned	22,291	76,345
Accrued interest receivable on loans and investments	454	922
Other assets	(18,288)	8,158
Accounts payable and other liabilities	(17,924)	(5,679)
Net cash provided by operating activities	\$ 8,866	\$ 88,309

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 (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, liabilities, 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.



(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 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 – Noncurrent 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. 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 Assets – Other asset balances as of December 31, 2018 and 2017, were \$53.0 million and \$35.3 million, respectively. Included in these amounts are mortgage servicing rights of \$50.2 million and \$31.6 million as of December 31, 2018 and 2017, 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 \$837 thousand and \$7.7 million on mortgage servicing rights as of December 31, 2018 and 2017, 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. 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.



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. At December 31, 2018, the Authority had executed 107 forward sales transactions with a \$473 million notional amount with nine 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 21, 2019. These contracts are considered investment derivative instruments and carry a fair value of \$1.2 million as of December 31, 2018.

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 – 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 Benefits 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 (LIHTC) 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 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.

chfa.

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

- 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.
- FFB Program: Certificates of Participation of multi-family loans are sold to Federal Financing Bank (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 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 – As of December 31, 2018, GASB issued Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, which is effective for financial statements for periods beginning after June 15, 2017. This Statement replaces the requirements of Statements No. 45, Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions, as amended, and No. 57, OPEB Measurements by Agent Employers and Agent Multiple-Employer Plans, for OPEB. The scope of this Statement addresses accounting and financial reporting for OPEB that is provided to the employees of state and local governmental employers. This Statement establishes standards for recognizing and measuring liabilities, deferred outflows of resources, deferred inflows of resources, and expense/expenditures. For defined benefit OPEB, this Statement identifies the methods and assumptions that are required to be used to project benefit payments, discount projected benefit payments to their actuarial present value, and attribute that present value to periods of employee service. Note disclosure and required supplementary information requirements about defined benefit OPEB also are addressed. This Statement was implemented by the Authority in 2018 and resulted in reporting a new OPEB liability, with associated deferred inflows and outflows of resources, thus reducing previously reported net position as of December 31, 2017 by \$2.2 million. With respect to the comparative information as of and for the year ended December 31, 2017, the balances could not be restated as information required to adopt the standard was not available to the Authority. More on this new statement can be found in footnote 12.

GASB issued Statement No. 86 Certain Debt Extinguishment Issues, which is effective for reporting periods beginning after June 15, 2017. The primary object of this Statement is to improve consistency in accounting and financial reporting for insubstance defeasance of debt by providing guidance for transactions in which cash and other monetary assets acquired with only existing resources – resources other than the proceeds of refunding debt – are placed in an irrevocable trust for the sole purpose of extinguishing debt. This Statement also improves accounting and financial reporting for prepaid insurance on debt that is extinguished and notes to the financial statements for debt that is defeased in substance. This Statement was applicable to the Authority in 2018; however, no such transactions were required to be reported in the Authority's financial statements during the year.

Future Accounting Principles – GASB issued Statement No. 84, Fiduciary Activities. The objective of this Statement is to improve guidance regarding the identification of fiduciary activities for accounting and financial reporting purposes and how those activities should be reported. This Statement establishes criteria for identifying fiduciary activities of all state and local governments. The focus of the criteria generally is on (1) whether a government is controlling the assets of the fiduciary



activity and (2) the beneficiaries with whom a fiduciary relationship exists. Separate criteria are included to identify fiduciary component units and postemployment benefit arrangements that are fiduciary activities.

An activity meeting the criteria should be reported in a fiduciary fund in the basic financial statements. Governments with activities meeting the criteria should present a statement of fiduciary net position and a statement of changes in fiduciary net position. An exception to that requirement is provided for a business-type activity that normally expects to hold custodial assets for three months or less. This Statement describes four fiduciary funds that should be reported, if applicable: (1) pension (and other employee benefit) trust funds, (2) investment trust funds, (3) private-purpose trust funds, and (4) custodial funds. Custodial funds generally should report fiduciary activities that are not held in a trust or equivalent arrangement that meets specific criteria. As the Authority does not currently participate in fiduciary activities subject to this Statement, no impact to Authority's financial statements is anticipated at this time. The requirements of this Statement are effective for reporting periods beginning after December 15, 2018. Earlier application is encouraged.

GASB issued Statement No. 87 *Leases*, which is effective for reporting periods beginning after December 15, 2019. The objective of this Statement 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 or resources, thereby enhancing the relevance and consistency of information about governments' leasing activities. This Statement will be applicable to the Authority in 2020; however, the financial impact of the applicability of Statement No. 87 on the Authority's financial statements has not yet been determined.

GASB issued Statement No. 88 Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements, which is effective for reporting periods beginning after June 15, 2018. The primary objective of this Statement is to improve the information that is disclosed in the notes to government financial statements related to debt, including direct borrowings and direct placements. Is also clarifies which liabilities governments should include when disclosing information related to debt.

This Statement defines debt for debt purposes of disclosure in notes to financial statements as a liability that arises from a contractual obligation to pay cash (or other assets that may be used in lieu of cash) in one or more payments to settle an amount that is fixed at the date the contractual obligation is established. This Statement requires that additional essential information related to debt be disclosed in notes to financial statements, including unused lines of credit; assets pledged as collateral for the debt; and terms specified in debt agreements related to significant events of default with finance-related consequences, significant termination events with finance-related consequences, and significant subjective acceleration clauses.

For notes to financial statements related to debt, this Statement also requires that existing and additional information be provided for direct borrowings and direct placements of debt separately from other debt. This Statement will be applicable to the Authority in 2019; however, the impact of the applicability of Statement No. 88 on the Authority's financial statements, and footnotes therein, has not yet been determined.

GASB issued Statement No. 89 Accounting for Interest Cost Incurred Before the End of a Construction Period, which is effective for reporting periods beginning after December 15, 2019. The primary objectives of this statements are (1) to enhance the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period and (2) to simplify accounting for interest cost incurred before the end of a construction period.

This Statement establishes accounting requirements for interest cost incurred before the end of a construction period. Such



interest cost includes all interest that previously was accounted for in accordance with the requirements of paragraphs 5–22 of Statement No. 62, Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements, which are superseded by this Statement. This Statement requires that interest cost incurred before the end of a construction period be recognized as an expense in the period in which the cost is incurred for financial statements prepared using the economic resources measurement focus. As a result, interest cost incurred before the end of a construction period will not be included in the historical cost of a capital asset reported in a business-type activity or enterprise fund.

This Statement also reiterates that in financial statements prepared using the current financial resources measurement focus, interest cost incurred before the end of a construction period should be recognized as an expenditure on a basis consistent with governmental fund accounting principles. This Statement will be applicable to the Authority in 2020; however, the impact of the applicability of Statement No. 89 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, 2018 and 2017, the Authority had unrestricted cash of \$41.3 million and \$47.5 million, respectively.

Restricted cash as of December 31, 2018 and 2017 was as follows:

Summary of Restricted Cash	2018	2017		
Customer escrow accounts	\$ 92,296	\$ 99,565		
Payments in process	6,816	9,112		
Administered program deposits	18,454	3,750		
Total fair value	\$ 117,566	\$ 112,427		

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 \$92.3 million and \$99.6 million held in a fiduciary capacity as of December 31, 2018 and 2017, respectively. These escrow deposits 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 Statues. 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 \$106.0 million include investments pledged as of December 31, 2018 as follows: \$80.9 million in Ginnie Mae securities pledged as collateral to the Federal Home Loan Bank of Topeka (FHLB) line of credit and Colorado Local Government Liquid Asset Trust (COLOTRUST) investments of Rural Development Loan Program (RDLP), RDLP II and RDLP V in the amounts of \$799 thousand, \$381 thousand and \$510 thousand, respectively; each pledged as collateral for the RDLP notes payable and \$80 thousand of investments pledged as collateral for private placement bonds.

General Program investments of \$38.3 million include investments pledged as of December 31, 2017 as follows: \$25.9 million in Ginnie Mae securities pledged as collateral to the Federal Home Loan Bank of Topeka (FHLB) line of credit and Colorado Local Government Liquid Asset Trust (COLOTRUST) investments of Rural Development Loan Program (RDLP), RDLP II and RDLP V in the amounts of \$715 thousand, \$552 thousand and \$282 thousand, respectively; each pledged as collateral for the RDLP notes payable and \$328 thousand of investments pledged as collateral for private placement bonds.

All Single Family and Multifamily/Business Program investments, which total \$719.0 million and \$666.1 million as of December 31, 2018 and 2017, 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, 2018, the Authority had the following investment maturities:

Investment Maturities (In Years)									
		Less						More	
Investment Type	-	Than 1		1-5		6-10	T	han 10	Total
External investment pool	\$	8,466	\$	_	\$	-	\$	_	\$ 8,466
Investment agreements - uncollateralized		42,920		-		-		-	42,920
Money market mutual fund		78,238		-		-		-	78,238
Repurchase agreement		10,008		-		-		-	10,008
U.S. government agencies		110,258		13,398		-		560,960	684,616
U.S. Treasury				506		-		181	687
T otal	\$	249,890	\$	13,904	\$	-	\$	561,141	\$ 824,935



As of December 31, 2017, the Authority had the following investment maturities:

	Investment Maturities (In Years)									
		Less						More		
Investment Type	•	Γhan 1		1-5		6-10	T	han 10		Total
External investment pool	\$	7,629	\$	-	\$	-	\$	-	\$	7,629
Investment agreements - uncollateralized		49,294		-		-		16,977		66,271
Money market mutual fund		212,223		-		-		-		212,223
Repurchase agreement		5,944		-		-		4,506		10,450
U.S. government agencies		25,932		25,161		-		325,351		376,444
U.S. Treasury		30,765		532		-		181		31,478
Total	\$	331,787	\$	25,693	\$	-	\$	347,015	\$	704,495

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.

	2018			2017	
Investment Type	Rating		Total	Rating	Total
External investment pool	AAAm/Aaa	\$	8,466	AAAm	\$ 7,629
Investment agreements - uncollateralized	AA+/Aa2		29,289	AA+/Aa2	34,488
Investment agreements - uncollateralized	AA+/A1		-	AA+/A1	580
Investment agreements - uncollateralized	AA/Aa2		-	AA/Aa2	15,680
Investment agreements - uncollateralized	AA-/A1		-	AA-/A1	2,395
Investment agreements - uncollateralized	AA-/Aa2		1,243	AA-/Aa2	-
Investment agreements - uncollateralized	A+/Aa2		-	A+/Aa2	5,500
Investment agreements - uncollateralized	A+/Aa3		5,500	A+/Aa3	-
Investment agreements - uncollateralized	A/A1		6,429	A/A1	-
Investment agreements - uncollateralized	A/A2		-	A/A2	7,628
Investment agreements - uncollateralized	BBB+/Baa1		459	BBB+/Baa1	-
Money market mutual fund	AAAm/Aaa		78,238	AAAm/Aaa	212,223
Repurchase agreements	AA+/Aaa		10,008	AA+/Aaa	10,450
U.S. government agencies	AA+/Aaa		684,616	AA+/Aaa	376,444
U.S. Treasury	AA+/Aaa		687	AA+/Aaa	31,478
Total		\$	824,935		\$ 704,495

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.



As of December 31, 2018 and 2017, the Authority had invested in COLOTRUST, an investment vehicle established for local governmental entities in Colorado to pool funds available for investment. COLOTRUST is reflected in the above tables as an external investment pool. The State Securities Commissioner administers and enforces all State statutes governing COLOTRUST. COLOTRUST operates similarly to a money market fund and each share's fair value is \$1.00.

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, 2018 and 2017.

Issuer	2018	2017
FHLMC	3.98%	10.59%
GNMA	71.97%	36.84%
Goldman Sachs	3.08%	18.00%
Invesco	0.85%	5.27%
Wells Fargo	5.55%	6.85%

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, 2018 and 2017 consisted of the following:

	2018	2017	
General Fund	\$ 447,513	\$ 291,945	
Single Family Fund	288,303	332,207	
Multifamily/Business Fund:			
Multifamily/Project	361,565	395,617	
Multifamily Pass Through	143,644	170,297	
Total Multifamily/Business Fund	505,209	565,914	
Less intercompany loans, included in Multifamily/Project above	(11,098)	(11,394)	
Total loans receivable	1,229,927	1,178,672	
Payments in process	(501)	(773)	
Allowance for loan losses	(4,909)	(5,102)	
Total loans receivable, net	\$ 1,224,517	\$ 1,172,797	

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, 2018 was comprised of \$329.6 million of FHA insured loans, \$12.9 million of VA guaranteed loans, \$13.4 million of RD guaranteed loans and \$93.4 million of conventional insured loans with the balance of \$200.4 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, 2017 was comprised of \$331.2 million of FHA insured loans, \$13.3 million of VA guaranteed loans, \$15.2 million of RD guaranteed loans and \$72.5 million of conventional insured loans with the balance of \$132.5 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 both December 31, 2018 and 2017, the Authority recorded a reserve of \$190 thousand and \$202 thousand, respectively, for claim refunds to be paid to the U.S. Department of Housing and Urban Development (HUD).

As of December 31, 2018 and 2017, single family mortgage loans with pending foreclosure actions have aggregate principal balances of approximately \$4.0 million and \$5.3 million, respectively. As of December 31, 2018 and 2017, the aggregate principal balance of single family mortgage loans delinquent 91 days or greater was approximately \$21.3 million and \$24.7 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, 2018, approximately \$305.9 million, or 71.1%, of the commercial loan balances are not covered by insurance. The insured loans were comprised of \$232.4 million of Section 542(c) risk share loans, which are 50% insured.

As of December 31, 2017, approximately \$320.6 million, or 69.5%, of the commercial loan balances are not covered by insurance. The insured loans were comprised of \$252.7 million of Section 542(c) risk share loans, which are 50% insured, and \$790 thousand of Section 221(d) new construction and rehabilitation loans, which are 99% insured.

As of December 31, 2018 and 2017, there were no commercial loans with pending foreclosure actions and there were no commercial loans delinquent 91 days or greater.



Activity in the allowance for loan loss for the years ended December 31, 2018 and 2017 was as follows:

	2018	2017			
Beginning balance	\$ 5,102	\$	5,620		
Provision	261		698		
Net charge-offs					
Single Family	(452)		(1,177)		
Multifamily/Business	 (2)		(39)		
Ending balance	\$ 4,909	\$	5,102		

The Authority services loans that it securitizes as Ginnie Mae mortgage-backed securities and sells. As of December 31, 2018 and 2017, these loans totaled \$3.6 billion and \$2.7 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, 2018 and 2017, these outstanding loan balances were \$1.4 billion and \$897.6 million, respectively.



The Authority has granted terms and interest rate concessions to debtors, which are considered troubled debt restructurings, as of December 31, 2018 and 2017, as summarized below:

Single Family Program Loans:	 2018	2017			
Aggregate recorded balance	\$ 41,869	\$	44,031		
Number of loans	356		373		
Gross interest revenue if receivables had been current	\$ 2,308	\$	2,410		
Interest revenue included in changes in net position	\$ 1,476	\$	1,629		
Multifamily/Business Program Loans:	 2018		2017		
,					
Aggregate recorded balance	\$ 15,756	\$	16,824		
Number of loans	14		17		
Constant interest on the constant					
Gross interest revenue					
if receivables had been current	\$ 909	\$	987		
	\$ 909	\$	987		



(4) Capital Assets

Capital asset activity for the year ended December 31, 2018 was as follows:

	eginning Balance	Ad	dditions	Red	luctions	Ending Balance
Nondepreciable capital assets:						
Land	\$ 1,573	\$	-	\$	-	\$ 1,573
Construction in progress	128		988		(821)	295
Total nondepreciable capital assets	1,701		988		(821)	1,868
Depreciable capital assets:						
Cost:						
Computer equipment/software	8,419		464		-	8,883
Furniture and equipment	1,969		32		(57)	1,944
Buildings and related improvements	13,644		78		-	13,722
Total depreciable capital assets	24,032		574		(57)	24,549
Less accumulated depreciation:						
Computer equipment/software	(7,828)		(265)		-	(8,093)
Furniture and equipment	(262)		(180)		47	(395)
Buildings and related improvements	(3,449)		(593)		-	(4,042)
Total accumulated depreciation	(11,539)		(1,038)		47	(12,530)
Total depreciable capital assets, net	12,493		(464)		(10)	12,019
Total capital assets, net	\$ 14,194	\$	524	\$	(831)	\$ 13,887



Capital asset activity for the year ended December 31, 2017 was as follows:

	eginning Balance	Α	dditions	Re	eductions	Ending Balance
Nondepreciable capital assets:						
Land	\$ 1,573	\$	-	\$	-	\$ 1,573
Construction in progress	475		10,419		(10,766)	128
Total nondepreciable capital assets	 2,048		10,419		(10,766)	1,701
Depreciable capital assets:						
Cost:						
Computer equipment/software	7,870		549		-	8,419
Furniture and equipment	247		1,722		-	1,969
Buildings and related improvements	 5,149		8,495		-	13,644
Total depreciable capital assets	13,266		10,766		-	24,032
Less accumulated depreciation:						
Computer equipment/software	(7,489)		(339)		-	(7,828)
Furniture and equipment	(207)		(55)		-	(262)
Buildings and related improvements	(3,177)		(272)		-	(3,449)
Total accumulated depreciation	(10,873)		(666)		-	(11,539)
Total depreciable capital assets, net	2,393		10,100		-	12,493
Total capital assets, net	\$ 4,441	\$	20,519	\$	(10,766)	\$ 14,194

(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 \$915.6 million. Amounts drawn under the agreement bear 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, 2018 and 2017, the Authority had \$212.5 million and \$92.8 million of short-term debt outstanding with the FHLB, respectively.

The Authority also has a 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 the one week or one-month LIBOR rate. This line of credit agreement terminates on October 1, 2019. The Authority pays an unused line fee, payable in arrears on the first business day after each calendar quarter. The fee is based upon the average daily unused amount of the line of credit computed on the basis of a 360-day year. As of December 31, 2018 and 2017, there was an outstanding balance of \$25.0 million and \$0, respectively.

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 and 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, 2018 and 2017 was as follows:

	2018	2017
Beginning balance	\$ 92,785	\$ 61,005
Additions	7,110,492	5,350,885
Reductions	(6,965,777)	 (5,319,105)
Ending balance	\$ 237,500	\$ 92,785

(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, 2018 and 2017 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, 2018, these rates ranged from 1.66% to 2.55%. At December 31, 2017, these rates ranged from 1.35% to 2.14%.



Outstanding Bonds at December 31, 2018 and 2017:

Descripton and due date		Interest rate (%)	2018	2017
Bonds payable:				
General Fund (prior to 2011, a	all General Fund bonds	s carry the Authority's general obligation pledge):		
Multifamily/Business Finar	nce:			
Guaranteed Loan Parti	cipation Purchase Bo	nds: (* principal and interest payable monthly)		
2011 Series A*	2019 - 2031	2.92	299	36
2012 Series A*	2018 - 2018	2.84	-	3,572
Total Guaranteed Loar	Participation Purchas	se Bonds	299	3,93
Taxable Rental Project	Revenue Bonds: (* p	rincipal and interest payable monthly)		
2000 Series A	2019 - 2020	6.15	931	1,59
2002 Series AV*	2019 - 2022	5.55	851	97
2003 Series AV*	2019 - 2024	5.19	178	54
2004 Series A*	2019 - 2024	4.90	4,340	5,02
Total Taxable Rental F	roject Revenue Bonds	3	6,300	8,14
Total Multifamily/Business	Finance		6,599	12,079
Total General Fund			6,599	12,07
Single Family Fund:				
Single Family Mortgage Bo	onds:			
2001 Series AA	2019 - 2041	Variable	51,565	59,66
2002 Series A	2019 - 2021	Variable	4,475	6,57
2002 Series B	2019 - 2021	Variable	14,565	19,00
2002 Series C	2019 - 2022	Variable	13,080	15,74
2003 Series B	2018 - 2018	Variable	-	23,83
2006 Series A	2019 - 2036	Variable	20,310	26,56
2006 Series B	2019 - 2036	Variable	24,855	47,90
2007 Series A	2018 - 2018	Variable	-	33,23
2007 Series B	2019 - 2038	Variable	17,995	43,36
2008 Series A	2018 - 2018	Variable	-	48,81
2011 Series AA	2019 - 2029	3.70 - 5.00	3,970	5,68
2012 Series A	2018 - 2018	Variable	-	10,180
2013 Series AA	2019 - 2041	2.80	13,835	16,420
2013 Series B	2019 - 2036	Variable	18,945	22,29
2014 Series A	2019 - 2027	2.02 - 3.53	19,080	25,57
2015 Series A	2019 - 2031	1.76 - 4.00	38,830	50,230
2015 Series B	2019 - 2025	1.89 - 3.27	9,940	13,09
2017 Series A	2019 - 2047	3.00	48,456	51,52
2017 Series B	2019 - 2044	1.88 - 3.05	16,020	20,430
2017 Series AA	2019 - 2047	3.03	48,123	49,969
2017 Series CDE	2019 - 2048	Variable and 1.35 - 4.00	74,890	80,39
2017 Series BB	2018 - 2018	2.14	-	99,80
2018 Series AA	2019 - 2048	3.70	71,331	-
2018 Series AB	2019 - 2048	Variable and 1.85 - 4.00	86,305	-
2018 Series C	2019 - 2048	1.50 - 4.25	94,985	-
2018 Series D	2019 - 2029	2.50 - 3.81	38,000	-
2018 Series BB	2019 - 2048	4.20 - 4.50	89,372	-
Total Single Family Mortga	ige Bonds		818,927	770,253
Total Single Family Fund			818,927	770,253

Table continued on following page.



Descripton and due date		Interest rate (%)	2018		2017
Multifamily/Business Fund:					
Multifamily/Project Bonds: (* principal and intere	st payable quarterly on some of the bonds)			
2000 Series A	2019 - 2030	Variable		4,625	5,4
2002 Series C	2018 - 2018	Variable		-	15,0
2003 Series A	2018 - 2018	Variable		-	26,2
2004 Series A	2018 - 2018	Variable		-	11,2
2005 Series A	2018 - 2018	Variable		-	17,2
2005 Series B	2019 - 2040	Variable	;	3,205	12,0
2006 Series A	2019 - 2036	Variable	14	4,200	33,4
2007 Series B	2019 - 2038	Variable	4	6,445	47,1
2008 Series A	2019 - 2029	Variable	1	7,145	17,2
2008 Series B	2019 - 2052	Variable	14	3,540	150,9
2008 Series C	2019 - 2038	Variable		2,950	13,0
2009 Series A	2019 - 2041	Variable	;	3,610	17,6
2012 Series A	2019 - 2051	2.75 - 4.50		9,895	10,0
2012 Series B	2019 - 2054	2.55 - 4.20		6,575	16,8
2013 Series A	2019 - 2023	Variable		1,615	2,6
2013 Series I	2019 - 2044	3.20		1,194	18,0
2016 Series A	2019 - 2041	1.47 - 4.00		1,045	11,3
2016 Series I	2019 - 2056	3.45		5,131	12,5
2016 Series II	2019 - 2056	0.90 - 3.00		3,000	18,0
2016 Series III	2019 - 2052	3.10		3,443	3,4
2016 Series IV	2019 - 2056	3.13		6,494	12,3
2016 Series V	2019 - 2045	3.40		9,847	42,9
2017 Series I	2019 - 2057	3.85		0,178	13,5
2017 Series II	2019 - 2057	1.15 - 3.76		4,100	14,1
2017 Series III	2019 - 2057	3.75		9,400	9,4
2017 Series A	2019 - 2019	1.55		7,950	7,9
2017 Series IV	2019 - 2057	3.64		5,000	26,0
2018 Series A	2019 - 2040	Variable & 2.25 - 3.90		3,200	20,0
Total Multifamily/Project Bor		Variable & 2.23 - 3.50		9,787	585,9
Total Multifamily/Business Fur				9,787	585,9
Total bonds payable	· ··			5,313	1,368,2
Premiums classified as bonds pay	able				
Bond premiums - unamortized			1;	3,140	4,6
Bonds payable, net			1,35	3,453	1,372,9
Notes payable				863	9
Bonds and notes payable, net			\$ 1,35	9,316	\$ 1,373,8
Current:					
Bonds payable			7:	9,612	117,3
Notes payable				105	1
Noncurrent:					
Bonds and notes payable			1,279	9,599	1,256,4
Total .			\$ 1,359	9,316	\$ 1,373,8



A breakdown of bonds payable as of December 31, 2018 and 2017, 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	2018	2017		
Fixed rate debt	\$ 832,389	\$ 508,164		
Synthetic fixed rate debt	449,594	572,909		
Unhedged variable rate debt	63,330	287,160		
Total	\$ 1,345,313	\$ 1,368,233		

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, 2018 and 2017:

Description		2017			
General Fund Program Bonds	\$	6,599	\$	12,079	
Multifamily/Project Bonds, Class I		60,085		151,605	
Multifamily/Project Bonds, Class II		17,145		17,210	
Total	\$	83,829	\$	180,894	



Standby Purchase Agreements 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, 2018. During 2018 and 2017, the Authority renewed or replaced expiring liquidity facilities of \$369 thousand and \$0, respectively. Liquidity fees for the years ended December 31, 2018 and 2017 were \$2.4 million and \$3.4 million, respectively.

A schedule of providers and maturities is presented below, as of December 31, 2018:

Liquidity Expiration	Bank of America (1)				FHLB (2)	oyal Bank of Canada (3)	Sumitomo MBC (4)	Grand Total
2019	\$	-	\$	17,710	\$ 46,740	\$ -	\$ 64,450	
2020		-		45,165	-	-	45,165	
2021		67,645		299,100	-	36,565	403,310	
Total	\$	67,645	\$	361,975	\$ 46,740	\$ 36,565	\$ 512,925	

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", for any day, a per annum rate to the highest of (a) the Federal Fund Rate plus 2.00%, (b) the prime rate plus 1.00%, (c) the LIBOR Rate plus 2.00%, and (d) seven and one-half percent (7.50%), then from and after the ninety-first (91st) day, the Base Rate plus 1.00% per annum.
 - (b) Term out provisions: three hundred sixty-six (366) days following the earlier of (x) the Purchase Date, or (y) the last day of the Purchase Period. Semiannual Principal payment due the date that is the earlier of (x) the five year anniversary of the related Purchase Date, or (y) the five year anniversary of the last day of the Purchase Period.
- (2) (a) Bank Rate: One-Month LIBOR plus 2.00%.
 - (b) Term out provisions: repayments due 366 days following the purchase date in equal semiannual installments until fifth anniversary of the purchase date.
- (3) (a) Bank Rate: for the first 90 days following the purchase date, the "Base Rate", which equals the highest of (i) the prime rate plus 2.50%, (ii) the Fed funds rate plus 3.00% and (iii) 8.00%; then for the period 91-180 days following the purchase date, the Base Rate plus 1.00%; then for the period 181 days and higher following the purchase date, the Base Rate plus 2.00%.
 - (b) Term out provisions: repayments due on the first business day of February, May, August or November on or following 90 days following purchase date and thereafter quarterly on each such dates in equal installments to the third anniversary of such purchase date. Class I lien.
- (4) (a) Bank Rate: for the first 60 days following the purchase date, the "Base Rate", for any day, a per annum rate to the highest of (i) prime rate plus 2.00%, (ii) the Federal Fund Rate plus 3.00%, (iii) the One Month LIBOR Rate plus 3.00%, (iv) the SIFMA Rate plus 3.00%, and (v) six and one-half percent (6.50%), then from and after the ninety-first (91st) day, the Base Rate plus 1.00% per annum.
 - (b) Term out provisions: repayments due 366 days following the Purchase date in quarterly installments to the fifth anniversary of purchase date.



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, 2018:

	Beginning						Ending				
Description	Balance	Additions		Reductions		Balance		Current		Noncurre	nt
Bonds payable	\$ 1,368,233	\$	474,334	\$	(497,254)	\$	1,345,313	\$	78,842	\$ 1,266,4	71
Bond premiums - unamortized	4,687		8,978		(525)		13,140		770	12,3	370
Total bonds payable	1,372,920		483,312		(497,779)		1,358,453		79,612	1,278,8	341
Notes payable	967		-		(104)		863		105	7	758
Unearned revenue	3,855		1,817		(491)		5,181		345	4,8	36
Other liabilities	12,326		25,166		(471)		37,021		415	36,6	606
Total other liabilities	16,181		26,983		(962)		42,202	-	760	41,4	42
Total	\$ 1,390,068	\$	510,295	\$	(498,845)	\$	1,401,518	\$	80,477	\$ 1,321,0)41

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, 2017:

	Beginning						Ending				
Description	Balance	Addit	Additions		Reductions		Balance	Current		Noncurrent	
Bonds payable	\$ 1,275,776	\$ 37	74,281	\$	(281,824)	\$	1,368,233	\$	116,981	\$	1,251,252
Bond premiums - unamortized	2,297		2,622		(232)		4,687		399		4,288
Total bonds payable	1,278,073	37	76,903		(282,056)		1,372,920		117,380		1,255,540
Notes payable	1,069		-		(102)		967		104		863
Unearned revenue	3,267		1,050		(462)		3,855		257		3,598
Other liabilities	8,633		4,081		(388)		12,326		250		12,076
Total other liabilities	11,900		5,131		(850)		16,181		507		15,674
Total	\$ 1,291,042	\$ 38	32,034	\$	(283,008)	\$	1,390,068	\$	117,991	\$	1,272,077



Bonds and notes payable sinking fund installments and contractual maturities subsequent to December 31, 2018, using rates in effect as of December 31, 2018, are as follows:

Years Ending	General Fund				Single Family			Multifamily / Business				Notes Payable				
December 31,		Principal		Interest		Principal		Interest		Principal		Interest		Principal		Interest
2019	\$	598	\$	325	\$	46,137	\$	23,615	\$	32,107	\$	14,447	\$	105	\$	9
2020		333		288		46,567		23,041		7,972		14,124		90		8
2021		-		278		46,762		22,410		8,297		13,969		57		7
2022		851		274		21,825		21,632		8,562		13,806		58		6
2023		-		231		19,705		21,124		8,547		13,622		58		6
2024 - 2028		4,518		115		98,325		97,402		23,960		65,370		195		19
2029 - 2033		299		26		68,225		84,865		39,735		59,420		133		12
2034 - 2038		-		-		74,610		76,637		80,870		54,759		140		6
2039 - 2043		-		-		75,640		67,276		22,440		44,656		27		-
2044 - 2048		-		-		321,131		49,016		56,287		37,045		-		-
2049 - 2053		-		-		-		-		157,308		27,678		-		-
2054 - 2058		-		-		-		-		73,702		8,625		-		-
Total	\$	6,599	\$	1,537	\$	818,927	\$	487,018	\$	519,787	\$	367,521	\$	863	\$	73

(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. Other conduit proceeds were made available to the State of Colorado for the Colorado Unemployment Insurance Trust Fund, these conduit bonds were fully redeemed during 2017. 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, 2018 and 2017, the aggregate principal amount of conduit debt outstanding totaled \$934.7 million and \$674.4 million, 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. Deemed termination activity for the year ended December 31, 2018 was as follows:

Deemed Terminations	Amount			
January 08	\$	330		
March 09		790		
March 28		9,890		
April 01		25		
May 01		12,295		
May 09		7,615		
July 09		410		
August 21		8,535		
September 10		4,270		
October 01		25		
November 01		44,940		
Total deemed terminations	\$	89,125		

On April 11, 2018, the Authority entered into a \$30.0 million forward starting interest rate swap agreement effective May 1, 2019 to replace portions of existing interest rate swap agreements that are considered effective interest rate hedges of certain single family bonds. In conjunction with entering into the forward starting swap, notice of par optional terminations effective May 1, 2019 was given to the counterparty of the swaps to be replaced. The forward starting swap was identified as a qualified hedge.

On November 27, 2018 the Authority entered into a two separate \$10.0 million interest rate swap agreements, totaling \$20.0 million, that would be effective January 3, 2019. The swaps are an effective interest rate hedge for variable rate bonds issued on January 3, 2019 by the Authority.



Deemed termination activity for the year ended December 31, 2017 was as follows:

Deemed Terminations	Amount			
April 01	\$	75		
May 01		11,110		
June 07		595		
June 23		4,395		
July 19		25,000		
October 01		4,120		
October 31		12,555		
November 01		23,535		
Total deemed terminations	\$	81,385		

On October 5, 2017, in anticipation of a refunding of certain single family bonds, the Authority entered into an amended and restated swap confirmation affecting an existing interest rate swap agreement totaling \$40.0 million that was considered an effective interest rate hedge. Under the terms of the restated confirmation, the notional amount of the swap will be reduced to \$25.0 million on May 1, 2018 with a new on-market fixed payer rate, a change to the floating rate received, and amended par optional termination rights. The amended swap will remain an effective interest rate hedge.

On November 1, 2017, the Authority entered into a \$50.0 million forward starting interest rate swap agreement effective May 1, 2019 to replace portions of existing interest rate swap agreements that are considered effective interest rate hedges of certain single family bonds. In conjunction with entering into the forward starting swap, notice of par optional terminations effective May 1, 2019 was given to the counterparty of the swaps to be replaced. The forward starting swap was identified as a qualified hedge.

A summary of interest rate swaps for the years ended December 31, 2018 and 2017 was as follows:

	2018 Fair Value			2017 Fair Value		
Summary of Interest Rate Swaps						
Par optional termination right with trigger	\$	(432)	\$	5,990		
Par optional termination right		2,600		4,252		
Trigger		2,828		4,607		
Plain		48,831		58,472		
Total fair value	\$	53,827	\$	73,321		

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 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, 2018, 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 at December 31, 2018 and 2017:

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	2018 Fair Value **	Change in	2017 Fair Value **
Single Family:	Amount	Date	Date	i aiu	Neceiveu	Оршона	Date, at 1 ai	Allount	out micody s	Tall Value	Tall Value	i ali value
Investment deriva	tives (include:	s overhedaed	d portion of inte	rest rate sv	vaps):							
2001AA-1 ****	15,000	12/1/2009	•		Trigger, SIFMA + .15% or 68% LIBOR	***	11/1/2019	all remaining	A / A2	(887)	(312)	(575)
2002A-3 ****	365	12/4/2008			Trigger, SIFMA + .05% or 68% LIBOR			·	A / A2	14	6	. 8
2002C-3 ****	7,795	12/4/2008			Trigger, SIFMA + .15% or 68% LIBOR				A / A2	342	(265)	607
2006A-3	18,945	1/18/2006	11/1/2036	4.3129%	Trigger, SIFMA + .15% or 68% LIBOR	***	5/1/2019	18,577	A+ / Aa3	108	(373)	481
2006B-3	52,315	7/26/2006	11/1/2036	4.5445%	Trigger, SIFMA + .15% or 68% LIBOR	***	5/1/2019	51,208	A+ / Aa3	340	(806)	1,146
2006C-2 (D)	2,265	12/20/2006	11/1/2034	4.2884%	Trigger, SIFMA + .05% or 68% LIBOR	***	11/1/2019	all remaining	A+ / Aa3	37	21	16
2007A-2	42,760	5/9/2007	11/1/2037	4.1530%	Trigger, SIFMA + .15% or 68% LIBOR	***	5/1/2019	42,035	A+ / Aa3	222	(793)	1,015
2007B-2	29,135	10/18/2007	5/1/2038	4.5075%	Trigger, SIFMA + .15% or 68% LIBOR	***	5/1/2019	28,773	A+ / Aa3	186	11	175
2012A-1 ****	9,505	12/2/2008	11/1/2021	4.1600%	Trigger, SIFMA + .05% or 68% LIBOR				A / A2	(185)	23	(208)
2012A-2 (SPV)	-	6/4/2008	5/1/2038	4.4140%	65% LIBOR + .10%	***			A+ / Aa2	-	(165)	165
Total	178,085									177	(2,653)	2,830
Hedging derivativ	es:											
2001AA-2 ****	36,565	12/4/2008	5/1/2031	4.6000%	Trigger, SIFMA + .05% or 68% LIBOR	0			A / A2	2,328	(908)	3,236
2001AA-3	-	12/2/2008	5/1/2018	5.5260%	Trigger, SIFMA + .05% or 68% LIBOR	0			A / A2	-	(7)	7
2002A-3 ****	4,475	12/4/2008	11/1/2021	4.7490%	Trigger, SIFMA + .05% or 68% LIBOR	0			A / A2	39	(106)	145
2002B-3 ****	14,565	12/4/2008	11/1/2021	4.5060%	Trigger, SIFMA + .05% or 68% LIBOR	0			A / A2	177	(292)	469
2002C-3 ****	13,775	12/4/2008	5/1/2022	4.4220%	Trigger, SIFMA + .15% or 68% LIBOR	0			A / A2	113	(230)	343
2003B-2	-	10/29/2008	5/1/2028	4.9380%	LIBOR + .05%	***			AA- / A2	-	(218)	218
2006A-3	19,615	1/18/2006	11/1/2036	4.3129%	Trigger, SIFMA + .15% or 68% LIBOR	***	5/1/2019	19,233	A+ / Aa3	498	(624)	1,122
2006B-2	16,700	7/26/2006	11/1/2034	4.1951%	Trigger, SIFMA + .05% or 68% LIBOR	***	5/1/2019	16,700	A+ / Aa3	305	(405)	710
2006B-3	8,155	7/26/2006	11/1/2036	4.5445%	Trigger, SIFMA + .15% or 68% LIBOR	***	5/1/2019	7,982	A+ / Aa3	643	(917)	1,560
2006C-2 (D)	18,945	12/20/2006	11/1/2034	4.2884%	Trigger, SIFMA + .05% or 68% LIBOR	***	11/1/2019	all remaining	A+ / Aa3	(2,149)	(393)	(1,756)
2007A-2	-	5/9/2007	11/1/2037	4.1530%	Trigger, SIFMA + .15% or 68% LIBOR	***			A+ / Aa3	-	(1,517)	1,517
2007B-2	17,995	10/18/2007	5/1/2038	4.5075%	Trigger, SIFMA + .15% or 68% LIBOR	***	5/1/2019	17,772	A+ / Aa3	641	(1,299)	1,940
2008A-1	-	6/4/2008	5/1/2038	5.4450%	LIBOR + .05%	***			A+ / Aa2	-	(363)	363
2008A-2	-	6/4/2008	11/1/2027	4.5960%	LIBOR + .05%	***			AA- / Aa2	-	(338)	338
2012A-2 (SPV)	25,000	5/1/2018	5/1/2038	2.3230%	LIBOR * 70%	***	11/1/2021	2,660	A+ / Aa2	3	(271)	274
2018B-2	21,235	5/9/2018	11/1/2041	4.1530%	Trigger, SIFMA + .15% or 68% LIBOR	***	5/1/2019	42,035	A+ / Aa3	(376)	(376)	-
2019B-1	10,000	1/3/2019	5/1/2028	2.9675%	LIBOR				AA- / Aa2	348	348	-
2019B-2	10,000	1/3/2019		3.7575%		***	5/1/2025	10,000	AA- / Aa2	318	318	-
Forward swap	30,000	5/1/2019	11/1/2041	2.6000%	LIBOR * 70%	***	5/1/2022	28,275	AA- / A2	523	523	-
Forward swap	50,000	5/1/2019	11/1/2037	2.4300%	LIBOR * 70%	***	11/1/2022	6,075	A+ / Aa2	445	445	-
Total	297,025									3,856	(6,630)	10,486
Total Single Famil	y 475,110									4,033	(9,283)	13,316

Table continued on following page.



	Current	Cffe et ive	Tomain etion	Fixed	Variable Date	Fushaddad	Optional	Optional	Counterparty	2040	Channa in	2047
Swap Series	Notional Amount	Date	Termination Date	Rate Paid	Variable Rate Received *	Options	Termination Date, at Par	Termination Amount	Rating S&P/Moody's	2018 Fair Value **	Change in Fair Value	2017 Fair Value **
Multifamily:									-			
Investment deriva	tives (include:	s overhedge	d portion of inter	rest rate sv	vaps):							
2002A-1 ****	4,300	11/21/2008	10/1/2022	5.1000%	SIFMA + .15%				A / A2	273	(175)	448
2002C-2 ****	-	11/21/2008	10/1/2032	5.1240%	Trigger, SIFMA + .15% or 68% LIBOR	***			A / A2	-	(365)	365
2002C-4 ****	-	11/21/2008	10/1/2032	5.0440%	Trigger, SIFMA + .05% or 68% LIBOR	***			A / A2	-	599	(599)
2003A ****	8,485	11/21/2008	10/1/2023	6.0350%	SIFMA + .05%				A / A2	(11)	(11)	-
2005B-2 (B)	2,585	9/1/2006	10/1/2038	4.5270%	SIFMA + .15%	***	10/1/2021	2,324	A+ / Aa3	173	(82)	255
2007B-2 (D) ****	4,240	12/3/2008	4/1/2028	4.6510%	SIFMA + .15%	***	4/1/2023	3,835	A / A2	412	(163)	575
2008A-2 ****	6,395	12/3/2008	4/1/2043	4.4540%	SIFMA + .15%	***	4/1/2019	6,340	A / A2	30	(198)	228
2008C-3 ****	3,645	12/3/2008	10/1/2038	4.3400%	SIFMA + .05%	***	4/1/2019	3,231	A / A2	22	(97)	119
2009A-1 ****	4,270	6/24/2009	10/1/2041	4.7900%	SIFMA + .05%	***	4/1/2024	3,608	A / A2	614	(718)	1,332
2013A ****	2,760	11/21/2008	10/1/2023	6.0350%	SIFMA + .05%				A / A2	292	(34)	326
Total	36,680									1,805	(1,244)	3,049
Hedging derivativ	es:											
2000A-1 ****	3,045	11/21/2008	10/1/2020	5.2350%	SIFMA + .05%				A / A2	69	(141)	210
2002C-2 ****	-	11/21/2008	10/1/2032	5.1240%	Trigger, SIFMA + .15% or 68% LIBOR	***		-	A / A2	-	1,128	(1,128)
2003A ****	-	11/21/2008	10/1/2023	6.0350%	SIFMA + .05%				A / A2	-	(40)	40
2005B-2 (B)	2,415	9/1/2006	10/1/2038	4.5270%	SIFMA + .15%	***	10/1/2021	2,196	A+ / Aa3	111	(73)	184
2006A-1 ****	5,115	12/3/2008	4/1/2027	5.7100%	LIBOR + .05%	***			A / A2	(638)	(41)	(597)
2006A-1 (F)	9,085	12/1/2006	10/1/2036	5.3420%	LIBOR + .05%	***	4/1/2021	8,040	A+ / Aa3	482	(357)	839
2007B-1 ****	8,400	12/3/2008	4/1/2038	5.6400%	LIBOR + .05%	***	4/1/2022	all remaining	A / A2	(579)	(121)	(458)
2007B-1 (G)	6,790	10/1/2007	4/1/2028	5.2200%	LIBOR + .05%	***	10/1/2022	6,190	A+ / Aa3	582	(275)	857
2008A-1 ****	7,620	12/3/2008	4/1/2029	5.1300%	LIBOR + .05%	***	4/1/2019	all remaining	A / A2	(442)	(73)	(369)
2008B (a) ****	104,870	12/3/2008	10/1/2044	5.1722%	LIBOR				AA- / A2	32,218	(6,608)	38,826
2008B (b) ****	43,670	12/3/2008	3/1/2047	5.2071%	LIBOR				AA- / A2	15,741	(3,084)	18,825
2008C-3 ****	2,950	12/3/2008	10/1/2038	4.3400%	SIFMA + .05%	***	4/1/2019	3,269	A / A2	18	(85)	103
2009A-1 ****	8,540	6/24/2009			SIFMA + .05%	***	4/1/2024	7,507		155	329	(174)
2013A ****		11/21/2008	10/1/2023	6.0350%	SIFMA + .05%				A / A2	(99)	103	(202)
2018A-2	33,455	4/1/2018		3.1450%		***	4/1/2025	22,185	AA- / Aa2	371	371	-
Total	237,570									47,989	(8,967)	56,956
Total Multifamily	274,250									49,794	(10,211)	60,005
Total	\$749,360									\$ 53,827	\$ (19,494)	\$ 73,321

^(*) 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 hybrid instrument borrowings.

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



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, 2018 and 2017, 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, 2018, the Authority had executed 33 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)					
	16		\$	173,425	23.1%	A/A2					
	9			268,940	35.9%	A+ / Aa3					
	2			75,000	10.0%	A+ / Aa2					
	3			53,455	7.2%	AA- / Aa2					
	3			178,540	23.8%	AA- / A2					
,	33	:	\$	749,360	100.0%						

At December 31, 2017, the Authority had executed 35 swap transactions with six 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)
20	\$	289,035	35.5%	A / A1
10		289,180	35.6%	A+ / Aa3
2		74,470	9.2%	AA-/Aa2
3		159,665	19.7%	AA- / A1
35	\$	812,350	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 (VRDOs) 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, 2018 and 2017, 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, 2018 and 2017, swaps with a fair value of \$51.8 million and \$69.1 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, 2018 and 2017, 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, 2018, 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,	Р	rincipal	Interest	S	S W	aps, Net	Total
2019	\$	36,750	\$ 9,523	\$	5	15,905	\$ 62,178
2020		37,615	9,069			14,897	61,581
2021		38,985	8,602			13,897	61,484
2022		26,765	8,172			12,908	47,845
2023		23,790	7,858			12,217	43,865
2024-2028		129,935	34,313			52,176	216,424
2029-2033		156,435	23,782			34,954	215,171
2034-2038		131,405	12,440			16,218	160,063
2039-2043		45,710	5,724			6,445	57,879
2044-2047		21,970	1,153			1,221	24,344
Total	\$	649,360	\$ 120,636	\$;	180,838	\$ 950,834

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, 2018 and 2017 was as follows:

	2018	2017
Beginning balance	\$ 21,113	\$ 26,687
Additions	1,218	-
Reductions	(6,272)	(5,574)
Ending balance	\$ 16,059	\$ 21,113



The following table sets forth as of December 31, 2018, 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,	incipal Interest
2019	\$ 2,615
2020	2,206
2021	1,776
2022	1,416
2023	1,213
2024-2028	4,334
2029-2033	2,024
2034-2038	409
2039-2043	60
2044-2047	 6
Total	\$ 16,059

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, 2018, were as follows:

				Ori	ginal Sales	1	2/31/18			Counterparty Rating
Count	Par	Ехр	osure		Price	Р	remium	Fa	ir Value	(S&P / Moody's)
23	\$ 125,000		26.4%	\$	129,789	\$	129,747	\$	(42)	A+ / Aa3
11	42,000		8.9%		43,330		43,550		220	A / A2
7	14,000		3.0%		14,452		14,562		110	AA- / Aa2
1	50,000		10.6%		52,625		51,906		(719)	NA
18	85,000		18.0%		88,155		88,528		373	A- / Baa1
5	20,000		4.2%		20,418		20,638		220	AA+ / Aaa
13	35,000		7.4%		35,873		36,227		354	BBB+/A3
4	20,000		4.2%		20,423		20,652		229	BBB-/NA
25	82,000		17.3%		84,310		84,766		456	A+ / Aa2
107	\$ 473,000	10	0.00%	\$	489,375	\$	490,576	\$	1,201	



The outstanding forward contracts, summarized by counterparty as of December 31, 2017, were as follows:

Count	Par	Exposure	Original Sales Price		2/31/17 remium	Fair Value		Counterparty Rating (S&P / Moody's)
23	\$ 97,000	23.9%	\$	101,855	\$ 101,554	\$	(301)	A+ / Aa3
14	34,000	8.4%		35,712	35,550		(162)	A / A1
7	7,000	1.7%		7,434	7,399		(35)	AA-/Aa2
23	94,000	23.2%		99,201	98,575		(626)	A- / Baa1
1	45,000	11.1%		47,925	47,173		(752)	AA+ / Aaa
27	67,000	16.5%		70,462	70,200		(262)	BBB+/A3
25	62,000	15.2%		64,975	64,835		(140)	AA- / Aa2
120	\$ 406,000	100.00%	\$	427,564	\$ 425,286	\$	(2,278)	

Summary

A summary of derivative instruments activity for the years ended December 31, 2018 and 2017 is as follows:

				20	18				2017								
	Н	Hedging		Investments						edging	Investments						
	Swaps		Swaps		Forwards		Total		Swaps		Swaps		Forwards			Total	
Fair value, beginning	\$	67,442	\$	5,879	\$	(2,278)	\$	71,043	\$	83,365	\$	10,398	\$	(2,378)	\$	91,385	
Settlements		(9,566)		(5,335)		2,278		(12,623)		(20,363)		(8,890)		2,378		(26,875)	
Change in fair value		(6,031)		1,438		1,201		(3,392)		4,440		4,371		(2,278)		6,533	
Fair value, ending	\$	51,845	\$	1,982	\$	1,201	\$	55,028	\$	67,442	\$	5,879	\$	(2,278)	\$	71,043	

(9) Debt Refundings

On February 28, 2018, the Authority issued the Homeownership Class I Series 2018AA Bonds in the aggregate principal amount of \$73.1 million. The entire proceeds of the bonds were used to refund a portion of the Authority's Homeownership Class Series 2017BB Bonds. The refunding was for the purpose of recycling the volume cap utilized for the issuance of the refunded 2017BB bonds.

On May 9, 2018, the Authority issued Single Family Mortgage 2018 Series A, 2018 Series B-1 and 2018 Series B-2 Bonds in the aggregate principal amount of \$87.5 million. Proceeds totaling \$21.2 million of the bonds were used to refund the Authority's Single Family Mortgage 2007 Series A-2 Bonds. The refunding resulted in a reduction of the projected interest rate on the refunded bonds, including any associated interest rate swaps outstanding on the refunded bonds as well as any swaps entered into in connection with the refunding bonds. Additionally, proceeds totaling \$24.5 million of the bonds were used to refund a portion of the Authority's Homeownership Class Series 2017BB Bonds. The refunding was for the purpose of recycling the volume cap utilized for the issuance of the refunded 2017BB bonds.

On September 26, 2018, the Authority issued Federally Taxable Single Family Mortgage Class I Bonds 2018 Series D in the aggregate principal amount of \$38.0 million. The entire proceeds of the bonds were used to refund all or a portion of the Authority's Single Family Mortgage 2003 Series B-1, 2003 Series B-2, 2008 Series A-1 and 2008 Series A-2 Bonds. The



refunding resulted in a reduction of the projected interest rate on the refunded bonds, including the associated interest rate swaps outstanding on the refunded bonds.

On March 28, 2018, the Authority issued Federally Taxable, Federally Multifamily/Project 2018 Series A-1 and 2018 Series A-2 Bonds in the aggregate principal amount of \$91.3 million. The entire proceeds of the bonds were used to refund all or a portion of the Multifamily/Project Bonds 2003 Series A-1, 2003 Series A-2, 2004 Series A-1, 2005 Series A-1, 2005 Series B-1, 2006 Series A-1 and 2008 Series C-1. The refunding resulted in a reduction of the projected interest rate on the refunded bonds, including the associated interest rate swaps outstanding on the refunded bonds.

On July 19, 2017, the Authority issued Federally Taxable Single Family Mortgage 2017 Series A Bonds in the aggregate principal amount of \$52.0 million. Proceeds totaling \$27.7 million of the bonds were used to refund a portion of the Authority's Taxable Single Family Mortgage 2007 Series B-1 and 2007 Series B-3 Bonds. The refunding resulted in a reduction of the projected interest rate on the refunded bonds, including the associated interest rate swaps outstanding on the refunded bonds.

On July 19, 2017, the Authority issued Federally Taxable Single Family Mortgage 2017 Series B-1 and 2017 Series B-2 Bonds in the aggregate principal amount of \$20.9 million. The entire proceeds of the bonds were used to refund a portion of the Authority's Taxable Single Family Mortgage 2007 Series B-1 Bonds. The refunding resulted in a reduction of the projected interest rate on the refunded bonds, including the associated interest rate swaps outstanding on the refunded bonds.

On October 31, 2017, the Authority issued Single Family Mortgage 2017 Series D and 2017 Series E Bonds in the aggregate principal amount of \$30.4 million. The entire proceeds of the bonds were used to refund a portion of the Authority's Single Family Mortgage 2012 Series A-2 Bonds. The refunding resulted in a reduction of the projected interest rate on the refunded bonds, including any associated interest rate swaps outstanding on the refunded bonds as well as any swaps entered into in connection with the refunding bonds.

(10) Fair Value Measurement

The Authority categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. 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, 2018:

				Fair Va	ts Using				
				Quoted					
			Pı	rices in					
				Active	Si	gnificant			
			Ма	rkets for		Other	Signi	ficant	
			ld	Identical Assets		servable	Unobs	ervable	
						Inputs	Inp	outs	
	12/31/2018			evel 1)	(Level 2)	(Level 3)		
Investments by fair value level									
U.S. government agencies	\$	684,616	\$	39,973	\$	644,643	\$	-	
U.S. Treasuries		687		506		181		-	
Total investments by fair value level			\$	40,479	\$	644,824	\$		
Other investments not subject to the leveling hierarch	у								
Investment agreements - uncollaterlized		42,920							
Repurchase agreements		10,008							
Money market mutual funds		78,238							
External investment pools		8,466							
Total investments	\$	824,935							
Derivative instuments									
Forward sale agreements	\$	1,201			\$	1,201	\$	-	
Hedging and investment derivatives		53,827				53,827		-	
Total derivative instruments	\$	55,028	\$	-	\$	55,028	\$	-	

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, 2018 the Authority held investments totaling \$52.9 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 mutual funds and in an external governmental investment pool totaling \$78.2 million and \$8.5 million, respectively, which were not subject to the leveling hierarchy.



The Authority has the following recurring fair value measurements as of December 31, 2017:

			Fair Value Measurements Using						
				Quoted					
			Pı	rices in					
				Active	Si	gnificant			
			Ма	rkets for		Other	Signi	ficant	
	Identi		entical	Ob	servable	Unobs	ervable		
			Assets			Inputs	Inp	uts	
		12/31/2017	(L	evel 1)	(Level 2)	(Lev	rel 3)	
Investments by fair value level									
U.S. government agencies	\$	376,444	\$	55,239	\$	321,205	\$	-	
U.S. Treasuries		31,478		181		31,297		-	
Total investments by fair value level			\$	55,420	\$	352,502	\$		
Other investments not subject to the leveling hierarchy	y								
Investment agreements - uncollaterlized		66,271							
Repurchase agreements		10,450							
Money market mutual funds		212,223							
External investment pools		7,629							
Total investments	\$	704,495							
Derivative instuments									
Forward sale agreements	\$	(2,278)			\$	(2,278)	\$	-	
Hedging and investment derivatives		73,321				73,321		-	
Total derivative instruments	\$	71,043	\$	-	\$	71,043	\$	-	

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, 2017 the Authority held investments totaling \$76.7 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 mutual funds and in an external governmental investment pool totaling \$212.2 million and \$7.6 million, respectively, which were not subject to the leveling hierarchy.

(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, 2018 and 2017, 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, 2018 and 2017:

		2018	2017
Designations:			
Housing lending program	\$	210,101	\$ 170,191
Commerical lending program		7,179	6,821
General operating and working capital reserves		29,471	28,837
Debt reserves		59,241	47,534
Total general programs unrestricted net position		305,992	\$ 253,383

(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 Public Employees' Retirement Association of Colorado (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.

During the 2018 legislative session, the Colorado General Assembly passed significant pension reform through Senate Bill (SB) 18-200: Concerning Modifications To the Public Employees' Retirement Association Hybrid Defined Benefit Plan Necessary to Eliminate with a High Probability the Unfunded Liability of the Plan Within the Next Thirty Years. Governmental accounting standards require the net pension liability and related amounts of the LGDTF for financial reporting purposes be measured using the plan provisions in effect as of the LGDTF's measurement date of December 31, 2017. As such, the following disclosures do not include the changes to plan provisions required by SB 18-200 with the exception of the section titled Changes between the measurement date of the net pension liability and December 31, 2018.

(b) General Information about the Pension Plan

Plan description – Eligible employees of the Authority are provided with pensions through the LGDTF. Plan benefits are specified in Title 24, Article 51 of the Colorado Revised Statutes (C.R.S.), administrative rules set forth at 8 C.C.R. 1502-1, and applicable provisions of the federal Internal Revenue Code. Colorado State law provisions may be amended from time



to time by the Colorado General Assembly. PERA issues a publicly available comprehensive annual financial report 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 federal Internal Revenue Code.

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.

Benefit recipients who elect to receive a lifetime retirement benefit are generally eligible to receive post-retirement cost-of-living adjustments (COLAs), referred to as annual increases in the C.R.S. Benefit recipients under the PERA benefit structure who began eligible employment before January 1, 2007 receive an annual increase of 2%, unless PERA has a negative investment year, in which case the annual increase for the next three years is the lesser of 2% or the average of the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) for the prior calendar year. Benefit recipients under the PERA benefit structure who began eligible employment after January 1, 2007 receive an annual increase of the lesser of 2% or the average CPI-W for the prior calendar year, not to exceed 10% of PERA's Annual Increase Reserve for the LGDTF.

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. Eligible employees are required to contribute 8% of their PERA-includable salary. The employer contribution requirements are summarized in the table below:

	Rate
Employer Contribution Rate ¹	10.00%
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%
Amount Apportioned to the LGDTF ¹	8.98%
Amortization Equalization Disbursement (AED) as specified in C.R.S. § 24-	
51-411 ¹	2.20%
Supplemental Amortization Equalization Disbursement (SAED) as	
specified in C.R.S. § 24-51-411 ¹	1.50%
Total Employer Contribution Rate to the LGDTF ¹	12.68%

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 \$2.1 million and \$1.9 million for the years ended December 31, 2018 and 2017, respectively.

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

At December 31 2018, the Authority reported a liability of \$29.0 million for its proportionate share of the net pension liability. The net pension liability was measured as of December 31, 2017, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of December 31, 2016. Standard update procedures were used to roll forward the total pension liability to December 31, 2017. The Authority's proportion of the net pension liability was based on the Authority's contributions to the LGDTF for the calendar year 2017 relative to the total contributions of participating employers to the LGDTF.

At December 31, 2017, the Authority's proportion was 2.6%, which was an increase of 0.2% from its proportion measured as of December 31, 2016.



For the year ended December 31, 2018, the Authority recognized pension expense of \$3.8 million. At December 31, 2018, 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	\$ 964	\$	-
Change of assumptions or other inputs	151		-
Net difference between projected and actual earnings on			
pension plan investments	1,905		6,692
Changes in proportion and differences between contributions			
recognized and proportionate share of contributions	1,514		-
Contributions subsequent to the measurement date	2,203		n/a
Total	\$ 6,737	\$	6,692

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, 2019. 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 Expens	e
2019	\$ 1,7	10
2020	(55	52)
2021	(1,64	43)
2022	(1,67	73)
2023		-
Thereafter		_



(ad hoc, substantively automatic)

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

Actuarial assumptions – The total pension liability in the December 31, 2016 actuarial valuation was determined using the following actuarial cost method, actuarial assumptions and other inputs:

Actuarial cost method	Entry age
Price inflation	2.40%
Real wage growth	1.10%
Wage inflation	3.50%
Salary increases, including wage inflation	3.50% - 10.45%
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	2.00%
PERA benefit structure hired after 12/31/06	

Healthy mortality assumptions for active members reflect the 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.

Financed by the Annual Increase Reserve

Healthy, post-retirement mortality assumptions reflect the RP-2014 Healthy Annuitant Mortality Table, adjusted as follows:

- Males: Mortality improvement projected to 2018 using the MP-2015 projection scale, a 73% factor applied to rates for ages less than 80, a 108% factor applied to rates for ages 80 and above, and further adjustments for credibility.
- Females: Mortality improvement projected to 2020 using the MP-2015 projection scale, a 78% factor applied to rates
 for ages less than 80, a 109% factor applied to rates for ages 80 and above, and further adjustments for credibility.

For disabled retirees, the mortality assumption was changed to reflect 90% of the RP-2014 Disabled Retiree Mortality Table.

The actuarial assumptions used in the December 31, 2016, valuations were based on the results of the 2016 experience analysis for the periods January 1, 2012, through December 31, 2015, as well as, the October 28, 2016, actuarial assumptions workshop and were adopted by the PERA Board during the November 18, 2016, Board meeting.

The long-term expected return on plan assets is reviewed as part of regular experience studies prepared every four or five years for PERA. Recently, this assumption has been reviewed more frequently. The most recent analyses were outlined in presentations to PERA's Board on October 28, 2016.

Several factors were considered in evaluating the long-term rate of return assumption for the LGDTF, 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 by the investment consultant 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 percentage and then adding expected inflation.



As of the most recent adoption of the long-term expected rate of return by the PERA Board, the target asset allocation and best estimates of geometric real rates of return for each major asset class are summarized in the following table:

		30 Year Expected Geometric
Asset Class	Target Allocation	Real rate of Return *
U.S. Equity – Large Cap	21.20%	4.30%
U.S. Equity – Small Cap	7.42%	4.80%
Non U.S. Equity – Developed	18.55%	5.20%
Non U.S. Equity – Emerging	5.83%	5.40%
Core Fixed Income	19.32%	1.20%
High Yield	1.38%	4.30%
Non U.S. Fixed Income - Develope	d 1.84%	0.60%
Emerging Market Debt	0.46%	3.90%
Core Real Estate	8.50%	4.90%
Opportunity Fund	6.00%	3.80%
Private Equity	8.50%	6.60%
Cash	1.00%	0.20%
Total	100.00%	

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 rate of return assumption of 7.25%.

Discount rate – The discount rate used to measure the total pension 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:

- 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 3.50%.
- Employee contributions were assumed to be made at the current member contribution rate. 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 and effective as of the measurement date, including 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 included 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
 used by the plan 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.



As the ad hoc post-retirement benefit increases financed by the AIR are defined to have a present value at the long-term expected rate of return on plan investments equal to the amount transferred for their future payment, AIR transfers to the fiduciary net position and the subsequent AIR benefit payments have no impact on the Single Equivalent Interest Rate (SEIR) determination process when the timing of AIR cash flows is not a factor (i.e., the plan's fiduciary net position is not projected to be depleted). When AIR cash flow timing is a factor in the SEIR determination process (i.e., the plan's fiduciary net position is projected to be depleted), AIR transfers to the fiduciary net position and the subsequent AIR benefit payments were estimated and included in the projections.

• Benefit payments and contributions were assumed to be made at the end of the month.

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%)	Cu	rrent Discount Rate (7.25%)	1.0% Increase (8.25%)
Proportionate share of the net pension liability	\$ 46,211	\$	29,014	\$ 14,679

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

Payables to the pension plan

Changes between the measurement date of the net pension liability and December 31, 2018

During the 2018 legislative session, the Colorado General Assembly passed significant pension reform through SB 18-200: Concerning Modifications to the Public Employees' Retirement Association Hybrid Defined Benefit Plan Necessary to Eliminate with a High Probability the Unfunded Liability of the Plan Within the Next Thirty Years. The bill was signed into law by Governor Hickenlooper on June 4, 2018. SB 18-200 makes changes to the plans administered by PERA with the goal of eliminating the unfunded actuarial accrued liability of the Division Trust Funds and thereby reach a 100% funded ratio for each division within the next 30 years.

A brief description of some of the major changes to plan provisions required by SB 18-200 are listed below. A full copy of the bill can be found online at www.leg.colorado.gov.

- Increases employee contribution rates by a total of 2% (to be phased in over a period of 3 years starting on July 1, 2019).
- Modifies the retirement benefits, including temporarily suspending and reducing the annual increase for all current
 and future retirees, modifying the highest average salary for employees with less than five years of service credit on
 December 31, 2019 and raises the retirement age for new employees.



- Member contributions, employer contributions, and the annual increases will be adjusted based on certain statutory parameters beginning July 1, 2020, and then each year thereafter, to help keep PERA on path to full funding in 30 years.
- Expands eligibility to participate in the PERA DC Plan to new members hired on or after January 1, 2019, in the Local Government Division. Beginning January 1, 2021, and every year thereafter, employer contribution rates for the LGDTF will be adjusted to include a defined contribution supplement based on the employer contribution amount paid to defined contribution plan participant accounts that would have otherwise gone to the defined benefit trusts to pay down the unfunded liability plus any defined benefit investment earnings thereon.

At December 31, 2018 the Authority reported a liability of \$29.0 million for its proportionate share of the net pension liability which was measured using the plan provisions in effect as of the pension plan's year-end based on a discount rate of 7.25%. For comparative purposes, the following schedule presents an estimate of what the Authority's proportionate share of the net pension liability and associated discount rate would have been had the provisions of SB 18-200, applicable to the LGDTF, become law on December 31, 2017. This pro forma information was prepared using the fiduciary net position of the LGDTF as of December 31, 2017. Future net pension liabilities reported could be materially different based on changes in investment markets, actuarial assumptions, plan experience and other factors.

Estimated Discount Rate	Proportionate Share of the Estimated
Calculated Using Plan Provisions	Net Pension Liability Calculated Using
Required by SB 18-200	Plan Provisions Required by SB 18-200
(pro forma)	(pro forma)
7.25%	\$20,522

(d) Defined Contribution Retirement Plans

PERAPlus 401(k) Plan

Plan Description - Employees of the Authority that are also members of the LGDTF may voluntarily contribute to the PERAPlus 401(k) plan, an Internal Revenue Code 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 comprehensive annual financial report for the Program. That report can be obtained at www.copera.org/investments/pera-financial-reports.

Funding Policy - The PERAPlus 401(k) plan is funded by voluntary member contributions up to the maximum limits set by the Internal Revenue Service, 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% of covered salary as determined by the Internal Revenue Service. Employees are immediately vested in their own contributions, employer contributions and investment earnings. For the years ended December 31, 2018 and 2017, program members contributed \$1.2 million and \$1.1 million, respectively, and the Authority recognized expense of \$651 thousand and \$441 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 Internal Revenue Code 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 comprehensive annual financial report 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 Internal Revenue Service, 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, 2018 and 2017, program members contributed \$87 thousand and \$63 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 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. The HCTF is established under Title 24, Article 51, Part 12 of the Colorado Revised Statutes (C.R.S.), as amended. Colorado State law provisions may be amended from time to time by the Colorado General Assembly. Title 24, Article 51, Part 12 of the C.R.S., as amended, 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 from time to time by the Colorado General Assembly. PERA issues a publicly available comprehensive annual financial report that can be obtained at www.copera.org/investments/pera-financial-reports.

Benefits provide - 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 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 basis for 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 \$168 thousand and \$149 thousand for the years ended December 31, 2018 and 2017.

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

At December 31, 2018 the Authority reported a liability of \$2.6 million for its proportionate share of the net OPEB liability. The net OPEB liability for the HCTF was measured as of December 31, 2017, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of December 31, 2016. Standard update procedures were used to roll-forward the total OPEB liability to December 31, 2017. The Authority's proportion of the net OPEB liability was based on the Authority's contributions to the HCTF for the calendar year 2017 relative to the total contributions of participating employers to the HCTF.

At December 31, 2017, the Authority's proportion was 0.20%, which was an increase of 0.02% from its proportion measured as of December 31, 2016.



For the year ended December 31, 2018 the Authority recognized OPEB expense of \$72 thousand. At December 31, 2018, the Authority reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

		ed Outflow esources	 erred Inflow Resources
Difference between expected and actual experience		10	\$ -
Change of assumptions or other inputs		-	-
Net difference between projected and actual earnings on			
pension plan investments		-	35
Changes in proportion and differences between contributions			
recognized and proportionate share of contributions		190	1
Contributions subsequent to the measurement date		164	n/a
Total	\$	364	\$ 36

The \$164 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, 2019. 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,	Pension	Expense
2019	\$	30
2020		30
2021		30
2022		30
2023		39
Thereafter		3



Actuarial assumptions - The total OPEB liability in the December 31, 2016 actuarial valuation was determined using the following actuarial cost method, actuarial assumptions and other inputs:

Actuarial cost method	Entry ag
Price inflation	2.40%
Real wage growth	1.10%
Wage inflation	3.50%

Salary increases, including wage inflation 3.50% in aggregate

Long-term investment rate of return, net of pension

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 5.00%

Medicare Part A premiums 3.00% for 2017,

gradually rising to 4.25% in 2023

DPS benefit structure:

Service-based premium subsidy 0.00%
PERACare Medicare plans N/A
Medicare Part A premiums N/A

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.

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 heuristics developed by health plan actuaries and administrators, and projected trends for the Federal Hospital Insurance Trust Fund (Medicare Part A premiums) provided by the Centers for Medicare & Medicaid Services. Effective December 31, 2016, 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
2017	5.00%	3.00%
2018	5.00%	3.25%
2019	5.00%	3.50%
2020	5.00%	3.75%
2021	5.00%	4.00%
2022	5.00%	4.00%
2023	5.00%	4.25%
2024+	5.00%	4.25%

Mortality assumptions for the determination of the total pension liability for each of the Division Trust Funds as shown below are applied, as applicable, in the determination of the total OPEB liability for the HCTF. Affiliated employers of the State, School, Local Government, and Judicial Divisions participate in the HCTF.

Healthy mortality assumptions for active members were based on the 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 percent factor applied to male rates and a 55 percent factor applied to female rates.

Healthy, post-retirement mortality assumptions for the State and Local Government Divisions were based on the RP-2014 Healthy Annuitant Mortality Table, adjusted as follows:

- Males: Mortality improvement projected to 2018 using the MP-2015 projection scale, a 73% factor applied to rates for ages less than 80, a 108% factor applied to rates for ages 80 and above, and further adjustments for credibility.
- Females: Mortality improvement projected to 2020 using the MP-2015 projection scale, a 78% factor applied to rates for ages less than 80, a 109% factor applied to rates for ages 80 and above, and further adjustments for credibility.

Healthy, post-retirement mortality assumptions for the School and Judicial Divisions were based on the RP-2014 White Collar Healthy Annuitant Mortality Table, adjusted as follows:

- Males: Mortality improvement projected to 2018 using the MP-2015 projection scale, a 93% factor applied to rates for ages less than 80, a 113% factor applied to rates for ages 80 and above, and further adjustments for credibility.
- Females: Mortality improvement projected to 2020 using the MP-2015 projection scale, a 68% factor applied to rates for ages less than 80, a 106% factor applied to rates for ages 80 and above, and further adjustments for credibility.

For disabled retirees, the mortality assumption was based on 90% of the RP-2014 Disabled Retiree Mortality Table.

The following economic and demographic assumptions were specifically developed for, and used in, the measurement of the obligations for the HCTF:

• The assumed rates of PERACare participation were 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 were updated to reflect the change in costs for the 2017 plan year.
- The percentages of PERACare enrollees who will attain age 65 and older ages and are assumed to not qualify for premium-free Medicare Part A coverage were revised to more closely reflect actual experience.
- The percentage of disabled PERACare enrollees who are assumed to not qualify for premium-free Medicare Part A coverage were revised to reflect more closely actual experience.
- 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 were 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, were revised to more closely reflect
 actual experience.
- 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.
- The rates of PERAcare coverage election for spouses of eligible inactive members and future retirees were revised to more closely reflect actual experience.
- The assumed age differences between future retirees and their participating spouses were revised to reflect more closely actual experience.

The actuarial assumptions used in the December 31, 2016, valuations were based on the results of the 2016 experience analysis for the periods January 1, 2012, through December 31, 2015, as well as, the October 28, 2016, actuarial assumptions workshop and were adopted by the PERA Board during the November 18, 2016, Board meeting. In addition, certain actuarial assumptions pertaining to per capita health care costs and their related trends are analyzed and reviewed by PERA's actuary, as needed.

The long-term expected return on plan assets is reviewed as part of regular experience studies prepared every four or five years for PERA. Recently, this assumption has been reviewed more frequently. The most recent analyses were outlined in presentations to PERA's Board on October 28, 2016.

Several factors were considered in evaluating the long-term rate of return assumption for the HCTF, 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 percentage and then adding expected inflation.



As of the most recent adoption of the long-term expected rate of return by the PERA Board, the target asset allocation and best estimates of geometric real rates of return for each major asset class are summarized in the following table:

		30 Year Expected Geometric
Asset Class	Target Allocation	Real rate of Return *
U.S. Equity – Large Cap	21.20%	4.30%
U.S. Equity – Small Cap	7.42%	4.80%
Non U.S. Equity – Developed	18.55%	5.20%
Non U.S. Equity – Emerging	5.83%	5.40%
Core Fixed Income	19.32%	1.20%
High Yield	1.38%	4.30%
Non U.S. Fixed Income - Develope	d 1.84%	0.60%
Emerging Market Debt	0.46%	3.90%
Core Real Estate	8.50%	4.90%
Opportunity Fund	6.00%	3.80%
Private Equity	8.50%	6.60%
Cash	1.00%	0.20%
Total	100.00%	

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 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	Current	1% Increase in
	Trend Rates	Trend Rates	Trend Rates
PERACare Medicare trend rate	4.00%	5.00%	6.00%
Initial Medicare Part Atrend rate	2.00%	3.00%	4.00%
Ultimate Medicare Part Atrend rate	3.25%	4.25%	5.25%
Net OPEB Liability	\$2,559	\$2,632	\$2,719

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, 2017, measurement date.

chfa.

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

- 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 3.50%.
- 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. For future plan members, employer contributions were reduced by the
 estimated amount of total service costs for future plan members.
- 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.
- Transfers of a portion of purchase service agreements intended to cover the costs associated with OPEB benefits were estimated and included in the projections.
- Benefit payments and contributions were assumed to be made at the end of the month.

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%.

Sensitivity of the Authority 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	Cur	rent Discount Rate	1.0% Increase
	(6.25%)		(7.25%)	(8.25%)
Proportionate share of the net OPEB liability	\$ 2,959	\$	2,632	\$ 2,352

OPEB plan fiduciary net position - Detailed information about the HCTF's fiduciary net position is available in PERA's comprehensive annual financial report 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, Regulatory Compliance and Information Security and Privacy. The Authority embraces the Three Lines of Defense Model to enterprise risk management, in which senior management and the Board of Directors look to (a) operating management, (b) the risk and compliance functions and (c) internal audit testing to appropriately manage risk. The Enterprise Risk Management (ERM) function includes the Board of Directors and an Enterprise Risk and Opportunity Management Committee including the executive officers, Directors of Information Technology, Research and Strategy and Human Resources and includes other CHFA 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. CHFA 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 in the past three years.

chfa.

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

(14) Related-Party Transactions

As of the year ended December 31, 2018, the Authority had allocated Federal and State Low Income Housing Tax Credits in the amount of \$8.8 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 three outstanding loans with the FCHA. As of December 31, 2018 and 2017, the unpaid principal balance on the loans was \$4.1 million and \$4.2 million, respectively. The Executive Director of the FCHA is a member of the Authority's Board.

As of the year ended December 31, 2018, the Authority had allocated Federal Low Income Housing Tax Credits in the amount of \$3.6 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 three outstanding loans with the GJHA. As of December 31, 2018 and 2017, the unpaid principal balance on the loans totaled \$5.2 million and \$4.9 million, respectively. The Executive Director of the GJHA is a member of the Authority's Board.

As of the year ended December 31, 2018, the Authority has four outstanding loans with the HACL. As of December 31, 2018 and 2017, the unpaid principal balance on the loans totaled \$5.6 million and \$5.7 million, respectively. The Executive Director of the HACL was a member of the Authority's Board at the time these loans were made.

(15) Commitments and Contingencies

The Authority had outstanding commitments to make or acquire single family and multifamily/business loans of \$339.8 million and \$43.9 million, respectively, as of December 31, 2018. The Authority had outstanding commitments to make or acquire single family and multifamily/business loans of \$282.7 million and \$33.6 million, respectively, as of December 31, 2017.

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 Mortgage Backed Securities (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 \$41.5 million and \$39.3 million of these loans in 2018 and 2017, 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 Mortgage-Backed Securities (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 Loans 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 \$0 and \$492 thousand of these loans in 2018 and 2017, respectively. The Authority did not have any repurchase obligations as of December 31, 2018.



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 Loans 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 did not repurchase any Freddie Mac loans in 2018 or 2017. The Authority did not have any repurchase obligations as of December 31, 2018.

(16) Subsequent Events

On November 15, 2018 the Authority's Board of Directors authorized the issuance and sale of Single Family Mortgage Class I Bonds 2019 Series A, B and C. Pricing of the bonds took place on November 27, 2018 and the bond transaction officially closed on January 3, 2019. The bonds consist of fixed and adjustable rate bonds in a par amount of \$102.9 million.

The proceeds of the 2019 ABC Bonds were used to purchase Ginnie Mae Mortgage Backed Securities (GNMA MBS) and associated 2nd mortgages. The GNMA MBS consisted of qualified tax-exempt loans. To stretch limited private activity bond (PAB) volume cap, the bonds were issued as taxable and tax-exempt series.

The 2019 A, B-1 and C series bonds are fixed rate bonds and the 2019 B-2 Bonds are adjustable rate bonds. The adjustable rate bonds are backed by a Barclays Standby Bond Purchase Agreement (SBPA). With the issuance of the adjustable rate bonds, the Authority entered into interest rate swap contracts totaling \$20.0 million to hedge the adjustable interest rates. The swaps were priced on the same day as the bonds, November 27, 2018, and were effective on the bond closing date of January 3, 2019.



required supplemental information (unaudited)



financing the places where people live and work

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

(in thousands of dollars)

	2014		2015	2016	2017
Proportion of the net pension liability		2.16%	2.29%	2.41%	2.61%
Proportionate share of net pension liability	\$	19,360	\$ 25,185	\$ 32,535	\$ 29,015
Covered-employee payroll	\$	11,857	\$ 12,984	\$ 14,091	\$ 14,974
Proportionate share of the net pension liability as a percentage of its covered-employee payroll		163.28%	193.97%	230.89%	193.77%
Plan fiduciary net position as a percentage of the total pension plan liability		80.72%	76.87%	73.65%	79.37%

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

Colorado Housing and Finance Authority Schedule of Authority Contributions Local Government Division Trust Fund Last 10 Fiscal Years*

	2014			2015	 2016	2017		
Contractually required contribution	\$	1,504	\$	1,646	\$ 1,787	\$	1,899	
Contributions in relation to the contractually required contribution		1,504		1,646	 1,787		1,899	
Contribution deficiency	\$		\$		\$ -	\$	-	
Covered-employee payroll	\$	11,857	\$	12,984	\$ 14,091	\$	14,974	
Contributions as a percentage of covered-employee payroll		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.

financing the places where people live and work

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

(in thousands of dollars)

	 2016	2017
Proportion of the net OPEB liability	0.18%	0.20%
Proportionate share of net OPEB liability	\$ 2,398	\$ 2,632
Covered-employee payroll	\$ 14,091	\$ 14,974
Proportionate share of the net OPEB liability as a percentage of its covered-employee payroll	17.02%	17.57%
Plan fiduciary net position as a percentage of the total OPEB plan liability	16.72%	17.53%

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

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

	2	2016	2017		
Contractually required contribution	\$	144	\$	153	
Contributions in relation to the contractually required contribution		144		153	
Contribution deficiency	\$		\$		
Covered-employee payroll	\$	14,091	\$	14,974	
Contributions as a percentage of covered-employee payroll		1.02%		1.02%	

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









financing the places where people live and work

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

As of December 31, 2018

(with summarized financial information for December 31, 2017)

	General	Single	Multifamily/			Summarized
	Programs	Family	Business	Eliminations	2018	2017
Assets	- J	•				
Current assets:						
Cash (Note 2)						
Restricted	\$ 117,566	\$ -	\$ -	\$ -	\$ 117,566	\$ 112,427
Unrestricted	41,287	-	-	-	41,287	47,530
Investments (Note 2)	89,434	91,856	68,600	-	249,890	331,787
Loans receivable (Note 3)	7,691	9,574	16,771	(370)	33,666	34,104
Loans receivable held for sale (Note 3)	214,557	-	-	-	214,557	149,694
Accrued interest receivable	4,015	3,592	1,149	(37)	8,719	8,030
Other assets	5,134	-	22	-	5,156	4,647
Due (to) from other programs	(9,818)	6,069	3,749	-	<u> </u>	
Total current assets	469,866	111,091	90,291	(407)	670,841	688,219
Noncurrent assets:						
Investments (Note 2)	3,394	528,524	43,127	-	575,045	372,708
Loans receivable, net (Note 3)	223,031	277,635	486,356	(10,728)	976,294	988,999
Capital assets - nondepreciable (Note 4)	1,868	-	-	-	1,868	1,701
Capital assets - depreciable, net (Note 4)	12,019	-	-	-	12,019	12,493
Other real estate owned, net	182	227	400	-	809	789
Other assets	52,190				52,190	34,468
Total noncurrent assets	292,684	806,386	529,883	(10,728)	1,618,225	1,411,158
Total assets	762,550	917,477	620,174	(11,135)	2,289,066	2,099,377
Deferred outflows of resources						
Accumulated increase in fair value of hedging derivatives	-	4,986	49,747	-	54,733	81,942
Pension and OPEB contributions and investment earnings	7,101	-	-	-	7,101	7,404
Refundings of debt	-	2,724	1,364	-	4,088	3,657
Total deferred outflows of resources	7,101	7,710	51,111	-	65,922	93,003
Liabilities						
Current liabilities:						
Short-term debt (Note 5)	237,500	-	-	-	237,500	92,785
Bonds payable (Note 6)	598	46,866	32,148	-	79,612	117,380
Notes payable (Note 6)	105	-	-	-	105	104
Accrued interest payable	152	4,802	4,598	(37)	9,515	9,855
Federally assisted program advances	554	-	-	-	554	647
Accounts payable and other liabilities	115,605	204	8,203	-	124,012	151,425
Total current liabilities	354,514	51,872	44,949	(37)	451,298	372,196
Noncurrent liabilities:						
Bonds payable (Note 6)	6,001	784,505	488,335	-	1,278,841	1,255,540
Derivative instruments	1,201	4,034	49,793	-	55,028	71,043
Derivatives related borrowing	-	10,022	6,037	-	16,059	21,113
Net pension and OPEB liability - proportionate share	31,646	-	-	-	31,646	32,535
Notes payable (Note 6)	11,856	-	-	(11,098)	758	863
Other liabilities (Note 6)	41,442	-	-	-	41,442	15,674
Total noncurrent liabilities	92,146	798,561	544,165	(11,098)	1,423,774	1,396,768
Total liabilities	446,660	850,433	589,114	(11,135)	1,875,072	1,768,964
Deferred inflows of resources						
Accumulated decrease in fair value of hedging derivatives	-	3,021	2,677	-	5,698	6,367
Pension and OPEB investment differences	6,728	<u> </u>		-	6,728	49
Total deferred inflows of resources	6,728	3,021	2,677	-	12,426	6,416
Net position						
Investment in capital assets, net of related debt	13,887	-	-	(11,098)	2,789	2,800
Restricted primarily by bond indentures	7,482	71,733	79,494	-	158,709	160,817
Unrestricted (Note 11)	294,894	-	· -	11,098	305,992	253,383
Total net position	\$ 316,263	\$ 71,733	\$ 79,494	\$ -	\$ 467,490	\$ 417,000

financing the places where people live and work

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

For the year ended December 31, 2018

(with summarized financial information for the year ended December 31, 2017)

	General		eneral Single		Multifamily/						Sur	mmarized
	Р	rogram		Family	В	usiness	Elim	inations	2018		2017	
Interest income and expense:												
Interest on loans receivable	\$	13,430	\$	14,822	\$	28,063	\$	(439)	\$	55,876	\$	55,777
Interest on investments		1,203		19,022		3,737		-		23,962		17,068
Interest on debt		(4,463)		(41,322)		(21,251)		439		(66, 597)		(56,033
Net interest income		10,170		(7,478)		10,549		-		13,241		16,812
Other operating income (loss):												
Loan servicing income		29,284		-		(7)		-		29,277		24,253
Gain on sale of loans		83,817		-		-		-		83,817		106,788
Investment derivative activity gain (loss)		(3,479)		3,088		1,171		-		780		3,143
Net increase (decrease) in the fair value												
of investments		(1,372)		5,677		(1,212)		-		3,093		5,950
Other revenues		11,878		(14)		10		-		11,874		16,857
Total other operating income		120,128		8,751		(38)		-		128,841		156,991
Total operating income		130,298		1,273		10,511		-		142,082		173,803
Operating expenses:												
Salaries and related benefits		26,211		-		-		-		26,211		27,515
General operating		56,750		4,212		908		-		61,870		92,395
Depreciation		1,038		-		-		-		1,038		684
Provision for losses		619		(70)		(288)		-		261		698
Total operating expenses		84,618		4,142		620		-		89,380		121,292
Net operating income		45,680		(2,869)		9,891		-		52,702		52,511
Nonoperating income and expenses:												
Federal grant receipts		140,231		-		-		-		140,231		137,126
Federal grant payments		(140,231)		-		-		-		(140,231)		(137, 126
Gain on sale of capital assets		18		-		-		-		18		19
Total nonoperating income and expenses, net	t	18		-		-		-		18		19
Income before transfers		45,698		(2,869)		9,891		-		52,720		52,530
Transfers from (to) other programs		9,275		1,309		(10,584)		-				-
Change in net position		54,973		(1,560)		(693)		-		52,720		52,530
Net position:												
Beginning of year		263,520		73,293		80,187		-		417,000		364,470
Restatement due to GASB 75		(2,230)		-		<u> </u>				(2,230)		
End of year	\$	316,263	\$	71,733	\$	79,494	\$	_	\$	467,490	\$	417.000



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

For the year ended December 31, 2018

(with summarized financial information for the year ended December 31, 2017) (in thousands of dollars)

		General	Single	Multifamily/			Summarized
		Program	Family	Business	Eliminations	2018	2017
Cash flows from operating activities:							
Principal payments received on loans receivable							
& receipts from dispositions of other real estate owned	\$	748,988 \$	34,800 \$	68,158	\$ (296) \$	851,650 \$	665,834
Interest payments received on loans receivable		13,099	15,172	28,498	(439)	56,330	56,699
Payments for loans receivable		(2,255,262)	(69,854)	(7,455)	-	(2,332,571)	(2,091,449
Receipts from sales of Ginnie Mae securities		1,434,024	78,713	-	-	1,512,737	1,527,338
Receipts from rental operations		5	-	-	-	5	4
Receipts from other revenues		41,206	(11)	3	-	41,198	41,241
Payments for salaries and related benefits		(29,616)	-	-	-	(29,616)	(19,740
Payments for goods and services		(50,463)	(4,386)	(36,275)	-	(91,124)	(99,834
All other, net		257	-	-	-	257	8,216
Net cash provided by (used in) operating activities		(97,762)	54,434	52,929	(735)	8,866	88,309
Cash flows from noncapital financing activities:							
Net increase (decrease) in short-term debt		144,715	-	-	-	144,715	31,780
Proceeds from issuance of bonds		-	383,079	91,255	-	474,334	374,281
Receipts from federal grant programs		156,231	-	-	-	156,231	137,906
Payments for federal grant programs		(140,231)	-	-	-	(140,231)	(137,127
Principal paid on bonds		(5,480)	(334,406)	(157,368)	-	(497,254)	(281,824
Principal paid on notes payable		(103)	-	-	-	(103)	(102
Interest rate swap activity, net		-	11,948	575	-	12,523	(1,651
Interest paid on short-term debt		(3,131)	-	-	-	(3,131)	(1,118
Interest rate swap settlements		-	(11,969)	(9,204)	-	(21,173)	(34,827
Interest paid on bonds		(458)	(23,444)	(16,843)	-	(40,745)	(22,240
Interest paid on notes payable		(416)	-	-	-	(416)	(11
Transfers to (from) other programs		1,628	8,872	(10,500)	•	-	-
Net cash provided by (used in) noncapital financing activities		152,755	34,080	(102,085)	-	84,750	65,067
Cash flows from capital and related financing activities:							
Purchase of capital assets		(713)	-	-	-	(713)	(10,419
Proceeds from the disposal of capital assets		-	-	-	-		· -
Proceeds from issuance of capital-related debt		-	-	-	-	-	-
Principal paid on capital-related debt		(296)	-	-	296	-	-
Interest paid on capital-related debt		(439)	-	-	439	-	-
Net cash provided by (used in) capital and related financing a	ctivities	(1,448)	-	-	735	(713)	(10,419
Cash flows from investing activities:							
Proceeds from maturities and sales of investments		1,727,863	1,022,536	308,666	-	3,059,065	2,548,640
Purchase of investments		(1,783,711)	(1,129,317)	(263,356)	-	(3,176,384)	(2,709,511
Income received from investments		1,199	18,267	3,846	-	23,312	16,790
Net cash provided by (used in) investing activities		(54,649)	(88,514)	49,156	-	(94,007)	(144,081
Net increase (decrease) in cash		(1,104)	-	-	-	(1,104)	(1,124
Cash at beginning of year		159,957	-	-	-	159,957	161,081
Cash at end of year	\$	158,853 \$	- \$	-	\$ - \$	158,853 \$	159,957
Restricted	\$	117,566 \$	- \$	-	\$ - \$	117,566 \$	112,427
Unrestricted	Ψ	41,287	- φ	-	· - J	41,287	47,530
Cash, end of year	\$	158,853	- \$		\$ - \$	158,853 \$	159,957

Continued on the next page.

financing the places where people live and work

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

For the year ended December 31, 2018

(with summarized financial information for the year ended December 31, 2017)

	General	Single	Multifamily/			Summarized
	Program	Family	Business	Eliminations	2018	2017
Reconciliation of operating income to net cash provided by (used in) operating activities:						
Net operating income \$	45,680 \$	(2,869) \$	9,891	\$ - \$	52,702 \$	52,511
Adjustments to reconcile operating income (loss) to net cash provided by (used in) operating activities:						
Depreciation expense	1,038	-	-	-	1,038	684
Amortization and fair value adjustments of service release premiums	9,412	-	-	-	9,412	25,290
Proportionate share of net pension and OPEB expense	3,862	-	-	-	3,862	6,207
Amortization of imputed debt associated with swaps	-	(2,224)	(4,048)	-	(6,272)	(5,573)
Provision for losses	619	(70)	(288)	-	261	698
Interest on investments	(1,203)	(19,022)	(3,737)	-	(23,962)	(17,068)
Interest on debt	4,463	43,546	25,299	(439)	72,869	61,607
Unrealized (gain) loss on investment derivatives	3,479	(3,088)	(1,171)	-	(780)	(3,143)
Unrealized (gain) loss on investments	1,372	(5,677)	1,212	-	(3,093)	(5,950)
(Gain) loss on sale of REO	109	14	(10)	-	113	88
Gain on sale of loans	(83,817)	-	-	-	(83,817)	(106,788)
Changes in assets and liabilities:						
Loans receivable and other real estate owned	(81,771)	43,645	60,713	(296)	22,291	76,345
Accrued interest receivable on loans and investments	(331)	350	435	-	454	922
Other assets	(18,289)	1	-	-	(18,288)	8,158
Accounts payable and other liabilities	17,615	(172)	(35, 367)	-	(17,924)	(5,679)
Net cash provided by (used in) operating activities \$	(97,762) \$	54,434 \$	52,929	\$ (735) \$	8,866 \$	88,309

financing the places where people live and work

Colorado Housing and Finance Authority Schedule of Adjusted Net Worth At December 31, 2018

A	Adjusted net worth calculation:			
	Net position per statement of			
	net position at end of			
	reporting period		\$	467,490
	Less:			
	Itemized unacceptable assets			
	1. Other assets	\$ 57,346		
	2.			
	3.		_	
	Total unacceptable assets			57,346
	Adjusted net worth		\$	410,144
B.	Required net worth calculation:			
	Unpaid principal balance (UPB) of			
	securities outstanding		\$	3,595,005
	(Note: number of pools = 626)			
	Plus:			
	Outstanding balance of available			
	commitment authority and			
	pools funded			448,969
	Total outstanding portfolio, commitment			
	authority and pools funded		\$	4,043,974
	Required net worth		\$	16,654
C.	Excess net worth		\$	393,490
	(Adjusted net worth - required net worth)			

financing the places where people live and work

Colorado Housing and Finance Authority Schedule of Other Assets At December 31, 2018

A.	Accrued interest income	\$ 8,719
B.	Deferred debt cost of issuance	-
C.	Other real estate owned	809
	Total other asset included in adjusted net worth	\$ 9,528
D.	Other assets excluded from adjusted net worth	 57,346
	Total current and noncurrent other assets	\$ 66,874



Colorado Housing and Finance Authority Liquid Asset Requirement Calculation for Issuers At December 31, 2018

A.	Liquid asset calculation:					
	Required net worth (Schedule of Adjusted Net Wo	orth, se	ction B)	\$	16,654	
	Acceptable liquid assets					
	Unrestricted cash	\$	41,287			
	2.	Ψ	41,201			
	3.					
	4.					
	5.					
	6.			_		
	Total liquid assets			\$	41,287	
	4			<u> </u>	, -	
B.	Required liquid asset:					
						Meets requirements?
	Single family issuer liquidity requirement			\$	3,595	Yes / No
	(Greater of \$1 million or 0.10% of outstanding				<u> </u>	
	single family securities)					



Colorado Housing and Finance Authority Capital Requirement Calculation for Issuer At December 31, 2018

	(in th	ousands of do	llars)				
A.	Capital requirement for depository institution	ns: not appl	icable to (CHFA	A		
	Tier 1 capital			\$_		_	
	Total capital			\$_		-	
	Risk-based assets			\$			
	Total assets			\$_		_ _	
	Tier 1 capital/total assets						%
	Tier 1 capital/risk-based assets						
	Total capital/risk-based assets						%
						Meets requ	uirement?
	5% of tier 1 capital/total assets	\$				Yes /	
	6% of tier 1 capital/risk-based assets	\$		•		Yes /	'No
	10% of total capital/risk-based assets	\$		= '		Yes /	'No
В.	Capital requirement for nondepository institu	utions:					
	Total adjusted net worth			\$	410,144		
	Total assets			\$_	2,289,066	- -	
	Total adjusted net worth/total assets		17.92	%		Meets requ	uirement? 'No

financing the places where people live and work

Colorado Housing and Finance Authority Schedule of Insurance Requirement At December 31, 2018

(in thousands of dollars)

A.	Identification of affiliated Ginnie Mae Issuers Affiliated Ginnie Mae issuers:	 None
B.	Required insurance calculation: Servicing portfolio:	
	Ginnie Mae	\$ 3,595,005
	Fannie Mae	1,285,042
	Freddie Mac	117,370
	Conventional (other)	 1,231,634
	Total servicing portfolio	\$ 6,229,051
	Required fidelity bond coverage	\$ 6,754
	Required mortgage servicing errors and omissions coverage	\$ 6,754
C.	Verification of insurance coverage:	
	Fidelity bond coverage at end of reporting period	\$ 10,000
	Mortgage servicing errors and omissions coverage at end of reporting period	\$ 10,000
D.	Excess insurance coverage:	
	Fidelity bond coverage	\$ 3,246
	Required mortgage servicing errors	
	and omissions coverage	\$ 3,246
E.	Policies contain the required elements	
	Fidelity bond coverage	 res No
	Mortgage servicing errors and omissions coverage	 res 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.











RSM US LLP

Independent Auditor's Report on Compliance With Requirements
That Could Have a Direct and Material Effect on the Major HUD Program
and on Internal Control Over Compliance Based on an Audit
in Accordance With the Consolidated Audit Guide for Audits of HUD Programs

The Board of Directors
Colorado Housing and Finance Authority

Report on Compliance for 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, 2018. The Authority's major HUD program and the related direct and material compliance requirements are as follows:

Name of Major HUD Program	Direct and Material Compliance Requirements
Government National Mortgage Association	Federal financial reports
issuers of mortgage-backed securities	 Eligibility to issue mortgage-backed securities
	 Review of custodial documents
	 Review of monthly accounting reports and quarterly submissions
	 Securities marketing and trading practices
	Adjusted net worth
	 Capital, liquid asset and insurance requirement

Management's Responsibility

Management is responsible for compliance with the requirements of laws, regulations, contracts and grants applicable to its HUD programs.

Auditor's Responsibility

Our responsibility is to express an opinion on compliance for the Authority's major HUD program based on our audit of the compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the Audit Guide. Those standards and the Audit Guide require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the compliance requirements referred to above that could have a direct and material effect on a major HUD program occurred. An audit includes examining, on a test basis, evidence about the Authority's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for the major HUD program. However, our audit does not provide a legal determination of the Authority's compliance.

Opinion on the Major HUD Program

In our opinion, based on our audit, the Authority complied, in all material respects, with the compliance requirements referred to above that could have a direct and material effect on the major HUD program for the year ended December 31, 2018.

Report on Internal Control Over Compliance

Management of the Authority is responsible for establishing and maintaining effective internal control over compliance with the compliance requirements referred to above. In planning and performing our audit of compliance, we considered the Authority's internal control over compliance with the requirements that could have a direct and material effect on the major HUD program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for the major HUD program 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 internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the Authority's 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 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 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 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 first paragraph of this section 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. However, material weaknesses may exist that have not been identified.

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 28, 2019



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

The 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, 2018, 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 28, 2019, which included an emphasis-of-a-matter paragraph relating to the adoption of an accounting standard.

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) to determine the 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.

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 determination of financial statement amounts. 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 entity'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 28, 2019





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

denver

1981 Blake Street Denver, Colorado 80202 303.297.chfa (2432) 800.877.chfa (2432)

www.chfainfo.com

western slope

348 Main Street Grand Junction, Colorado 81501 970.241.2341 800.877.8450













APPENDIX B

OUTSTANDING MASTER INDENTURE OBLIGATIONS

Outstanding Bonds

As of April 1, 2019, the Authority had issued and had Outstanding the following Series of Bonds under the Master Indenture in the Classes as indicated:

	Principal	Outstanding Principal Amount
Title of Bonds	Amount Issued	(April 1, 2019)
2000 Series A: Adjustable 2000 Series A-1 (Class I)	\$56,195,000	\$4,625,000
2005 Series B: Adjustable 2005 Series B-2 (Class I)	\$10,820,000	\$3,165,000
2006 Series A: Taxable Adjustable 2006 Series A-1 (Class I)	\$57,130,000 (1)	\$13,790,000
2007 Series B: Taxable Adjustable 2007 Series B-1 (Class I) Adjustable 2007 Series B-2 (Class I)	\$55,710,000 ⁽¹⁾ \$31,170,000	\$40,935,000 \$3,490,000
2008 Series A: Taxable Adjustable 2008 Series A-1 (Class II)	\$23,090,000	\$17,145,000
2008 Series B: Taxable Adjustable 2008 Series B (Class II)	\$165,565,000	\$148,540,000
2008 Series C: Adjustable 2008 Series C-3 (Class I) (2)	\$12,055,000 (1)	\$2,925,000
2009 Series A: Adjustable 2009 Series A-1 (Class I)	\$33,210,000	\$8,495,000
2012 Series A: 2012 Series A (Class I)	\$10,500,000	\$9,820,000
2012 Series B: 2012 Series B (Class I)	\$17,450,000	\$16,460,000
2013 Series A: 2013 Series A (Class I)	\$7,880,000	\$1,475,000
2016 Series A:		
2016 Series A-1 (Class I)	\$1,250,000	\$570,000
2016 Series A-2 (Class I)	\$10,475,000	\$10,475,000
2017 Series A:		
2017 Series A (Class I)	\$7,950,000	\$7,950,000
2018 Series A:		
2018 Series A-1 (Class I)	\$56,255,000	\$46,280,000

Title of Bonds 2018 Series A-2 (Class I)	Principal Amount Issued \$35,000,000	Outstanding Principal Amount (April 1, 2019) \$35,000,000
Total	\$ <u>1,441,860,000</u>	\$371,140,000
Total Class I Bonds Total Class II Bonds Total Class III Bonds	\$ 927,970,000 \$ 445,955,000 \$ 67,935,000	\$205,455,000 \$165,685,000 \$-0-

Designated as general obligations of the Authority.
 Bonds being refunded, in whole or in part, by a portion of the 2019 Series A Bonds issued by the Authority on July 30, 2019.

Outstanding Derivative Products

In connection with the issuance of certain Bonds under the Master Indenture, the Authority has previously entered into the interest rate swap agreements listed on the following table ("**Derivative Products**") which were outstanding as of April 1, 2019. As of April 1, 2019, the total notional amount of Derivative Products provided by Bank of New York Mellon was \$32,490,000; by Barclays Bank PLC was \$47,525,000; by Royal Bank of Canada was \$147,275,000; and by Bank of America, N.A., was \$20,540,000.

Except as noted in the table below, the Authority's obligation to make interest payments to the respective counterparty under each of these Derivative Products constitutes a Class I Obligation under the Master Indenture, secured on parity with the lien on the Trust Estate of the other Class I Obligations. The Authority's obligation to make termination payments under each of these Derivative Products in the event of early termination is a general obligation of the Authority and not secured as an Obligation under the Master Indenture. See "Part II—CERTAIN BONDOWNERS' RISKS—Risks Related to Derivative Products" and "Part II—COLORADO HOUSING AND FINANCE AUTHORITY—Obligations of the Authority—General Obligations."

See also footnote (8) to the audited 2018 financial statements of the Authority, included in Appendix A hereto, for a description of the key terms of the outstanding Derivative Products, including the fair values and the counterparty credit ratings, as of December 31, 2018.

[Remainder of page left blank intentionally]

Outstanding Derivative Products	Amount ⁽¹⁾	Counterparty
Surplus Assets Derivative Products (2)		
MFP Surplus Asset (Class I) MFP Surplus Asset (Class I) MFP Surplus Asset (Class I)	\$ 2,550,000 3,805,000 4,200,000	Bank of America, N.A. Barclays Bank PLC Barclays Bank PLC
MFP Surplus Asset (Class I) MFP Surplus Asset (Class I)	4,270,000 10,275,000	Barclays Bank PLC Barclays Bank PLC
2000 Series A Derivative Products: Adjustable 2000 Series A-1 (Class I)	2,020,000	Barclays Bank PLC
2005 Series B Derivative Products: Adjustable 2005 Series B-2 (Class I)	2,375,000	Bank of America, N.A.
2006 Series A Derivative Products: Taxable Adjustable 2006 Series A-1 (Class I) Taxable Adjustable 2006 Series A-1 (Class I)	4,900,000 8,890,000	Barclays Bank PLC Bank of America, N.A.
2007 Series B Derivative Products: Taxable Adjustable 2007 Series B-1 (Class I) Taxable Adjustable 2007 Series B-1 (Class I)	8,225,000 6,725,000	Barclays Bank PLC Bank of America, N.A.
2008 Series B Derivative Products: Taxable Adjustable 2008 Series B (Class II)	147,275,000	Royal Bank of Canada
2009 Series A Derivative Products: Adjustable 2009 Series A-1 (Class I)	8,365,000	Barclays Bank PLC
2013 Series A Derivative Products:		
Adjustable 2013 Series A (Class I)	1,465,000	Barclays Bank PLC
2018 Series A Derivative Products:		
Taxable Adjustable 2018 Series A (Class I)	32,490,000	BNY Mellon
Total Outstanding Derivative Products		
Total Outstanding Class I Derivative Products Total Outstanding Class II Derivative Products Total Outstanding Class III Derivative Products	\$100,555,000 \$147,275,000 <u>None</u>	

⁽¹⁾ As of April 1, 2019.

Outstanding Liquidity Facilities

The Authority has previously entered into Standby Bond Purchase Agreements (constituting Liquidity Facilities under the Master Indenture) among the Authority, the Paying Agent and respective Liquidity Facility Providers. The following table describes the Liquidity Facilities currently in effect as of April 1, 2019 except as noted with respect to the outstanding Series of Adjustable Rate Bonds under the Master Indenture, the name of the respective Liquidity Facility Providers, the applicable expiration dates (unless extended or earlier terminated), the Bank Bond rates, terms for accelerated payments and liens.

The Authority's obligations to repay the Liquidity Facility Providers prior to stated maturity for any principal amounts due on any Bank Bonds outstanding under a Liquidity Facility constitute Class III Obligations under the Master Indenture and also constitute general obligations of the Authority. See "Part II—CERTAIN BONDOWNERS' RISKS—Risks Related to Derivative Products."

⁽²⁾ Surplus Asset Derivative Products effectively serve as interest rate hedges against other outstanding series of Bonds under the Master Indenture.

Outstanding Liquidity Facilities and Providers (1)

Series of Adjustable Rate Bonds	Related Liquidity Facility Provider	Expiration Date of Liquidity Facility	Bank Bond Rate/ Accelerated <u>Payments/Lien</u>
2000 Series A-1	Federal Home Loan Bank of Topeka	March 21, 2022	(2)
2005 Series B-2	Federal Home Loan Bank of Topeka	December 14, 2021	(2)
2006 Series A-1	Federal Home Loan Bank of Topeka	August 24, 2021	(2)
2007 Series B-1 and B-2	Federal Home Loan Bank of Topeka	August 24, 2021	(2)
2008 Series A-1	Federal Home Loan Bank of Topeka	April 12, 2021	(2)
2008 Series B	Federal Home Loan Bank of Topeka	June 25, 2021	(2)
2008 Series C-3	Federal Home Loan Bank of Topeka	December 17, 2021	(2)
2009 Series A-1	Federal Home Loan Bank of Topeka	June 24, 2022	(2)
2013 Series A	Federal Home Loan Bank of Topeka	August 24, 2021	(2)
2018 Series A-2	Federal Home Loan Bank of Topeka	March 27, 2021	(2)
(1)			

As of April 1, 2019. Bank Rate: One-Month LIBOR Rate from time to time in effect plus 2.00% 10 semi-annual payments (5 years). Class III lien/General Obligation. Term out provisions:



APPENDIX C

SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE

The Master Indenture and the 2019 Series B Indenture (collectively, the "Indenture") contain various provisions and covenants, some of which are summarized below. Reference is made to the Indenture for a full and complete statement of its provisions. Copies of the Indenture are available as provided in "Part II—MISCELLANEOUS."

Certain Definitions

"Account" or "Accounts" means one or more of the special trust accounts created and established pursuant to the Master Indenture or a Series Indenture.

"Acquisition Account" mean the Account so designated, which is created and established in the Program Fund by the Master Indenture.

"Administrative Expenses" means all the Authority's expenses of administering its activities under the Indenture and the Act. Such expenses may include, without limiting the generality of the foregoing, (i) Fiduciary Expenses, (ii) the fees and expenses of any auction agent, market agent and any broker-dealer then acting under a Series Indenture with respect to auction rate Bonds, (iii) the fees and expenses of any calculation agent then acting under a Series Indenture with respect to index-based Bonds, (iv) the costs of any remarketing of any Bonds, including the fees and expenses of any remarketing agent then acting under a Series Indenture with respect to such Bonds, (v) the fees and expenses due to any Credit Facility Provider or any Liquidity Facility Provider with respect to any Bonds for which any Credit Enhancement Facility or a Liquidity Facility is in place, (vi) the fees and expenses of the Authority incurred in connection with the preparation of legal opinions and other authorized reports or statements attributable to the Bonds, (vii) fees and expenses associated with the delivery of a substitute Credit Enhancement Facility or Liquidity Facility under a Series Indenture, (viii) fees and expenses associated with the monitoring of the Bonds, the Loans, the Housing Facilities, the Projects and the Authority Projects by the Rating Agencies, (ix) fees and expenses associated with (but not payments under) Derivative Products, (x) Costs of Issuance not paid from proceeds of Bonds, and (xi) salaries, supplies, utilities, labor, materials, office rent, maintenance, furnishings, equipment, machinery and apparatus, including information processing equipment, telephone, software, insurance premiums, legal, accounting, management, consulting and banking services and expenses, travel and other operating costs of the Authority, and payments to pension, retirement, dental, health and hospitalization and life and disability insurance benefits, and any other employee benefits; and any other expenses required or permitted to be paid by the Authority, all to the extend properly allocable to a financing under the Indenture.

"Aggregate Principal Amount" means, as of any date of calculation, the principal amount or Compound Accreted Value of the Bond referred to.

"Amortized Value" means, when used with respect to Investment Securities purchased at a premium above or at a discount below par, the value as of any given date obtained by dividing the total amount of the premium or the discount at which such Investment Securities were purchased by the number of days remaining to the first call date (if callable) or the maturity date (if not callable) of such Investment Securities at the time of such purchase and by multiplying the amount so calculated by the number of days having passed from the date of such purchase; and (i) in the case of Investment Securities purchased at a premium, by deducting the product thus obtained from the purchase price and (ii) in the case of Investment Securities purchased at a discount, by adding the product thus obtained to the purchase price.

- "<u>Authority Certificate</u>" means a document signed by an Authorized Officer either (i) attesting or acknowledging the circumstances, representations or other matters therein stated or set forth or (ii) setting forth matters to be determined by such Authorized Officer pursuant to the Master Indenture.
- "<u>Authority Derivative Payment</u>" means a payment required to be made by or on behalf of the Authority due to a Reciprocal Payor pursuant to a Derivative Product.
- "Authority Payment Account" means the Account so designated which is created and established in the Debt Service Fund with respect to General Obligation Bonds by the Master Indenture.
- "Authority Project" means a housing facility or other asset intended to be owned and operated by the Authority, or the financing and refinancing of designated expenditures and/or obligations of the Authority, or any combination thereof.
- "<u>Authority Project Subaccount</u>" means the subaccount so designated which is created and established in the Series subaccount of the Acquisition Account by the Series Indenture.
- "Authority Request" means a written request or direction of the Authority signed by an Authorized Officer.
- "Authorized Officer" means the Chairman, Chairman <u>protem</u> or Executive Director of the Authority and any other officer designated from time to time as an Authorized Officer by resolution of the Authority and, when used with reference to any act or document, also means any other person authorized by resolution of the Authority to perform such act or sign such document.
- "Bond" or "Bonds" means any of the bonds, notes or other financial obligations (however denominated) of the Authority authorized and issued under the Indenture.
- "Bond Counsel" means any attorney or firm of attorneys of nationally recognized standing in the field of municipal law whose opinions are generally accepted by purchasers of municipal bonds, appointed from time to time by the Authority.
- "Bond Payment Date" means each date on which interest or a Principal Installment or both are payable on such Bond, and unless limited, means all such dates.
- "Borrower" means the maker of, and any other party obligated on, a promissory note in connection with a Housing Facility or Project.
- "Business Day" means a day on which the Trustee, any Paying Agent, the Remarketing Agent, the Liquidity Facility Provider or banks or trust companies in New York, New York, are not authorized or required to remain closed and on which The New York Stock Exchange is not closed.
- "Capital Appreciation Bonds" means any Bond of a Series, Class, tenor and maturity so designated in the Related Series Indenture for which certain determinations hereunder are made on the basis of Compound Accreted Value rather than principal amount.
- "Cash Flow Statement" means, with respect to any particular Bonds, a certificate prepared by or on behalf of the Authority with respect to Cash Flows setting forth, for the period extending from the date of such certificate to the latest maturity of the Bonds then outstanding, (i) all Revenues expected to be received during such period; (ii) the application of all such Revenues in accordance with the Indenture; (iii) the resulting balances on each Bond Payment Date and Derivative Payment Date, if any; and establishing under all scenarios included in the Cash Flows, that anticipated Revenues will be at least

sufficient to pay the principal of and interest on the Obligations when due and all Administrative Expenses payable under the Indenture when due. Each Cash Flow Statement shall be accompanied by all supporting Cash Flows. Reference to a Cash Flow Statement with respect to a Series shall be taken to mean a Cash Flow Statement with respect to such Series and any other Series to which it has been linked for Cash Flow Statement purposes.

"<u>Cash Flows</u>" means cash flow schedules prepared by or on behalf of the Authority, presented in sufficient detail acceptable to the Rating Agencies and including a listing of all assumptions and scenarios used in the preparation of such cash flow schedules. The assumptions used and scenarios included shall be acceptable to the Rating Agencies.

"Class I Bonds" means the Colorado Housing and Finance Authority Multi-Family/Project Class I Bonds authorized by, and at any time Outstanding pursuant to, the Indenture.

"Class I Debt Service Fund" means the Fund so designated, which is created and established by the Master Indenture.

"Class I Obligations" means Class I Bonds and any Derivative Product the priority of payment of which is equal with that of Class I Bonds.

"Class I Sinking Fund Installment" means the amount designated for any particular due date in the Related Series Indenture for the retirement of Class I Bonds on an unconditional basis, less any amount credited pursuant to the Master Indenture.

"Class II Bonds" means the Colorado Housing and Finance Authority Multi-Family/Project Class II Bonds authorized by, and at any time Outstanding pursuant to, the Indenture.

"Class II Debt Service Fund" means the Fund so designated, which is created and established by the Master Indenture.

"Class II Obligations" means Class II Bonds and any Derivative Product the priority of payment of which is equal with that of Class II Bonds.

"Class II Sinking Fund Installment" means the amount designated for any particular due date for the retirement of Class II Bonds, as set forth in the Related Series Indenture, which amount may be conditioned upon the transfer of sufficient moneys to the Class II Debt Service Fund, plus all such amounts specified for any prior date or dates, to the extent such amounts have not been paid or discharged, less any amounts credited pursuant to the Master Indenture.

"Class III Bonds" means the Colorado Housing and Finance Authority Multi-Family/Project Class III Bonds authorized by, and at any time Outstanding pursuant to, the Indenture.

"Class III Debt Service Fund" means the Fund so designated, which is created and established by the Master Indenture.

"Class III Obligations" means Class III Bonds and any Derivative Product the priority of payment of which is equal with that of Class III Bonds.

"Class III Sinking Fund Installment" means the amount designated for any particular due date for the retirement of Class III Bonds, as set forth in the Related Series Indenture, which amount may be conditioned upon the transfer of sufficient moneys to the Class III Debt Service Fund, plus all such amounts specified for any prior date or dates, to the extent such amounts have not been paid or discharged, less any amounts credited pursuant to the Master Indenture.

"Class IV Bonds" means the Colorado Housing and Finance Authority Multi-Family/Project Class IV Bonds authorized by, and at any time Outstanding pursuant to, the Indenture.

"Class IV Debt Service Fund" means the Fund so designated, which is created and established by the Master Indenture.

"Class IV Obligations" means Class IV Bonds and any Derivative Product the priority of payment of which is equal with that of Class IV Bonds.

"Class IV Sinking Fund Installment" means the amount designated for any particular due date for the retirement of Class IV Bonds, as set forth in the Related Series Indenture, which amount may be conditioned upon the transfer of sufficient moneys to the Class IV Debt Service Fund, plus all such amounts specified for any prior date or dates, to the extent such amounts have not been paid or discharged, less any amounts credited pursuant to the Master Indenture.

"Costs of Issuance" means the items of expense payable or reimbursable directly or indirectly by the Authority and other costs incurred by the Authority, all related to the authorization, sale and issuance of Bonds and Derivative Products or otherwise pursuant to the Indenture, which costs and items of expense shall include, but not be limited to, underwriters' compensation, initial fees and expenses due to any Credit Facility Provider or Liquidity Facility Provider, printing costs, costs of developing, reproducing, storing and safekeeping documents and other information processing or storage of materials, equipment and software related to the Bonds, filing and recording fees, travel expenses incurred by the Authority in relation to such issuance of Bonds or otherwise pursuant to the Indenture, initial fees or charges of the Trustee, the Bond Registrar and the Paying Agent, initial premiums with respect to insurance required by the Indenture to be paid by the Authority or by the Trustee, legal fees and charges, consultants' fees, accountants' fees, costs of bond ratings, and fees and charges for execution, transportation and safekeeping of the Bonds.

"Cost of Issuance Account" means the Account so designated, which is created and established within the Program Fund by the Master Indenture.

"Credit Enhancement Facility" means an insurance policy insuring, or a letter of credit or surety bond or other financial instrument providing a direct or indirect source of funds for, the timely payment of principal of and interest on the Bonds of a Series or portion thereof (but not necessarily principal due upon acceleration thereof under the Master Indenture), as shall be designated pursuant to a Series Indenture with respect to such Series.

"<u>Credit Facility Provider</u>" means a commercial bank or other Person providing a Credit Enhancement Facility pursuant to any Series Indenture with respect to a Series.

"<u>Debt Service Payment</u>" means, when used with respect to any Bond Payment Date, the sum of the (i) interest, if any, and (ii) Principal Installments, if any, due and payable on such Bond Payment Date with respect to the Bonds referred to.

"<u>Debt Service Reserve Fund</u>" means the Fund so designated, which is created and established by the Master Indenture.

"<u>Debt Service Reserve Fund Requirement,</u>" with respect to each Series of Bonds, shall have the meaning set forth in the Related Series Indenture. See Part I.

"<u>Defeasance Securities</u>" means any Investment Securities used to effect defeasance of Bonds in accordance with the Master Indenture if upon such defeasance the Bonds so defeased are rated in the highest rating category by each Rating Agency rating such Bond, and which are not subject to redemption by the issuer prior to their maturity.

"<u>Depository</u>" means any bank, trust company, or savings and loan association (including any Fiduciary) selected by the Authority and approved by the Trustee as a depository of moneys, Loans, Investment Securities or Financing Documents held under the provisions of the Indenture, and its successor or successors.

"<u>Derivative Product</u>" means a written contract or agreement between the Authority and a Reciprocal Payor, which provides that the Authority's obligations thereunder will be conditioned on the absence of (i) a failure by the Reciprocal Payor to make any payment required thereunder when due and payable, or (ii) a default thereunder with respect to the financial status of the Reciprocal Payor; and:

- (i) under which the Authority is obligated to pay (whether on a net payment basis or otherwise) on one or more scheduled and specified Derivative Payment Dates, the Authority Derivative Payments in exchange for the Reciprocal Payor's obligations to pay (whether on a net payment basis or otherwise), or to cause to be paid, to the Authority, Reciprocal Payments on one or more scheduled and specified Derivative Payment Dates in the amounts set forth in the Derivative Product:
- (ii) for which the Authority's obligations to make Authority Derivative Payments may be secured by a pledge of and lien on the Trust Estate on an equal and ratable basis with the Outstanding Class I Bonds, Class II Bonds, Class III Bonds or Class IV Bonds, as the case may be; and
- (iii) under which the Reciprocal Payments are to be made directly to the Trustee for deposit into the Revenue Fund.

"Excess Earnings" means, with respect to Loans held in any subaccount of the Acquisition Account or the Loan Recycling Account established in connection with a Series of Tax-exempt Bonds, the "excess earnings," as defined in Treasury Regulations §1.148-10T, with respect thereto.

"Excess Earnings Fund" means the Fund so designated, which is created and established by the Master Indenture.

"Fiduciary" means the Trustee, the Bond Registrar, the Paying Agent, or a Depository or any or all of them, as may be appropriate.

"Fiduciary Expenses" means the fees and expenses of the Fiduciaries, except Servicing Fees payable to such persons.

"Financing Documents" means, with respect to any Loan, the Loan Agreement between the Authority and the Borrower with respect to the Loan, the Note duly executed by the Borrower evidencing its obligation to repay the Loan, the Mortgage on the real property or leasehold constituting part of the Housing Facility or Project, financing statements duly prepared and registered pursuant to the Uniform Commercial Code, and such insurance, guaranties and other security for the repayment of the Loan as required by the Authority.

"Fiscal Year" means a period beginning on January 1 in any year and ending December 31 of the same year or such other twelve month period as may be adopted by the Authority in accordance with law.

"<u>Fund</u>" or "<u>Funds</u>" means one or more of the special trust funds created and established pursuant to the Master Indenture or a Series Indenture.

"General Obligation Bonds" means Bonds for the payment of which the Authority pledges its full faith and credit, subject only to the provisions of any agreements with the owners of particular notes or bonds pledging any particular revenues or assets to the payment thereof.

"Housing Facility" means a facility which is designed and financed for the primary purpose of providing decent, safe and sanitary dwelling accommodations pursuant to the Act, including any buildings, land, equipment or facilities or other real or personal property, which may be financed under the Act and (if applicable) the Code and which the Authority has found to be necessary to insure required occupancy or balanced community development or necessary or desirable for sound economic or commercial development of a community.

"Indenture" means the Master Indenture authorized, executed and issued by an Authorized Officer and any amendments or supplements made in accordance with its terms, including all Series Indentures.

"<u>Interest Payment Date</u>" means, for each Bond, any date upon which interest on such Bond is due and payable in accordance with the Related Series Indenture.

"Investment Agreement" means any investment agreement provided by an Investment Provider, which agreement, as of the date of execution thereof, shall have no adverse impact on the rating assigned to any Bonds by any Rating Agency.

"Investment Provider" means any commercial bank or trust company, bank holding company, investment company or other entity (which may include the Trustee, the Bond Registrar or the Paying Agent), which Investment Provider shall be approved by the Authority for the purpose of providing investment agreements.

"Investment Revenues" means amounts earned on investments (other than Loans) credited to any Fund or Account pursuant to the Indenture (including gains upon the sale or disposition of such investments), except the Rebate Requirement and any Excess Earnings.

"Investment Securities" means and includes any of the following securities, if and to the extent the same are at the time legal for investment of the Authority's Funds:

- (a) Direct, general obligations, or obligations the timely payment of principal and interest of which are unconditionally guaranteed by, the United States of America;
- (b) Obligations, debentures, notes or other evidence of indebtedness issued or guaranteed by any of the following: Federal Farm Credit Banks; Federal Home Loan Bank System; Export-Import Bank of the United States; Federal Land Banks; Federal National Mortgage Association (excluding "interest only" mortgage strip securities, and excluding other mortgage strip securities which are valued greater than par); Farmers Home Administration; Federal Home Loan Mortgage Corporation (including participation certificates only if they guarantee timely payment of principal and interest); Government National Mortgage Association (excluding "interest only" mortgage strip securities, and excluding other mortgage strip securities which are valued greater than par); Federal Financing Bank; or Federal Housing Administration; or any other agency or instrumentality of the United States of America (created by an act of Congress) substantially similar to the foregoing in its legal relationship to the United States of America:

- (c) Repurchase agreements, collateralized by Investment Securities described in clause (a) or clause (b) of this definition, with any institution, any registered broker/dealer subject to the Securities Investors' Protection Corporation jurisdiction or any commercial bank rated by each Rating Agency rating the Bonds sufficiently high to maintain then current rating on such Bonds by such Rating Agency, and collateralized in such manner to meet all requirements for collateralized repurchase agreements of each Rating Agency rating the Bonds in order to maintain then current rating on such Bonds by such Rating Agency;
- (d) General obligations or revenue obligations (including bonds, notes or participation certificates) of, or "private activity bonds" (within the meaning of the Code), issued by any state of the United States of America or any political subdivision thereof, or any agency or instrumentality of any state of the United States of America or any political subdivision thereof, which obligations are rated by each Rating Agency then rating the Bonds sufficiently high to maintain then current rating on such Bonds by such Rating Agency, or any money market or short term investment fund investing substantially in or consisting substantially of and secured by obligations described in this paragraph (d), which fund is rated by each Rating Agency then rating the Bonds sufficiently high to maintain then current rating on such Bonds by such Rating Agency and which fund, if the income from such investment is intended to be excluded from gross income for federal income tax purposes, is included in the definition of "tax-exempt bond" set forth in Treasury Regulation §1.150-1(b);

(e) Any Investment Agreement;

- (f) Certificates of deposit, interest-bearing time deposits, or other similar banking arrangements, with a bank or banks (i) rated by each Rating Agency rating the Bonds sufficiently high to maintain then current rating on such Bonds by such Rating Agency or (ii) collateralized in such manner to meet all requirements for collateralized agreements of each Rating Agency rating the Bonds in order to maintain then current rating on such Bonds by such Rating Agency; and
- (g) Commercial paper rated by each Rating Agency rating the Bonds sufficiently high to maintain then current rating on such Bonds by such Rating Agency;
- (h) Shares in the statutory law trust known as the Colorado Local Government Liquid Asset Trust (COLOTRUST), created pursuant to part 7 of article 75 of title 24, Colorado Revised Statutes; and
- (i) Units of a money market fund or a money market mutual fund which has a rating from each Rating Agency then rating the Bonds sufficiently high to maintain then current rating on such Bonds by such Rating Agency.

provided, that it is expressly understood that the definition of Investment Securities shall be, and be deemed to be, expanded, or new definitions and related provisions shall be added to the Indenture, thus permitting investments with different characteristics from those listed above which the Authority deems from time to time to be in the interest of the Authority to include as Investment Securities if at the time of inclusion the Trustee shall have received written confirmation from the Rating Agencies that such inclusion will not, in and of itself, impair, or cause any of the Bonds to fail to retain, then existing rating assigned to them by the Rating Agencies.

"<u>Liquidity Facility</u>" means a Liquidity Facility, letter of credit or other agreement providing liquidity with respect to any Series or portion thereof for the Authority's obligation to repurchase Bonds subject to remarketing which have not been remarketed, as shall be designated pursuant to a Series Indenture with respect to such Series.

"<u>Liquidity Facility Provider</u>" means a commercial bank or other Person providing a Liquidity Facility pursuant to any Series Indenture with respect to a Series.

"Loan" means a loan of money, including advances, in the form of a loan (including a construction loan, a permanent loan or a combined construction and permanent loan) made by the Authority to a Borrower with the proceeds of the Bonds or the Refunded Bonds or with Prepayments for the financing of a portion of the costs of a Housing Facility or Project, which loan is evidenced by a Note pursuant to a Loan Agreement. The Authority may use money deposited in the Acquisition Account or the Loan Recycling Account to acquire mortgage-backed securities, pass-through certificates or other instruments backed by Loans, so long as each such Loan satisfies the requirements of the Master Indenture, in which case references in the Indenture to "Loans" shall be deemed to be references to such mortgage-backed securities, pass-through certificates or other instruments.

"Loan Agreement" means, collectively, the loan agreement, any regulatory agreement, and any other agreement between the Authority and the Borrower relating to the making of the Loan and the operation of the Housing Facility or Project.

"<u>Loan Recycling Account</u>" means the Account so designated, which is created and established in the Program Fund by the Master Indenture.

"Loan Repayments" means, with respect to any Loan, the amounts received by the Authority in respect of scheduled payments of the principal of and/or interest on the Note by or for the account of the Authority but does not include Prepayments or Servicing Fees.

"Mortgage" means the deed of trust, mortgage or other instrument creating a lien on real property within the State and improvements constructed or to be constructed thereon or on a leasehold under a lease of such real property having a remaining term, at the time such instrument is acquired by the Authority, of not less than the term for repayment of the applicable Loan, and which secures the repayment of the Loan.

"Note" means the note or notes executed by the Borrower evidencing the Borrower's payment obligations under the Loan.

"Outstanding" means, when used with respect to a Derivative Product, a Derivative Product which has not expired, been terminated or been deemed paid in accordance with the Master Indenture, and when used with reference to any Bonds as of any date, all Bonds theretofore authenticated and delivered under the Indenture except:

- (a) any Bond cancelled or delivered to the Bond Registrar for cancellation on or before such date;
- (b) any Bond (or any portion thereof) (i) for the payment or redemption of which there shall be held in trust under the Indenture and set aside for such payment or redemption, moneys and/or Defeasance Securities maturing or redeemable at the option of the holder thereof not later than such maturity or redemption date which, together with income to be earned on such Defeasance Securities prior to such maturity or redemption date, will be sufficient to pay the principal or Redemption Price thereof, as the case may be, together with interest thereon to the date of maturity or redemption, and (ii) in the case of any such Bond (or any portion thereof) to be redeemed prior to maturity, notice of the redemption of which shall have been given in accordance with the Indenture or provided for in a manner satisfactory to the Bond Registrar;
- (c) any Bond in lieu of or in exchange for which another Bond shall have been authenticated and delivered pursuant to the Indenture; and

(d) any Bond deemed to have been paid as provided in the Master Indenture.

"Owner" means (i) when used with respect to a Bond, the registered owner of such Bond, and (ii) when used with respect to a Derivative Product, any Reciprocal Payor, unless the context otherwise requires.

"Paying Agent" means the bank, trust company or national banking association, appointed as Paying Agent under the Master Indenture and having the duties, responsibilities and rights provided for in the Indenture and its successors or successors and any other corporation or association which at any time may be substituted in its place pursuant to the Indenture.

"Prepayment" means, with respect to any Loan, any moneys received or recovered by the Authority from any payment of or with respect to the principal (including any applicable penalty, fee, premium or other additional charge for prepayment of principal, but excluding any Servicing Fees with respect to the collection of such moneys) under any Note prior to the scheduled payment of such principal as called for by such Note, whether (a) by voluntary prepayment made by the Borrower, (b) as a consequence of the damage, destruction or condemnation of the mortgaged premises or any part thereof, (c) by the sale, assignment, endorsement or other disposition of such Loan or any part thereof by the Authority or (d) in the event of a default thereon by the Borrower, by the acceleration, sale, assignment, endorsement or other disposition of such Loan by the Authority or by any other proceedings taken by the Authority.

"Principal Installment" means, as of any date of calculation, and for any Bond Payment Date, (a) the principal amount or Compound Accreted Value of all Bonds due and payable on such date, plus (b) any Class I, Class II, Class III or Class IV Sinking Fund Installments due and payable on such date.

"Program Fund" means the Fund so designated, which is created and established by the Master Indenture.

"Project" means a work or improvement which is located or is to be located in the State, including but not limited to real property, buildings, equipment, furnishings and any other real or personal property or any interest therein, financed, refinanced, acquired, owned, constructed, reconstructed, extended, rehabilitated, improved or equipped, directly or indirectly, in whole or in part, by the Authority and which is designed and intended for the purpose of providing facilities for manufacturing, warehousing, commercial, recreational, hotel, office, research and development, or other business purposes, including but not limited to machinery and equipment deemed necessary for the operation thereof, excluding raw material, work in process, or stock in trade. "Project" includes more than one project or any portion of a project, but shall not include (a) a housing facility or any portion thereof unless the Authority elects to treat such housing facility or portion thereof as a Project or (b) the financing by the Authority of any county or municipal public facilities beyond the boundaries of the Project.

"Qualified Surety Bond" means any surety bond, letter of credit, insurance policy or other instrument which has liquidity features equivalent to a letter of credit, deposited in the Debt Service Reserve Fund in lieu of or in partial substitution for moneys on deposit therein, which shall have no adverse impact on the rating assigned to any Bonds by any Rating Agency.

"Rating Agency" means, at any particular time, any nationally recognized credit rating service designated by the Authority, if and to the extent such service has at the time one or more outstanding ratings of Bonds. The Authority shall at all times have designated at least one such service as a Rating Agency hereunder.

"Rebate Fund" means the Fund so designated, which is created and established by the Master Indenture.

"Reciprocal Payments" means any payment to be made to, or for the benefit of, the Authority under a Derivative Product.

"Reciprocal Payor" means a third party which, at the time of entering into a Derivative Product, shall have no adverse impact on the rating assigned by any Rating Agency, and which is obligated to make Reciprocal Payments under a Derivative Product.

"Record Date" means the fifteenth day (whether or not a Business Day) of the month next preceding each Interest Payment Date.

"Redemption Fund" means the Fund so designated, which is created and established by the Master Indenture.

"Related" (whether capitalized or not) means, with respect to any particular Bond, Class, Series, Series Indenture, Supplemental Indenture, Cash Flow Statement, Fund, Account, moneys, investments, Loan (or portion thereof), Loan Repayment or Prepayment, having been created in connection with the issuance of, or having been derived from the proceeds of, or having been reallocated to, or concerning, the same Series, as the case may be.

"Revenue Fund" means the Fund so designated, which is created and established by the Master Indenture.

"Revenues" means (i) all Loan Repayments, Prepayments and, except insofar as such payments may constitute Servicing Fees, any penalty payments on account of overdue Loan Repayments, (ii) payments made by the Authority for deposit to the Revenue Fund with respect to Authority Projects in accordance with the most recently filed Cash Flow Statement, (iii) Investment Revenues, and (iv) all other payments and receipts received by the Authority with respect to Loans, other than: (a) Servicing Fees, unless such fees are specifically pledged to the Trustee, or (b) any commitment, reservation or application fees charged by the Authority in connection with a Loan, or (c) accrued interest received in connection with the purchase of any Investment Securities, or (d) amounts collected with respect to Loans representing housing assistance payments under any applicable agreement with the U.S. Department of Housing and Urban Development.

"Series" means and refers to all of the Bonds designated as such in the Related Series Indenture and authenticated and delivered on original issuance in a simultaneous transaction, regardless of variations in Class, dated date, maturity, interest rate or other provisions, and any Bond thereafter delivered in lieu of or substitution for any of such Bonds pursuant to the Master Indenture and the Related Series Indenture.

"Series Indenture" means a Supplemental Indenture authorizing a Series of Bonds and delivered pursuant to the Master Indenture.

"Servicer" means a state-chartered bank or national banking association, state or federal savings and loan association or mortgage banking or other financial institution which has been approved by the Authority as experienced and qualified to service Loans, and any successor thereto.

"Servicing Agreement" means an agreement between the Authority and a Servicer for the servicing of Loans.

"Servicing Fees" means (a) any fees paid to or retained by a Servicer in connection with the servicing obligations undertaken by the Servicer in accordance with the Related Servicing Agreement and (b) any fees retained by or expenses reimbursed to the Authority with respect to Loans serviced by the

Authority, in each case not in excess of the amount assumed in the most recently filed Cash Flow Statement.

"State" means the State of Colorado.

"Supplemental Indenture" means any supplemental indenture (including a Series Indenture) approved by the Authority in accordance with the Master Indenture amending or supplementing the Indenture.

"<u>Trustee</u>" means the bank, trust company or national banking association appointed as trustee by the Master Indenture and having the duties, responsibilities and rights provided for in the Master Indenture and its successor or successors, and any other corporation or association which at any time may be substituted in its place as Trustee pursuant to the Master Indenture.

"<u>Unrelated</u>" (whether capitalized or not) means not "Related," within the meaning of that term as defined herein.

Indenture Constitutes a Contract

In consideration of the purchase and acceptance of any and all of the Bonds and any Derivative Products authorized to be issued under the Indenture, the Indenture will be deemed to be and will constitute a contract between the Authority, the Trustee, the Bond Registrar, the Paying Agent, and the Owners from time to time of the Obligations.

Issuance of Additional Bonds

A Series of Bonds is to be authenticated by the Trustee and delivered to the Authority upon its order only upon receipt by the Trustee of:

- (a) an original executed copy of the Series Indenture authorizing such Bonds and specifying certain information as set forth in the Master Indenture;
 - (b) a written order as to the delivery of such Bonds, signed by an Authorized Officer;
- (c) a certificate of an Authorized Officer stating that the Authority is not in default in the performance of any of the covenants, conditions, agreements or provisions contained in the Indenture;
- (d) a Cash Flow Statement with respect to such Series of Bonds (and any other Series to which it may be limited for Cash Flow Statement purposes) taking into account the proposed issuance of such Bonds and the application of the proceeds thereof; and
- (e) such further documents and moneys, including Investment Agreements, as are required by the provisions of the Related Series Indenture.

The Authority may not issue Additional Bonds under the Indenture if such issuance would result in the lowering, suspension or withdrawal of the ratings then applicable to any Bonds (without regard to any Credit Enhancement Facility).

Issuance of Refunding Bonds

Bonds of one or more Series may be issued to refund Outstanding Bonds of one or more Series only upon the receipt by the Trustee of: (i) items referred to in clauses (a), (b), (c), (d) and (e) of the preceding paragraph, and (ii) certain other instructions to the Trustee. In addition, if the bonds to be refunded are Bonds, there must be deposited with the Trustee (or paying agent or escrow agent, if any) either (A) moneys (which may include all or a portion of the proceeds of the Refunding Bonds to be issued) in an amount sufficient to effect payment or redemption at the applicable redemption price of the Bonds to be refunded, together with accrued interest on such Bonds to the due date or redemption date, or (B) Defeasance Securities, the principal of and interest on which when due, together with any moneys deposited with the Trustee (or paying agent or escrow agent), will be sufficient to pay when due the applicable principal or Redemption Price of and interest due or to become due on the Bonds to be refunded. Defeasance Securities include any Investment Securities (including direct obligations of or obligations guaranteed by the United States of America) used to effect defeasance of Bonds in accordance with the Master Indenture if upon such defeasance the Bonds so defeased are rated in the highest rating category by each Rating Agency rating such Bonds, and which are not subject to redemption by the issuer thereof prior to maturity.

Derivative Products

Pursuant to the Master Indenture, the Trustee is to acknowledge any Derivative Product entered into between the Authority and a Reciprocal Payor under which (i) the Authority may be required to make, from time to time, Authority Derivative Payments and (ii) the Trustee may receive, from time to time, Reciprocal Payments for the account of the Authority; provided that no Derivative Product may be entered into unless the Trustee receives a letter from each Rating Agency then rating a Series confirming that the action proposed to be taken by the Authority will not, in and of itself, result in a lowering, suspension or withdrawal of the ratings then applicable to any Bonds.

No later than the fourth Business Day immediately preceding each Bond Payment Date or Derivative Product Date on which a Reciprocal Payment or Authority Derivative Payment is due, the Authority is to give written notice to the Trustee stating the amount of any Reciprocal Payment due to be received by the Trustee or any Authority Derivative Payment to be paid to a Reciprocal Payor.

The Trustee is to deposit all moneys received representing Reciprocal Payments in the Revenue Fund to be applied in accordance with the Indenture. However, Reciprocal Payments may not be used to make an Authority Derivative Payment or to pay any other amounts owned to a Reciprocal Payor under a Derivative Product. The Trustee is to pay to the Reciprocal Payor from moneys in the Revenue Fund, in accordance with the Indenture, the amount of the Authority Derivative Payment due on such Bond Payment Date (as specified in the Authority's written notice) by the deposit or wire transfer of immediately available funds to the credit of the account of the Reciprocal Payor specified in such written notice, but only to the extent such payment will not result in a deficiency in the amount due on the next succeeding Bond Payment Date to the Owners of any Obligations having a priority higher than such Reciprocal Payor under such Derivative Product.

Funds Established by the Master Indenture

The Master Indenture establishes the following funds, all of which are to be held by the Trustee:

- (a) Program Fund (consisting of the Acquisition Account, the Cost of Issuance Account, the Negative Arbitrage Account and the Loan Recycling Account),
 - (b) Revenue Fund,

- (c) Debt Service Reserve Fund,
- (d) Class I Debt Service Fund,
- (e) Class II Debt Service Fund,
- (f) Class III Debt Service Fund,
- (g) Class IV Debt Service Fund,
- (h) Redemption Fund (consisting of the Class I Special Redemption Account, the Class II Special Redemption Account, the Class III Special Redemption Account, and the Class IV Special Redemption Account),
 - (i) Rebate Fund, and
 - (j) Excess Earnings Fund.

A Bond Purchase Fund may be created and established by a Series Indenture to be held by a fiduciary to provide for the payment of the tender price or purchase price of Bonds as provided herein.

Allocation of Moneys, Investments and Loans Among Series

Except as otherwise provided in the Indenture, bond proceeds and other moneys relating to a Series of Bonds are to be deposited in the related subaccounts created with respect to such Series of Bonds. Loans made or purchased in connection with a Series of Bonds are to be allocated to such Series and held in the subaccount of the Acquisition Account created in connection with such Series of Bonds. The Authority may reallocate moneys, investments and Loans (or portions thereof) among Series by delivering an Authority Request to the Trustee specifying such reallocation under any of the following circumstances:

- (a) if and to the extent required by the Master Indenture (including meeting certain requirements with respect to the Revenue Fund and the Debt Service Reserve Fund and in the case of an Event of Default);
- (b) if and to the extent necessary to enable the Authority to deliver a Cash Flow Statement with respect to one or more Series;
- (c) in connection with an Authority Request, pursuant to the Indenture, directing the Trustee to transfer moneys to the Redemption Fund to redeem certain Bonds;
- (d) if and to the extent that the aggregate amount of moneys, investments and Loans allocated to any particular Series exceeds the aggregate amount of Outstanding Bonds of such Series.

Loans (or portions thereof) reallocated among Series are not required to meet the requirements of the Series Indenture Related to the Series to which such Loans (or portions thereof) are being reallocated if such Loans at the time of their original acquisition by the Authority met the requirements of the Master Indenture and the Series Indenture Related to such Loans at the time of their purchase.

Program Fund; Acquisition Account

There is to be deposited into the Related subaccount of the Acquisition Account established within the Program Fund the amount of Bond proceeds specified in each Series Indenture, other moneys specified in each Series Indenture, and any moneys transferred from the Related Cost of Issuance Account, as provided in the Master Indenture. Moneys deposited in the Acquisition Account of the Program Funds are to be applied, upon Authority Request, to finance (i) Loans that satisfy certain conditions of the Indenture, and (ii) Authority Projects.

Moneys may be withdrawn from the Acquisition Account for the financing of a Loan at the direction of the Authority upon receipt by the Trustee of an Authority Request stating the name of the person to be paid and the amount to be paid. Any moneys deposited in the Acquisition Account that the Authority certifies from time to time will not be used to purchase Loans or to finance Authority Projects are to be transferred to the Redemption Fund on the date specified in the Related Series Indenture (or such later date as may be specified by the Authority and certified by the Authority as consistent with the most recently filed Cash Flow Statement and the Related Series Indenture) and applied as provided in the Related Series Indenture. In the event that no Bonds of a particular Series remain Outstanding, moneys, investments and/or Loans are to be transferred in accordance with the Authority's Request, provided that such request is accompanied by a certification that the requested transfer is consistent with the most recently filed Cash Flow Statement for all Bonds and for any Series to which such retired Series has been linked. In the event that a Loan is financed or refinanced with proceeds of more than one Series of Bonds, provisions of the Indenture relating to a Loan, Loan Repayments, Prepayments, and moneys will be interpreted and applied to relate to such Loan, Loan Repayments, Prepayments and moneys to each Series furnishing proceeds for such Loan in proportion to the respective principal amounts of Bonds of each such Series the proceeds of which were or will be used to finance or refinance such Loan.

Loans made by the Authority must meet the following requirements: (i) such Loan complies with, and is in fulfillment of the purposes of, the Act; and (ii) at the time the Authority makes the Loan, (A) the Authority reasonably believes that such Loan meets applicable requirements under the Code as in effect or as otherwise applicable with respect to such Loan; (B) the Authority has determined that the facility being financed or refinanced as completed constitutes a Housing Facility or a Project, as the case may be, for purposes of the Act; and (C) except to the extent, if any, that a variance is required as a

condition to any insurance on, guaranty of or other security for such Loan, such Loan shall bear interest at the rate or rates and shall be payable as to both principal and interest at the time or times which shall be reasonably estimated to be sufficient to assure the timely payment of (1) the allocable portion of scheduled Fiduciary Expenses (as reasonably estimated by the Authority and not otherwise provided for), and (2) all Debt Service Payments on the portion of the Outstanding Bonds used or to be used to make Loans (assuming the receipt of scheduled Loan Repayments on other Loans and scheduled Revenues on moneys not yet used to finance or refinance Loans or held in any Fund or Account held by the Trustee other than the Rebate Fund or the Excess Earnings Fund).

Program Fund; Cost of Issuance Account

The Master Indenture establishes within the Program Fund a Cost of Issuance Account and provides that each Series Indenture is to create a subaccount in the Cost of Issuance Account. Moneys in a Series Cost of Issuance subaccount are to be used to pay Costs of Issuance of the Related Series of Bonds, and any excess moneys remaining therein after payment of all Costs of Issuance shall be transferred to the Related subaccount in the Acquisition Account.

Program Fund; Negative Arbitrage Account

Under the Master Indenture, a Series Indenture may establish for the Related Series of Bonds a Series Subaccount of the Negative Arbitrage Account. The Authority may create a separate subaccount of the Negative Arbitrage Account for any Housing Facility or Project financed or refinanced in whole or in part with the proceeds of a Series of Bonds or with moneys in the Loan Recycling Account. Moneys in each such subaccount will be subject to the lien and pledge of the Indenture until the withdrawal and application thereof in accordance with the Indenture. The amount to be credited to each subaccount of the Negative Arbitrage Account shall be specified by the Authority in the Related Series Indenture or in an Authority Certificate. Any moneys collected by the Authority from a Borrower to reimburse the Authority for any Authority moneys deposited to the Related subaccount of the Negative Arbitrage Account shall be and remain the property of the Authority, and shall not be subject to the lien and pledge of the Indenture.

Moneys in each subaccount of the Negative Arbitrage Account are to be transferred to the Revenue Fund on any Bond Payment Date and/or upon completion of the related Housing Facility or Project and/or the date that amounts in the Related subaccount of the Acquisition Account or the Loan Recycling Account, as the case may be, allocable to the related Housing Facility or Project are transferred to the Redemption Fund or the Revenue Fund, pursuant to the Indenture, in an amount specified in an Authority Request.

The amount in any subaccount of the Negative Arbitrage Account with respect to a defaulted Loan is to be transferred to the related subaccount of the Redemption Fund at the time that the Authority receives or recovers any Prepayment of such Mortgage Loan, upon Authority Request. If a Loan is not closed on account of any failure to meet the conditions of the Authority's written commitment to provide the Loan or for any other reason (e.g., failure to meet the conditions of the firm commitment of a governmental insurer or guarantor to insure or guarantee such Loan), provided that the Authority has issued such written commitment with respect to such Loan and is ready and willing to close, and the Authority does not finance or refinance a substitute Housing Facility or Project, the amount in the related subaccount of the Negative Arbitrage Account is to be transferred, upon Authority Request, to the Revenue Fund. Upon the completion of a Housing Facility or Project, the date that another Housing Facility or Project is substituted for such Housing Facility Project or the date that amounts in the related subaccount of the Acquisition Account or the Loan Recycling Account, as the case may be, allocable to such Housing Facility or Project are transferred to the Redemption Fund or the Revenue Fund pursuant to the Indenture, any amounts in the related subaccount of the Negative Arbitrage Account that have not been transferred to the Revenue Fund or to the Redemption Fund pursuant to the Indenture are to be paid by the Authority to the related Borrower to the extent and under the circumstances provided in any Agreement with such Borrower. Each subaccount of the Negative Arbitrage Account is to be terminated upon the earliest of the completion of the related Housing Facility or Project, the date that another Housing Facility or Project is substituted for the related Housing Facility or Project, the date that amounts in the related subaccount or the Loan Recycling Account, as the case may be, allocable to the related Housing Facility or Project are transferred to the Redemption Fund or the Revenue Fund pursuant to the Indenture or the date on which there is no remaining balance in such subaccount of the Negative Arbitrage Account.

Program Fund; Loan Recycling Account

There is to be transferred into the Loan Recycling Accounts amounts from the Revenue Fund as described in "Allocation of Moneys in the Revenue Fund" under this caption. Loans (or portions thereof) allocated to a Series of Bonds and financed or refinanced with moneys in the related subaccount of the Loan Recycling Account are to be held in such subaccount of the Loan Recycling Account. Before any moneys are transferred to the Loan Recycling Account from the Revenue Fund pursuant to the Indenture,

the Authority is to file with the Trustee: (i) a Cash Flow Statement; (ii) an Authority Certificate demonstrating that the Class Asset Requirements will be met; (iii) a rating agency Confirmation, except to the extent a previous Cash Flow Statement, Authority Certificate and Confirmations shall apply to such transfer and the Loans to be made with such amounts. Amounts on deposit in the Loan Recycling Account are to be applied, upon Authority Request, (i) to finance or refinance Loans that satisfy the requirements of the Indenture, and (ii) to finance or refinance Authority Projects. The Trustee is to withdraw moneys from the related subaccount of the Loan Recycling Account for the financing of a Loan upon receipt of an Authority Request stating (i) the name of the person to be paid and (ii) the amount to be paid. Moneys remaining in the related subaccount of the Loan Recycling Account on the date set forth in the Cash Flow Statement in connection with which such moneys were deposited in such subaccount are to be withdrawn by the Trustee on such date (or such earlier date or dates as may be specified by the Authority), and are to be transferred to the Revenue Fund.

Revenue Fund

The Master Indenture provides that each Series Indenture shall create a subaccount for the related Series of Bonds in the Revenue Fund. All Revenues related to each Series of Bonds, in addition to certain amounts transferred from the Negative Arbitrage Account, Loan Recycling Account, Debt Service Fund for each Class, Special Redemption Account for each Class, Rebate Fund and Excess Earnings Fund in accordance with the Indenture, are to be deposited in the related Subaccount of the Revenue Fund.

The Trustee is to pay from the related subaccount of the Revenue Fund (i) all Fiduciary Expenses when payable, and (ii) reasonable and necessary Administrative Expenses as provided in the following paragraph.

Allocation of Moneys in the Revenue Fund

On the last Business Day Prior to each Bond Payment Date or Derivative Payment Date, or more frequently if required by a Series Indenture, or on the other dates specifically provided below, moneys in each subaccount of the Revenue Fund are to be transferred by the Trustee to the Related (or Unrelated, as provided below) subaccounts of the following Funds and Accounts in the following order of priority:

- (a) <u>Related Subaccounts of Rebate Fund</u>. On each December 31, an amount to be calculated by the Authority which, together with the amount therein, will equal the Rebate Requirement related to the Tax-Exempt Bonds of each respective Series, as determined by the Authority;
- (b) Related Subaccounts of the Excess Earnings Fund. On each December 31, an amount to be calculated by the Authority which, together with the amount therein, will equal the amount determined by the Authority to be required to be on deposit therein;
- (c) Related Subaccounts of Class I Debt Service Fund. An amount which, together with the amount therein, will equal (x) the interest due and payable on the next Bond Payment Date on all Class I Bonds of the Related Series then Outstanding and any Authorized Derivative Payment secured on a parity with the Class I Bonds accrued and unpaid as of such date; plus (y) the aggregate amount of Principal Installments becoming due and payable on the Outstanding Class I Bonds of the Related Series on such Bond Payment Date or, if such date is not a date for payment of such Principal Installments, an amount that, if made in substantially equal installments on each subsequent Bond Payment Date to an including the next Bond Payment Date that is a date for the payment of Principal Installments on related Class I Bonds, will equal the amount of the Principal Installments becoming due and payable on Outstanding Related Class I Bonds on such next Bond Payment Date;

- (d) <u>Unrelated Subaccounts of Class I Debt Service Fund</u>. Any deficiency in such subaccount(s) of the Class I Debt Service Fund, after making any requisite transfers from the Related Debt Service Reserve Fund, resulting from the lack of moneys sufficient to make the deposit described in (c) above as of such date, on a proportionate basis with all other Unrelated such subaccounts or as otherwise directed by Authority Request;
- (e) <u>Related Subaccounts of Loan Recycling Account (Upon Authority Elections) or Class I Special Redemption Account or any combination thereof.</u> The amount, if any, needed to ensure that the Class I Asset Requirement of the Related Series of Bonds will be met on such Bond Payment Date following such transfer, provided that any election by the Authority to make deposits into the Loan Recycling Account must be evidenced by an Authority Certificate filed with the Trustee;
- (f) <u>Unrelated Subaccounts of Class I Special Redemption Account</u>. Any deficiency in such subaccount(s) resulting from the lack of moneys sufficient to make the deposit described in (e) above as of such date, on a proportionate basis with all other Unrelated such subaccounts or as otherwise directed by Authority Request;
- (g) Related Subaccount of Class II Debt Service Fund. An amount which, together with the amount therein, will equal (x) the interest due and payable on the next Bond Payment Date on all Class II Bonds of the Related Series then Outstanding and any Authorized Derivative Payment secured on a parity with the Class II Bonds accrued and unpaid as of such date; plus (y) the aggregate amount of Principal Installments becoming due and payable on the Outstanding Class II Bonds of the Related Series on such Bond Payment Date or, if such date is not a date for payment of such Principal Installments, an amount that, if made in substantially equal installments on each subsequent Bond Payment Date to an including the next Bond Payment Date that is a date for the payment of Principal Installments on related Class II Bonds, will equal the amount of the Principal Installments becoming due and payable on Outstanding Related Class II Bonds on such next Bond Payment Date;
- (h) <u>Unrelated Subaccounts of Class II Debt Service Fund</u>. Any deficiency in such subaccount(s) of the Class II Debt Service Fund, after making any requisite transfers from the Related Debt Service Reserve Fund, resulting from the lack of moneys sufficient to make the deposit described in (g) above as of such date, on a proportionate basis with all other Unrelated such subaccounts or as otherwise directed by Authority Request;
- (i) <u>Related Subaccount of Debt Service Reserve Fund</u>. An amount, if any, which, together with the available amount of any Qualified Surety Bond therein, will equal the Debt Service Reserve Fund Requirement of the Related Series of Bonds;
- (j) <u>Unrelated Subaccounts of Debt Service Reserve Fund.</u> Any deficiency in such subaccount(s) resulting from the lack of Related Revenues sufficient to make the deposit described in (i) above as such date on a proportionate basis with all other Unrelated such subaccounts or as otherwise directed by Authority Request;
- (k) Related Subaccount of Loan Recycling Account (Upon Authority Election) or Class II Special Redemption Account or any combination thereof. An amount, if any, needed to ensure that the Class II Asset Requirement of the Related Series Bonds will be met on such Bond Payment Date following such transfer, provided that any election by the Authority to make deposits into the Loan Recycling Account must be evidenced by an Authority Certificate filed with the Trustee;

- (l) <u>Unrelated Subaccounts of the Class II Special Redemption Account</u>. Any deficiency in such subaccount resulting from the lack of moneys sufficient to make the deposit described in (k) above as of such date, on a proportionate basis with all other Unrelated such subaccounts or as otherwise directed by Authority Request;
- (m) To the Authority. An amount of any reasonable and necessary Fiduciary Expenses with respect to the Related Series of Bonds previously incurred but not reimbursed to the Authority or reasonably anticipated to be payable in the following six months; provided, however, that in no event shall the aggregate of all Fiduciary Expenses with respect to the Related Series of Bonds paid directly to Fiduciaries or to the Authority under this paragraph (m) exceed any limitation set forth in the Related Series Indenture for any period;
- (n) <u>To the Authority</u>. An amount equal to any deficiency in moneys to pay reasonable and necessary Fiduciary Expenses with respect to Unrelated Series of Bonds resulting from the lack of moneys sufficient to make the deposit described in (m) above as of such date on a proportionate basis with all other Unrelated Series of Bonds or as otherwise directed by Authority Request;
- (o) Related Subaccount of Class III Debt Service Fund. An amount which, together with the amount therein, will equal (x) the aggregate amount of interest becoming due and payable on such Bond Payment Date or Derivative Payment Date upon all Class III Bonds of the Related Series then Outstanding and any Authority Derivative Payment secured on a parity with the Class III Bonds accrued and unpaid as of such date; plus (y) the aggregate amount of Principal Installments required to be paid for the Outstanding Class III Bonds of the Related Series on such Bond Payment Date or, if such Bond Payment Date is not a date for the payment of such Principal Installments on Related Class III Bonds, an amount that, if made in substantially equal installments on each subsequent Bond Payment Date to an including the next Bond Payment Date that is a date for the payment of Principal Installments on related Class III Bonds, will equal the amount of the Principal Installments becoming due and payable on Outstanding Related Class III Bonds on such next Bond Payment Date;
- (p) <u>Unrelated Subaccounts of Class III Debt Service Fund</u>. Any deficiency in such subaccounts (after making any requisite transfers from the Related subaccount of the Debt Service Reserve Fund) resulting from the lack of moneys sufficient to make the deposit described in (o) above as of such date, on a proportionate basis with all other Unrelated such subaccounts or as otherwise directed by Authority Request.
- (q) To the Authority. An amount of any reasonable and necessary Administrative Expenses with respect to the Related Series of Bonds previously incurred but not reimbursed to the Authority or reasonably anticipated to be payable in the following six months; provided, however, that in no event shall the aggregate of such amounts paid to the Authority, plus amounts paid to the Authority with respect to such Series of Bonds pursuant to paragraphs (m) and (n) above and plus all Fiduciary Expenses with respect to the Related Series of Bonds paid directly to Fiduciaries exceed any limitations set forth in the Related Series Indenture;
- (r) <u>To the Authority</u>. An amount equal to any deficiency in moneys to pay the reasonable and necessary Administrative Expenses with respect to Unrelated Series of Bonds resulting from the lack of moneys sufficient to make the deposit described in (q) above, on a proportionate basis with all other Unrelated Series of Bonds or as otherwise directed by Authority Request;

- Redemption Fund or any combination thereof. An amount, if any, necessary to satisfy the Class III Asset Requirement of the Related Series of Bonds, calculated as of such next succeeding Bond Payment Date and giving effect to such transfer, which amount shall be allocated to the Related subaccounts of the Class I Special Redemption Account, the Class II Special Redemption Account and the Class III Special Redemption Account on the basis of the relative ratios represented by the Aggregate Principal Amounts Outstanding of the Related Class I Bonds, Class II Bonds and Class III Bonds, respectively, to the Aggregate Principal Amount of all Related Class I, Class II and Class III Bonds Outstanding, provided that any election by the Authority to make deposits into the Loan Recycling Account must be evidenced by an Authority Certificate filed with the Trustee:
- (t) <u>Unrelated Subaccounts of Redemption Fund</u>. On a proportionate basis with all other Unrelated such subaccounts or as otherwise directed by Authority Request, the additional amount, if any, necessary (after the deposits required by paragraph (s) above for the Related Series of Bonds) to satisfy the Class III Asset Requirement of such Unrelated Series of Bonds, calculated as of such next succeeding Bond Payment Date and giving effect to such transfer, which amount shall be allocated to the applicable subaccount of the Class I Special Redemption Account, the Class II Special Redemption Account and the Class III Special Redemption Account on the basis of the relative ratios represented by the Aggregate Principal Amount Outstanding of the applicable Class I Bonds, Class II Bonds and Class III Bonds, respectively, to the Aggregate Principal Amount of all applicable Class I, Class II, and Class III Bonds Outstanding (for purposes of this paragraph (t), "applicable" means Related to such Unrelated Series);
- (u) Related Subaccount of Class IV Debt Service Fund. An amount which, together with the amount herein, will equal (x) the aggregate amount of interest becoming due and payable on such Bond Payment Date or Derivative Payment Date upon all Class IV Bonds of the Related Series then Outstanding and any Authority Derivative Payment secured on a parity with the Class IV Bonds accrued and unpaid as of such date; plus (y) the aggregate amount of Principal Installments required to be paid for the Outstanding Class IV Bonds of the Related Series on such Bond Payment Date;
- (v) <u>Unrelated Subaccounts of Class IV Debt Service Fund</u>. Any deficiency (after making any requisite transfers from the Related Subaccount of the Debt Service Reserve Fund) in such subaccounts resulting from the lack of moneys sufficient to make the deposit described in (u) above as of such date, on a proportionate basis with all other Unrelated such subaccounts or as otherwise directed by Authority Request; and
- (w) <u>Upon Authority Request, Related Subaccount of the Loan Recycling Account.</u> In order to finance or refinance Loans or Authority Projects, to the extent permitted by the applicable Series Indenture.

The balance, if any, in each subaccount of the Revenue Fund (or such lesser amount as requested by the Authority) is to be paid to the Authority for the payment of Administrative Expenses or for any other purpose free and clear of any lien and pledge of the Indenture upon receipt of an Authority Request made within 30 days of such Bond Payment Date. Any balance remaining after such payment to the Authority is to be transferred to the Related subaccounts of the Redemption Fund and allocated as provided in (s) above or as set forth in an Authority Request, subject to any limitation or requirements specified in the Related Series Indenture.

In the event Bonds are to be redeemed on a date other than a Bond Payment Date, and to the extent moneys are not available in the Related subaccounts of the Class I Debt Service Fund, the Class II

Debt Service Fund, the Class III Debt Service Fund or the Class IV Debt Service Fund to pay accrued interest on such redemption date for such Class I Bonds, Class II Bonds, Class III Bonds and Class IV Bonds, respectively, the Trustee is to apply or cause the Paying Agent to apply available moneys in the Related subaccount of the Revenue Fund for the payment of such interest.

Debt Service Funds

There is created a Class I Debt Service Fund, Class II Debt Service Fund, Class III Debt Service Fund and Class IV Debt Service Fund, and pursuant to each Series Indenture, subaccounts in each such Fund for each Series of Bonds. Amounts in each series subaccount of each Debt Service Fund are to be used and withdrawn by the Trustee solely for transfer to the Paying Agent (i) on each Bond Payment Date and Derivative Payment Date for the purpose of paying first the interest then the Principal Installments on the Related Class and Series of Bonds and any Authority Derivative Payment secured on a parity with the Related Class and Series of Bonds as the same shall become due and payable (including accrued interest on any Bonds of the Related Class purchased or redeemed prior to maturity pursuant to the Indenture) or (ii) on each purchase date for the purpose of paying the purchase price of the Related Class and Series of Bonds purchased in lieu of redemption by the Sinking Fund Installments for the Related Class of Bonds.

Amounts remaining in each subaccount of the Debt Service Funds after all Bonds of the Related Class has been paid or funds have been set aside and held in trust for such payment are to be transferred to the Related subaccount of the Revenue Fund.

Debt Service Reserve Fund

Upon the issuance, sale and delivery of a Series of Bonds pursuant to the Indenture, the Trustee is to deposit in the Related subaccount of the Debt Service Reserve Fund such amounts, if any, as are required by the provisions of the Related Series Indenture, which aggregate amount, together with the available amount of any Qualified Surety Bond or Bonds in the Debt Service Reserve Fund, is to be at least sufficient to equal the Debt Service Reserve Fund Requirement relating to such Series of Bonds, calculated after giving effect to the issuance of such Bonds. Additional moneys may be deposited in the Related subaccount of the Debt Service Reserve Fund in accordance with the Master Indenture.

On the last Business Day prior to each Bond Payment Date or more frequently if required by a Series Indenture, and in each case in conjunction with the transfers, deposits and payments to be made from the Revenue Fund as provided in the Master Indenture, the Trustee is to transfer from each subaccount of the Debt Service Reserve Fund to the specified subaccounts of other Funds or Accounts the following amounts (from any cash, Investment Securities or Qualified Surety Bonds therein), in the following order of priority:

- (a) <u>Related Subaccount of Class I Debt Service Fund</u>. In the event that the amount transferred to any subaccount of the Class I Debt Service Fund from the Related subaccount of the Revenue Fund is insufficient to pay the interest and Principal Installments, if any, due on the Class I Bonds of the Related Series on the next succeeding Bond Payment Date, the amount of such insufficiency is to be transferred from the Related subaccount of the Class I Debt Service Reserve Fund;
- (b) <u>Unrelated Subaccounts of Class I Debt Service Fund</u>. In the event that the amount transferred to a subaccount of the Class I Debt Service Fund from Unrelated subaccounts of the Revenue Fund is insufficient to pay the interest and Principal Installments, if any, due on Class I Bonds of the Related Series on the next succeeding Bond Payment Date, the amount of such insufficiency is to be transferred from Unrelated subaccounts in the Debt Service Reserve Fund, on a proportionate basis or as otherwise directed by Authority Request.

- (c) <u>Related Subaccount of Class II Debt Service Fund</u>. In the event that the amount transferred to any subaccount of the Class II Debt Service Fund from the Related subaccount of the Revenue Fund is insufficient to pay the interest and Principal Installments, if any, due on the Class II Bonds of the Related Series on the next succeeding Bond Payment Date, the amount of such insufficiency is to be transferred from the Related subaccount of the Debt Service Reserve Fund.
- (d) <u>Unrelated Subaccounts of Class II Debt Service Fund</u>. In the event that the amount transferred to any subaccount of the Class II Debt Service Fund from the Unrelated subaccount of the Revenue Fund is insufficient to pay the interest and Principal Installments, if any, due on the Class II Bonds of the Related Series on the next succeeding Bond Payment Date, the amount of such insufficiency is to be transferred from Unrelated subaccounts in the Debt Service Reserve Fund, on a proportionate basis or as otherwise directed by Authority Request.
- (e) Related Subaccount of Class III Debt Service Fund. In the event that the amount transferred to any subaccount of the Class III Debt Service Fund from the Related subaccount of the Revenue Fund is insufficient to pay the interest and Principal Installments, if any, due on the Class III Bonds of the Related Series on the next succeeding Bond Payment Date, the amount of such insufficiency is to be transferred from the Related subaccount of the Debt Service Reserve Fund; provided, however, that no such transfer may result in (A) the amount on deposit in the Related subaccount of the Debt Service Reserve Fund being reduced to an amount less than any minimum deposit specified in the Related Series Indenture or (B) a failure to meet the Related Class II Asset Requirement.
- (f) <u>Unrelated Subaccounts of Class III Debt Service Fund</u>. In the event that the amount transferred to any subaccount of the Class III Debt Service Fund from the Unrelated subaccounts of the Revenue Fund is insufficient to pay the interest and Principal Installments, if any, due on the Class III Bonds of the Related Series on the next succeeding Bond Payment Date, the amount of such insufficiency is to be transferred from the Unrelated subaccounts of the Debt Service Reserve Fund on a proportionate basis or as otherwise directed by Authority Request; provided, however, that no such transfer may result in (A) the amount on deposit in a subaccount of the Debt Service Reserve Fund being reduced to an amount less than any minimum deposit specified in the Related Series Indenture or (B) a failure to meet the Related Class II Asset Requirement.
- Related Subaccount of Class IV Debt Service Fund. In the event that the amount transferred to any subaccount of the Class IV Debt Service Fund from the Related subaccounts of the Revenue Fund is insufficient to pay the interest and Principal Installments on the Class IV Bonds of the Related Series on the next succeeding Bond Payment Date, the amount of such insufficiency is to be transferred from the Related subaccount of the Debt Service Reserve Fund; provided, however, that no such transfer may result in (A) the amount on deposit in the Related subaccount of the Debt Service Reserve Fund being reduced to an amount less than any minimum deposit specified in the Related Series Indenture or (B) a failure to meet the Related Class III Asset Requirement.
- (h) <u>Unrelated Subaccounts of Class IV Debt Service Fund.</u> In the event that the amount transferred to any subaccount of the Class IV Debt Service Fund from the Unrelated subaccounts of the Revenue Fund is insufficient to pay the interest, and Principal Installments, if any, due on the Class IV Bonds of the Related Series on the next succeeding Bond Payment Date, the amount of such insufficiency is to be transferred from Unrelated subaccounts of the Debt Service Reserve Fund on a proportionate basis or as otherwise directed by Authority Request; provided, however, that no such transfer may result in (A) the amount on deposit in a subaccount of the Debt Service Reserve Fund being reduced to an amount less than any minimum deposit

specified in the Related Series Indenture or (B) a failure to meet the Related Class III Asset Requirement.

On or prior to each Bond Payment Date, the Trustee is to determine the Debt Service Fund Requirement for each Series of Bonds as of the next succeeding Bond Payment Date. Any amount which will then be in the Related subaccount of the Debt Service Reserve Fund (other than amounts attributable to accrued, but unrealized, interest purchased on Investment Securities) in excess of such Requirement is to be transferred by the Trustee to the Related Subaccount of the Revenue Account, upon notification of the Authority and unless otherwise instructed by an Authority Request.

Redemption Fund

There is created a Redemption Fund and within such Fund, a Class I Special Redemption Account, a Class II Special Redemption Account, a Class III Special Redemption Account and a Class IV Special Redemption Account. Within each such Class Special Redemption Account there will be created a subaccount for each Series of Bonds. Moneys transferred to any Class Special Redemption Account of the Redemption Fund from the Revenue Fund are to be used to purchase or redeem Bonds of the Class in respect of which the subaccount was established. However, at any time prior to the transmission of the notices of redemption, the Authority may by delivery of an Authority Request instruct the Trustee to transfer moneys on deposit in a Series subaccount of a Class Special Redemption Account in the Redemption Fund to another Series subaccount of the same Class Special Redemption Account in the Redemption Fund to be applied as provided in the Indenture to the redemption of the same Class of Bonds but a different Series. Such Authority Request (i) shall certify that it is consistent with the most recently filed Related Cash Flow Statement and not prohibited by the Related Series Indenture and (ii) shall be accompanied by evidence of satisfaction of all Asset Requirements for the Related Series. See Part I.

Any amounts remaining in any subaccount after all Bonds of the Related Class and Related Series have been paid are to be transferred to the Related subaccount of the Revenue Fund.

Credit Against Sinking Fund Installments

Upon any redemption (other than by Class I Sinking Fund Installment, Class II Sinking Fund Installment, Class III Sinking Fund Installment or Class IV Sinking Fund Installment) of Bonds for which Class I Sinking Fund Installments, Class II Sinking Fund Installments, Class III Sinking Fund Installments or Class IV Sinking Fund Installments have been established, or any purchase in lieu thereof, there is to be credited by the Trustee and the Bond Registrar toward the Class I Sinking Fund Installments, Class II Sinking Fund Installment, Class III Sinking Fund Installments or Class IV Sinking Fund Installments thereafter to become due with respect thereto, on a proportionate basis and in increments of the applicable minimum denomination, an amount bearing the same ratio to each such Class I Sinking Fund Installment, Class II Sinking Fund Installment, Class III Sinking Fund Installment or Class IV Sinking Fund Installment as the total principal amount of such Class and maturity of Bonds so purchased or redeemed bears to the total amount of all such Class I Sinking Fund Installments, Class II Sinking Fund Installments, Class III Sinking Fund Installments or Class IV Sinking Fund Installments to be credited; provided, however, that, if there shall be filed with the Trustee and the Bond Registrar an Authority Request specifying a different method for crediting Class I Sinking Fund Installments, Class II Sinking Fund Installments, Class III Sinking Fund Installments or Class IV Sinking Fund Installments upon any such purchase or redemption of Bonds and certifying that such Authority Request is consistent with the most recently filed Related Cash Flow Statement and the Related Series Indenture, then such Sinking Fund Installments shall be so credited as shall be provided in such Authority Request. The portion of any such Class I Sinking Fund Installment, Class II Sinking Fund Installment, Class III Sinking Fund Installment or Class IV Sinking Fund Installment remaining after the deduction of any

such amounts credited towards the same (or the original amount of any such Class I Sinking Fund Installment, Class II Sinking Fund Installment or Class IV Sinking Fund Installment if no such amounts shall have been credited toward the same) shall constitute the unsatisfied balance of such Class I Sinking Fund Installment, Class II Sinking Fund Installment or Class IV Sinking Fund Installment for the purpose of calculation of Class I Sinking Fund Installments, Class III Sinking Fund Installments, Class III Sinking Fund Installments and Class IV Sinking Fund Installments due on or scheduled for a future date.

Authority Payment Accounts

There may be created an Authority Payment Account within each Debt Service Fund and, within each such Authority Payment Account, a Series Indenture may create a subaccount for each Series of Bonds. If, following transfers made from the Revenue Account and the Debt Service Reserve Fund, there are not sufficient moneys to pay all interest due and payable on any General Obligation Bond or to pay any Principal Installment on any General Obligation Bond, the Authority is to pay to the Trustee for deposit in the Related subaccounts of the Authority Payment Accounts (upon notification of such insufficiency) the amount of such insufficiency from the Authority's other general revenues or moneys legally available therefor, subject only to agreements made or to be made with holders of notes or bonds pledging particular revenues or moneys for the payment thereof. If the amount provided by the Authority is less than the amount of such insufficiency, any shortfall is to be allocated pro rata among the holders of the Related General Obligation Bonds in proportion to the amounts then due and payable on such Bonds.

Amounts deposited in the Related subaccounts of the Authority Payment Accounts are only to be used to pay interest or Principal Installments due and payable on the Related General Obligation Bonds and may not be transferred to any Debt Service Fund for Bonds which are not General Obligation Bonds or to any other Fund or Account for any reason.

Investment of Funds

Moneys in all Funds and Accounts held by the Trustee shall be invested to the fullest extent possible in Investment Securities which mature or may be redeemed at the option of the holder not later than the times when such moneys shall be needed for payments to be made from such Funds or Accounts. Investments are to be made by the Trustee in accordance with instructions received from the Authority and may be made by the Trustee through its own bond department, commercial banking department or commercial paper department or with investment companies for which the Trustee or its affiliates may provide advisory, administrative, custodial or other services for compensation.

The interest or income earned by, or gain to, all Funds and Accounts due to the investment thereof shall be transferred to the related subaccount of the Revenue Fund, except that such income, interest or gain shall be retained in the Debt Service Reserve Fund unless, after giving effect to the transfer, the amount therein at least equals the aggregate Debt Service Reserve Fund Requirement.

Notwithstanding anything in the Indenture to the contrary, proceeds from any Credit Enhancement Facility or Liquidity Facility are to be held uninvested.

Creation of Liens

The Authority shall not issue any bonds or other evidences of indebtedness, other than the Bonds, secured by a pledge of the Revenues or of the moneys, securities, rights or interests pledged or held or set aside by the Authority or by any Fiduciary under the Indenture, except that the Authority may issue (i) evidences of indebtedness secured by a pledge of the Revenues to be derived after the pledge of the Revenues provided in the Indenture has been discharged and satisfied; or (ii) notes or bonds of the

Authority not secured under the Indenture; or (iii) notes or bonds which are general obligations of the Authority under the Act.

Covenants Relating to Loans

The Authority has covenanted to use the proceeds of Bonds and other moneys deposited in the Funds and Accounts only in accordance with the provisions of the Indenture.

The Authority shall at all times charge and collect Loan Repayments and other amounts with respect to the Loans which, together with any other moneys estimated to be available therefor (including Prepayments, but excluding the Rebate Requirement and any Excess Earnings), are estimated to be at least sufficient for the payment of the sum of:

- (a) the aggregate Debt Service Payments; and
- (b) Administrative Expenses, as projected by the Authority.

The Authority has covenanted not to sell any Loan or any Authority Project, except in the event of a default on such Loan, unless the Authority determines that such sale would not have a material adverse effect on the ability of the Authority to pay the principal of and interest on the Outstanding Bonds.

The Authority has covenanted not to modify the financial terms of any Loan or any security therefor which will in any manner materially adversely affect the interests of the Owners of the Bonds, as determined in good faith by the Authority.

The Authority has covenanted to diligently enforce, and take all reasonable steps, actions and proceedings necessary for the enforcement of, all terms, covenants and conditions of all Loans and the preservation and protection of the rights and privileges of the Authority, the Trustee and the Bondholders thereunder.

Certain Other Covenants

Creation and Use of Rebate Account

There is created pursuant to each Series Indenture relating to any tax-exempt Bonds a special and a separate subaccount within the Rebate Fund to be held by the Authority for such Series of Bonds (the "Series Rebate Account"). There shall be transferred in accordance with the Indenture into the Series Rebate Account such amounts as shall be required to be deposited therein in accordance with Authority Certificates to meet the Authority's obligations under the covenant described below under "Tax Covenant." Amounts in the Series Rebate Account shall be used for the purpose of making the payments to the United States required by such covenant and Section 148(f) of the Tax Code. Any amounts in the Series Rebate Account in excess of those required to be on deposit therein as described below under "Tax Covenant" and Section 148(f) of the Tax Code may be withdrawn therefrom and deposited into the Revenue Fund.

Creation and Use of Excess Earnings Fund

All amounts in a subaccount of the Excess Earnings Fund relating to any tax-exempt Bonds, including all investment earnings thereon, shall remain therein until transferred or paid by the Trustee to such other Fund or the United States Department of the Treasury or for such other purpose, as the Authority shall specify, upon receipt by the Trustee of (a) an Authority Request directing the Trustee to so

transfer or pay a specified amount, and (b) a written opinion of Bond Counsel to the effect that any such transfer or payment, upon satisfaction of any conditions set forth in such opinion (e.g., forgiveness of indebtedness on all or a portion of the Loans), would not cause interest on such Bonds to be includable in the gross income of the Owners thereof for federal income tax purposes. Upon receipt of an opinion of Bond Counsel that the balance in a subaccount of the Excess Earnings Fund is in excess of the amount required to be included therein, such excess shall be transferred to the Revenue Fund. Moneys in a subaccount of the Excess Earnings Fund may be used to purchase Loans in the Related subaccount of the Acquisition Account or the Loan Recycling Account, at a purchase price equal to the unpaid balances of the principal amounts of such Loans plus accrued interest, if any, thereon, and any unamortized premium, and any such Loans so purchased shall be credited to such subaccount of the Excess Earnings Fund. Loans in a subaccount of the Excess Earnings Fund may be exchanged for Loans in the Related subaccount of the Acquisition Account or the Loan Recycling Account having an aggregate principal balance not less than the aggregate principal balance of such Loans in such subaccount for the Excess Earnings Fund, upon receipt by the Trustee of an Authority Request specifying the Loans to be so exchanged. If, on the final maturity of all of a Series, there is a balance in a subaccount of the Excess Earnings Fund which is allocated to payments related to such Series, and the Trustee has not received directions meeting the requirements of the preceding sentence for the disposition of such balance, the Trustee shall obtain an opinion of Bond Counsel as to the purposes, if any, to which such balance may be applied without adversely affecting the federal income tax status of interest on such Bonds, and shall thereafter dispose of such balance in accordance with such opinion. Records of the calculation of Excess Earnings and the Excess Earnings Fund shall be retained by the Authority until six years after the retirement of all of the Bonds of the Related Series.

Tax Covenant

The Authority will covenant for the benefit of the owners of the each Series of tax-exempt Bonds that it will not take any action or omit to take any action with respect to such Series of Bonds, the proceeds thereof, or any other funds of the Authority or any facilities financed with the proceeds of such Series of Bonds, if such action or omission would cause the interest on such Series of Bonds, to lose its exclusion from gross income for federal income tax purposes under Section 103 of the Tax Code, would subject the Authority to any penalties under Section 148 of the Tax Code, or would cause such Bonds to be "federally guaranteed" within the meaning of Section 149(b) of the Tax Code. The foregoing covenants shall remain in full force and effect notwithstanding the payment in full or defeasance of such Series of Bonds until the date on which all obligations of the Authority in fulfilling the above covenant under the Tax Code have been met.

Events of Default under the Indenture and Remedies

Each of the following events constitutes an "Event of Default":

- (a) default shall be made in the payment of any Principal Installment of any Class I Bond when and as the same shall become due and payable, whether at maturity or by call for redemption or otherwise;
- (b) default shall be made in the payment of any installment of interest on any Class I Bond when and as the same shall become due and payable, or any other payment due under any other Class I Obligations when due and payable;
- (c) default shall be made in the payment of any Principal Installment or interest on any Class II Bond or any other payment due under any other Class II Obligations when due and payable, provided that sufficient moneys for such payment are available in the Class II Debt Service Fund;

- (d) default shall be made in the payment of any Principal Installment or interest on any Class III Bond or any other payment due under any other Class III Obligations when due and payable, provided that sufficient moneys for such payment are available in the Class III Debt Service Fund:
- (e) default shall be made in the payment of any Principal Installment or interest on any Class IV Bond or any other payment due under any other Class IV Obligations when due and payable, provided that sufficient moneys for such payment are available in the Class IV Debt Service Fund;
- (f) default shall be made by the Authority in the performance or observance of any other covenant, agreement or condition on its part contained in the Indenture (except the requirement that the Authority pay amounts to the Trustee from its other revenues, moneys or assets in connection with General Obligation Bonds) or in the Bonds, and such default shall continue for a period of 60 days after written notice thereof to the Authority by the Trustee or to the Authority and to the Trustee by the Holders of not less than 10% in principal amount of the Bonds Outstanding; or
- (g) the Authority shall file a petition seeking a composition of indebtedness under the federal bankruptcy laws or under any other applicable law or statute of the United States or of the State.

Upon the occurrence of an Event of Default the Trustee may, and upon the written request of the Owners of not less than 25% in principal amount of the Bonds Outstanding following an Event of Default described in paragraphs (a), (b), (c), (d), (e), and (g) above, and 50% in principal amount of the Bonds Outstanding following an Event of Default described in paragraph (f) above, shall give 30 days' notice in writing to the Authority of its intention to declare all Outstanding Obligations due and payable immediately. After such 30-day period the Trustee may, and upon written request of Owners of not less than 25% (except with respect to an Event of Default described in paragraph (f) or (g) above, to the extent provided in the following sentence) in principal amount of the Bonds Outstanding shall, declare all Bonds Outstanding, plus all interest accrued therein and which will accrue to the date of payment, immediately due and payable by notice to the Authority. Notwithstanding the foregoing, following an Event of Default described in paragraphs (f) or (g) above (except for a default which could adversely affect the exclusion from gross income for federal income tax purposes of interest on any Tax-Exempt Bonds), the Trustee shall not declare all Obligations Outstanding immediately due and payable unless so directed by written request of Owners of 100% in principal amount of Bonds Outstanding. The Trustee may (and at the direction of the Owners of a majority in aggregate principal amount of Outstanding Bonds, shall) annul such declaration and its consequences if (i) money shall have been deposited in the Revenue Fund sufficient to pay all matured installments of interest and principal or Redemption Price (other than principal then due only because of such declaration) of all Outstanding Obligations; (ii) moneys shall have been deposited with the Trustee sufficient to pay the charges, compensation, expenses, disbursements, advances and liabilities of the Trustee; (iii) all other amounts then payable by the Authority under the Indenture shall have been paid or a sum sufficient to pay the same shall have been deposited with the Trustee; and (iv) every event of Default known to the Trustee (other than a default in the payment of the principal of such Bonds then due only because of such declaration) shall have been remedied to the satisfaction of the Trustee.

Upon the occurrence of an Event of Default, the Trustee may, and upon the written request of the Owners of not less than 25% in principal amount of Outstanding Bonds, together with indemnification of the Trustee to its satisfaction, shall, proceed with such suits, actions or proceedings as the Trustee, being advised by counsel, shall deem expedient, including but not limited to:

- (i) enforcement of the right of Bondholders to collect and enforce the payment of principal and interest due or becoming due on Loans and collect and enforce any rights in respect to the Loans or other security or mortgages securing such Loans and to require the Authority to carry out its duties under the terms of the Indenture and the Act;
 - (ii) suit upon all or any part of the Obligations;
- (iii) civil action to require the Authority to account as if it were the trustee of an express trust for the Owners;
- (iv) civil action to enjoin any acts or things which may be unlawful or in violation of the rights of the Owners; and
 - (v) enforcement of any other rights of the Owners conferred by law or the Indenture.

The Trustee may waive any Event of Default which in its opinion shall have been remedied before the entry of final judgment or decree in any proceeding instituted by it under the Indenture or before the completion of the enforcement of any other remedy under the Indenture. Any waiver by the Trustee of an Event of Default shall not extend to any subsequent or other Event of Default or impair any right consequent thereon.

Regardless of the happening of an Event of Default, the Trustee, if requested in writing by the Holders of not less than 25% in principal amount of the Bonds then Outstanding, shall, upon being indemnified to its satisfaction therefor, institute and maintain such suits and proceedings as it may be advised shall be necessary or expedient (i) to prevent any impairment of the security under the Indenture by any acts which may be unlawful or in violation of the Indenture or (ii) to preserve or protect the interests of the Owners, provided that such request is in accordance with law and the provisions of the Indenture and, in the sole judgment of the Trustee, is not unduly prejudicial to the interests of the Owners of the Bonds not making such request.

It is further provided that no Bondholder shall have any right to institute any action unless such Holder shall have given to the Trustee written notice of an Event of Default described under paragraphs (a), (b) or (c) above and unless the holders of not less than 25% in principal amount of the Bonds then Outstanding shall have made written request of the Trustee and shall have afforded the Trustee a reasonable opportunity to proceed to institute action and unless, also, there shall have been offered to the Trustee reasonable security and indemnity, and the Trustee shall have refused or neglected to comply with such request within 60 days after receipt.

General Obligation Bonds Events of Default and Remedies

Any failure by the Authority to pay interest on any General Obligation Bond when due or to pay any Principal Installment on any General Obligation Bond at maturity, provided such failure does not constitute an Event of Default as described above, constitutes a "General Obligation Bond Default" under the Indenture. A General Obligation Bond Default does not constitute an Event of Default under the Indenture and does not affect the priority of the lien and pledge granted Owners of Bonds under the Indenture.

Upon the occurrence of a General Obligation Bond Default, the Trustee may and, upon the written request of the Owners of note less than 25% in Aggregate Principal Amount of Outstanding General Obligation Bond shall, give 30 days' notice in writing to the Authority of its intention to declare the Aggregate Principal Amount of all General Obligation Bonds Outstanding immediately due and payable. At the end of such 30-day period the Trustee may, and upon such written request of Owners of

not less than 25% in Aggregate Principal Amount of Outstanding General Obligation Bonds shall, by notice in writing to the Authority, declare the Aggregate Principal Amount of all General Obligation Bonds Outstanding immediately due and payable; and the Aggregate Principal Amount of such General Obligation Bonds shall become and be immediately due and payable. In such event, there shall be due and payable on the General Obligation Bonds an amount equal to the total principal amount of all such Bonds, plus all interest which will accrue thereon to the date of payment.

The Trustee may annul such declaration and its consequences if (i) moneys shall have been deposited in the Related Authority Payment Account sufficient to pay all matured installments of interest and principal or Redemption Price (other than principal then due only because of such declaration) of all Outstanding General Obligation Bonds; and (ii) money shall have been deposited with the Trustee sufficient to pay the charges, compensation, expenses, disbursements, advances and liabilities of the Trustee.

Upon the occurrence and continuance of a General Obligation Bond Default, the Trustee may, and upon the written request of the Owners of not less than 25% in Aggregate Principal Amount of the General Obligation Bonds Outstanding, together with indemnification of the Trustee to its satisfaction therefor, shall, proceed forthwith to protect and enforce the rights of the Owners of General Obligation Bonds under the Act, the General Obligation Bonds and the Indenture by such suits, actions or proceedings as the Trustee, being advised by counsel, shall deem expedient and consistent with the limitations specified in the Indenture, including but not limited to:

- (a) Suit upon all or any part of the General Obligation Bonds;
- (b) Civil action to enjoin any acts or things which may be unlawful or in violation of the rights of the Owners of General Obligation Bonds; and
- (c) Enforcement of any other right of the Owners of General Obligation Bonds conferred by law or by the Indenture.

Regardless of the happening of a General Obligation Bond Default, the Trustee, if requested in writing by the Owners of not less than 25% in Aggregate Principal Amount of the General Obligation Bonds then Outstanding, shall, upon being indemnified to its satisfaction therefor, institute and maintain such suits and proceedings as it may be advised shall be necessary or expedient (i) to prevent any impairment of the security under the Indenture by any acts which may be unlawful or in violation of the Indenture; or (ii) to preserve or protect the interests of the Owners of the General Obligation Bonds, provided that such request is in accordance with law and the provisions of the Indenture and, in the sole judgment of the Trustee, is not unduly prejudicial to the interests of the Owners of General Obligation Bonds not making such request.

The rights and remedies of Owners of General Obligation Bonds upon the occurrence of a General Obligation Bond Default shall be limited to the enforcement of the Authority's general obligation covenant with respect to the Related Bonds and to the disbursement of amounts available to Owners of General Obligation Bonds from time to time in the Related Debt Service Fund, the Related Special Redemption Account and the Related Debt Service Reserve Fund after provision is made for, and after taking into account the rights of, Owners of Bonds other than General Obligation Bonds as provided in the Indenture. The exercise of remedies upon the occurrence of a General Obligation Bond Default shall not in any manner affect, disturb or prejudice the security and rights of Owners of Bonds under the Indenture.

The Trustee may waive any General Obligation Bond Default which in its opinion shall have been remedied before the entry of final judgment or decree in any suit, action or proceeding instituted by it under the provisions of the Indenture, or before the completion of the enforcement of any other remedy under the Indenture.

No Owner of any General Obligation Bond shall have any right to institute any suit, action or proceeding in equity or at law for any remedy under the Indenture unless:

- (i) a General Obligation Bond Default has occurred as to which the Trustee has actual notice, or as to which the Trustee has been notified in writing; and
- (ii) the Owners of at least 25% in Aggregate Principal Amount of General Obligation Bonds Outstanding shall have made written request to the Trustee to proceed to exercise the powers granted in the Master Indenture or to institute such action, suit or proceeding in its own name; and
- (iii) such Owners of the Bonds shall have offered the Trustee indemnity as provided in the Master Indenture; and
 - (iv) the Trustee shall have failed or refused to exercise the powers in the Indenture

granted or to institute such action, suit or proceedings in its own name for a period of 60 days after receipt by it of such request and offer of indemnity.

Successors to Trustee

Wells Fargo Bank, National Association, has been appointed as Trustee under the Master Indenture and will act as Trustee until any successor thereto becomes successor trustee, provided that such successor company must be a bank or trust company organized under the laws of any state of the United States or a national banking association, and must be authorized by law to perform all the duties imposed upon it by the Master Indenture.

Modifications of Indenture and Outstanding Bonds

There are provided procedures whereby the Authority may amend the Master Indenture or a Series Indenture by execution and delivery of a Supplemental Indenture. Amendments that may be made without consent of Bondholders must be for such purposes as providing for the issuance of a Series of Bonds, further securing the Bonds, imposing further limitations on or surrendering rights of the Authority or curing ambiguities.

Amendments of the respective rights and obligations of the Authority and the Bondholders may be made with the written consent of the Holders of at least a majority in principal amount of the Bonds Outstanding to which the amendment applies, but no such amendment shall permit a change in the terms of redemption or maturity of the principal of any Bond Outstanding (other than the terms of a Sinking Fund Installment) or of any installment of interest thereon or a reduction in the principal amount of Redemption Price therefor or the rate of interest thereon or reduce the percentages of Bonds, the consent of the Holders of which is required to effect such amendment, or the ability to declare the Aggregate Principal Amount of Bonds due and payable without the consent of the Owners of all Bonds then Outstanding or shall materially adversely affect the rights of the Owners of Class II Bonds, Class III Bonds or Class IV Bonds without the consent of the Owners of a majority in aggregate principal amount of Class II, Class III or Class IV Bonds Outstanding, respectively.

Amendments may be made in any respect with the written consent of the Owners of all the Bonds then Outstanding.

Defeasance

All outstanding Bonds will prior to the maturity or redemption date thereof be deemed to have been paid and will cease to be entitled to the pledge of the Trust Estate under the Indenture and all covenants, agreements and other obligations of the Authority to the Bondowners will cease if the following conditions are met: (i) in case any Bonds are to be redeemed on any date prior to their maturity, the Authority has given to the Bond Registrar irrevocable instructions to transmit notice of redemption therefor, (ii) there have been deposited with the Trustee either moneys in an amount which are sufficient, or Defeasance Securities the principal of and interest on which when due will provide moneys, which, together with the moneys, if any, deposited with the Trustee at the same time, will be sufficient to pay when due the principal or redemption price, if applicable, of and interest due and to become due on said Bonds on or prior to the redemption date or maturity date thereof, as the case may be, (iii) in the event said Bonds are not subject to redemption within the next succeeding 60 days, the Authority has given the Bond Registrar irrevocable instructions to transmit, as soon as practicable, a notice to the owners of such Bonds that the above deposit has been made with the Trustee and that said Bonds are deemed to have been paid and stating such maturity or redemption date upon which moneys are to be available for the payment of the principal or redemption price, if applicable, of and interest on such Bonds, and (iv) except in the event of a full cash defeasance or a current refunding of less than ninety days to maturity or redemption date, the sufficiency of such moneys or Defeasance Securities shall have been confirmed to the Authority in an opinion signed by a certified public accountant or firm of such accountants duly licensed to practice and practicing as such under the laws of the State, selected by the Authority.

Neither Defeasance Securities nor moneys deposited with the Trustee for the purpose of defeasing the Bonds nor principal or interest payments on any such Defeasance Securities shall be withdrawn or used for any purpose other than, and shall be held in trust for, the payment of the principal or Redemption Price, if applicable, of and interest on said Bonds and any bonds or other obligations issued by the Authority the proceeds of which were used to acquire such Defeasance Securities, in whole or in part; provided that no such principal of or interest on such Defeasance Securities shall be applied to the payment of the principal or redemption price of or interest on such bonds or other obligations unless (x) the Trustee shall have received a schedule showing, for each year from the date of deposit of such Defeasance Securities until the redemption date or maturity date of said Bonds, as the case may be, the amount of principal of and interest on such Defeasance Securities and moneys, if any, deposited with the Trustee at the same time that will be available to pay the principal or Redemption Price of and interest due on said Bonds in each such year, plus the amount of any excess in each such year, and (y) the amount of such principal of or interest on such Defeasance Securities to be so applied to the payment of such bonds or other obligations does not exceed in any year the amount of such excess for, or accumulated and unexpended to, such year. Any cash received from such principal or interest payments on such Defeasance Securities deposited with the Trustee, if not then needed for such purpose, to the extent practicable and, in accordance with an opinion of Bond Counsel filed with the Trustee, permitted by Section 103 of the Code, shall be reinvested in Defeasance Securities maturing in times and in amounts sufficient to pay when due the principal or Redemption Price, if applicable, of and interest due and to become due on said Bonds on and prior to such redemption date or maturity date thereof, as the case may be.

Any Authority Derivative Payments are deemed to have been paid and the applicable Derivative Product terminated when payment of all Authority Derivative Payments due and payable to each Reciprocal Payor under its respective Derivative Product have been made or duly provided for to the satisfaction of each Reciprocal Payor and the respective Derivative Product has been terminated.

APPENDIX D

CLASS ASSET REQUIREMENTS

Set forth below are the Class Asset Requirements applicable to the Outstanding Bonds pursuant to the Master Indenture. These Class Asset Requirements for the Outstanding Bonds are calculated based on applicable **Parity Ratios** which have the values set forth in the Series Indentures related to the most recently issued Series of Bonds, or any other value permitted or required by each Rating Agency as evidenced by Confirmations delivered by each Rating Agency after the date of issuance of such Series of Bonds.

Under the Master Indenture:

- (I) the **Class I Asset Requirement** means the requirement that, as of any date of calculation, the Accrued Assets shall be at least equal to the product of (x) the Aggregate Principal Amount of Class I Bonds then Outstanding multiplied by (y) the Class I Parity Ratio.
- (II) the **Class II Asset Requirement** means the requirement that, as of any date of calculation, the Accrued Assets shall be at least equal to the product of (x) the Aggregate Principal Amount of Class I Bonds and Class II Bonds then Outstanding multiplied by (y) the Class II Parity Ratio.
- (III) the **Class III Asset Requirement** means the requirement that, as of any date of calculation, the Accrued Assets shall be at least equal to the product of (x) the Aggregate Principal Amount of Class I Bonds, Class II Bonds and Class III Bonds then Outstanding multiplied by (y) the Class III Parity Ratio.

The Master Indenture defines **Accrued Assets** to mean the sum of (i) amounts held in the Acquisition Account, the Loan Recycling Account, the Debt Service Fund, the Redemption Fund, the Debt Service Reserve Fund and the Revenue Fund, and (ii) the aggregate unpaid principal balances of all Loans and Authority Projects.

The 2019 Series B Indenture provides that the **Class I Parity Ratio** shall be no less than 130%. As of April 1, 2019, the Accrued Assets were equal to 221.0% of the Aggregate Principal Amount of Class I Bonds and 122.3% of the Aggregate Principal Amount of Class I Bonds and Class II Bonds. These ratios did not take into account the 2019 Series B Bonds.



APPENDIX E

FORM OF BOND COUNSEL OPINION

August 7, 2019

Colorado Housing and Finance Authority 1981 Blake Street Denver, Colorado 80202

Colorado Housing and Finance Authority
Multi-Family/Project Class I Bonds, 2019 Series B-1 and 2019 Series B-2

Ladies and Gentlemen:

We have acted as bond counsel to the Colorado Housing and Finance Authority (the "Authority"), in connection with the issuance of its Multi-Family/Project Class I Bonds, 2019 Series B-1 and its Multi-Family/Project Class I Bonds, 2019 Series B-2 (together, the "2019 Series B Bonds") in the aggregate principal amount of \$42,325,000. In such capacity, we have examined the Authority's certified proceedings and such other documents and such law of the State of Colorado and of the United States of America as we have deemed necessary to render this opinion letter. The 2019 Series B Bonds are authorized and issued pursuant to the Master Indenture of Trust, dated as of March 1, 2000, as amended, and as supplemented by the 2019 Series B Indenture of Trust dated as of August 1, 2019 (together, the "Indenture") between the Authority and Wells Fargo Bank, National Association (formerly, Norwest Bank Colorado, National Association), as trustee (the "Trustee"). Capitalized terms not otherwise defined herein shall have the meanings ascribed to them in the Indenture.

Regarding questions of fact material to our opinions, we have relied upon the Authority's certified proceedings and other representations and certifications of public officials and others furnished to us, without undertaking to verify the same by independent investigation.

Based upon such examination, it is our opinion as bond counsel that:

- 1. The 2019 Series B Bonds constitute valid and binding obligations of the Authority, payable solely from the Revenues and other assets pledged thereto under the Indenture.
- 2. The Indenture has been duly authorized by the Authority, duly executed and delivered by authorized officials of the Authority, and, assuming due authorization, execution and delivery by the Trustee, constitutes a valid and binding obligation of the Authority enforceable in accordance with its terms.
- 3. Interest on the 2019 Series B Bonds, except for interest on any 2019 Series B Bond for any period during which it is held by a "substantial user" of facilities financed with the 2019 Series B Bonds or a "related person," as such terms are used in Section 147(a) of the Internal Revenue Code of 1986, as amended to the date hereof (the "Tax Code"), is excluded from gross income under federal income tax laws pursuant to Section 103 of the Tax Code; further, interest on the 2019 Series B Bonds is excluded from alternative minimum taxable income as defined in Section 55(b)(2) of the Tax Code. The opinions expressed in this paragraph assume continuous compliance with the covenants and

representations contained in the Authority's certified proceedings and in certain other documents and certifications furnished to us.

4. The 2019 Series B Bonds, their transfer and the income therefrom shall at all times be free from taxation by the State of Colorado under Colorado laws in effect as of the date hereof.

The opinions expressed in this opinion letter above are subject to the following:

The obligations of the Authority pursuant to the 2019 Series B Bonds and the Indenture may be limited by bankruptcy, insolvency, reorganization, moratorium and other similar laws affecting creditors' rights generally, and by equitable principles, whether considered at law or in equity.

In this opinion letter issued in our capacity as bond counsel, we are opining only upon those matters set forth herein, and we are not opining upon the accuracy, adequacy or completeness of any statements made in connection with any offer or sale of the 2019 Series B Bonds or upon any federal or state tax consequences arising from the receipt or accrual of interest on or the ownership or disposition of the 2019 Series B Bonds, except those specifically addressed herein.

This opinion letter is issued as of the date hereof and we assume no obligation to revise or supplement this opinion letter to reflect any facts or circumstances that may hereafter come to our attention or any changes in law that may hereafter occur.

Respectfully submitted,

APPENDIX F

BOOK-ENTRY SYSTEM

The following information in this section regarding DTC and the book entry system is based solely on information provided by DTC. No representation is made by the Authority or the Underwriters as to the completeness or the accuracy of such information or as to the absence of material adverse changes in such information subsequent to the date hereof. The Beneficial Owners of the 2019 Series B Bonds should confirm the following information with DTC or the DTC Participants.

The Depository Trust Company ("DTC"), New York, NY, will act as securities depository for the 2019 Series B Bonds. The 2019 Series B Bonds will be issued as fully-registered securities, registered in the name of Cede & Co., DTC's partnership nominee ("Cede") or such other name as may be requested by an authorized representative of DTC. One fully-registered 2019 Series B Bond certificate will be issued for each maturity of the 2019 Series B Bonds, in the aggregate principal amount of each such maturity of the 2019 Series B Bonds, and will be deposited with DTC.

DTC, the world's largest securities depository, is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments from over 100 countries that DTC's participants (the "Direct Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). DTC has a Standard & Poor's rating of "AA+." The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com and www.dtcc.org. The Authority, the Trustee, and the Underwriters undertake no responsibility for and make no representation as to the accuracy or the completeness of the content of such material contained on DTC's website as described in the preceding sentence including, but not limited to, updates of such information or links to other Internet sites accessed through the aforementioned website.

Purchases of 2019 Series B Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the 2019 Series B Bonds on DTC's records. The ownership interest of each actual purchaser of each 2019 Series B Bond ("Beneficial Owner") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the 2019 Series B Bonds are to be accomplished by entries made on the books of Direct or Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in 2019 Series B Bonds, except in the event that use of the book-entry system for the 2019 Series B Bonds is discontinued.

To facilitate subsequent transfers, all 2019 Series B Bonds deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of 2019 Series B Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the 2019 Series B Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such 2019 Series B Bonds are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of 2019 Series B Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the 2019 Series B Bonds, such as redemptions, defaults, and proposed amendments to the 2019 Series B Bond documents. For example, Beneficial Owners of 2019 Series B Bonds may wish to ascertain that the nominee holding the 2019 Series B Bonds for their benefit has agreed to obtain and transmit notices to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the Bond Registrar and request that copies of notices be provided directly to them.

While the 2019 Series B Bonds are in the book-entry system, redemption notices will be sent to DTC. If less than all of the 2019 Series B Bonds are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such issue to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to 2019 Series B Bonds, unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the Authority as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the 2019 Series B Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Principal and interest payments on the 2019 Series B Bonds will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts, upon DTC's receipt of funds and corresponding detail information from the Authority or the Trustee, on a payment date in accordance with their respective holdings shown on DTC's records. Payments by Direct and Indirect Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Direct and Indirect Participant and not of DTC, the Trustee, the Paying Agent or the Authority, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal and interest to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC), is the responsibility of the Trustee or the Authority, disbursement of such payments to Direct Participants shall be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners shall be the responsibility of Direct and Indirect Participants.

THE AUTHORITY, THE TRUSTEE, AND THE PAYING AGENT SHALL HAVE NO RESPONSIBILITY OR OBLIGATION WITH RESPECT TO THE ACCURACY OF THE RECORDS OF DTC, CEDE & CO. OR ANY DTC PARTICIPANT WITH RESPECT TO ANY OWNERSHIP INTEREST IN THE 2019 SERIES B BONDS, THE DELIVERY TO ANY DTC PARTICIPANT OR ANY INDIRECT PARTICIPANT OR ANY OTHER PERSON, OTHER THAN CEDE & CO., AS NOMINEE OF DTC, AS SHOWN ON THE BOND REGISTER, OF ANY NOTICE WITH RESPECT TO THE 2019 SERIES B BONDS, INCLUDING ANY NOTICE OF REDEMPTION, THE PAYMENT

TO ANY DTC PARTICIPANT OR INDIRECT PARTICIPANT OR ANY OTHER PERSON, OTHER THAN CEDE & CO., AS NOMINEE OF DTC, AS SHOWN ON THE BOND REGISTER, OF ANY AMOUNT WITH RESPECT TO PRINCIPAL OF, PREMIUM, IF ANY, OR INTEREST ON, THE 2019 SERIES B BONDS OR ANY CONSENT GIVEN BY CEDE & CO., AS NOMINEE OF DTC. SO LONG AS CERTIFICATES FOR THE 2019 SERIES B BONDS ARE NOT ISSUED PURSUANT TO THE INDENTURE AND THE 2019 SERIES B BONDS ARE REGISTERED TO DTC, THE AUTHORITY, THE PAYING AGENT, AND THE TRUSTEE SHALL TREAT DTC OR ANY SUCCESSOR SECURITIES DEPOSITORY AS, AND DEEM DTC OR ANY SUCCESSOR SECURITIES DEPOSITORY TO BE, THE ABSOLUTE OWNER OF THE 2019 SERIES B BONDS FOR ALL PURPOSES WHATSOEVER, INCLUDING WITHOUT LIMITATION (1) THE PAYMENT OF PRINCIPAL AND INTEREST ON THE 2019 SERIES B BONDS, (2) GIVING NOTICE OF REDEMPTION AND OTHER MATTERS WITH RESPECT TO THE 2019 SERIES B BONDS, (3) REGISTERING TRANSFERS WITH RESPECT TO THE 2019 SERIES B BONDS AND (4) THE SELECTION OF 2019 SERIES B BONDS FOR REDEMPTION.

DTC may discontinue providing its services as depository with respect to the 2019 Series B Bonds at any time by giving reasonable notice to the Authority and the Trustee. Under such circumstances, in the event that a successor depository is not obtained, 2019 Series B Bond certificates are required to be printed and delivered. The Authority may decide to discontinue use of the system of book-entry transfer through DTC (or a successor securities depository). In that event, 2019 Series B Bond certificates will be printed and delivered to DTC.

According to DTC, the foregoing information with respect to DTC and DTC's book-entry system has been provided to the Industry for informational purposes only and is not intended to serve as a representation, warranty or contract modification of any kind.

The information in this section concerning DTC and DTC's book-entry system has been obtained from sources that the Authority believes to be reliable, but neither the Authority nor the Underwriters take any responsibility for the accuracy thereof.



APPENDIX G-1

CERTAIN INFORMATION REGARDING THE 2019B LOAN

The information concerning the 2019B Borrower and the 2019B Project has been obtained from the Borrower, but neither the Authority nor the Underwriters take any responsibility for the accuracy thereof.

2019B Loan

The Authority expects to make a non-recourse loan of approximately \$41,565,000 to DMV Partnership LLLP (the "2019B Borrower"), to provide moneys to the 2019B Borrower, together with other moneys expected to be available to it, to finance the acquisition, construction, rehabilitation and equipping of the 2019B Facility (referred to herein as the "2019B Project"), a 210-unit rental housing facility located at 1523 Quitman in Denver, Colorado, and expected to cost approximately \$81,049,395.

During the Construction Phase, the 2019B Loan is expected to bear interest at a rate equal to 2.52% for 24 months. Upon completion of construction, approximately \$22,215,000 of the 2019B Loan is expected to be paid from the syndication of related federal Low Income Housing Tax Credits and other sources, and the remaining principal is expected to be payable monthly based on amortization over a 38 year period, with a balloon maturity on July 1, 2059, at a rate equal to 4.10%. See "Part I—CERTAIN PROGRAM ASSUMPTIONS—The 2019B Loan—The Loan Agreement."

The 2019B Loan will be secured by a Deed of Trust, and upon completion of the Construction Phase, the 2019B Loan is expected to be endorsed as a permanent loan for Risk-Share Insurance. See **Appendix H**—"FEDERAL INSURANCE PROGRAMS" for a discussion of the Risk-Share Insurance. For a discussion of certain conditions to be met in order to obtain such Risk-Share Insurance for the 2019B Loan, see "Part II—CERTAIN BONDOWNERS' RISKS—Considerations Regarding Redemption—Loan Conversion Redemption Considerations." If completion of construction and conversion to a permanent loan has not occurred within twenty-four (24) months following the closing of the 2019B Loan (or such later date to which the Authority may consent in writing), there will be an event of default under the related loan agreement.



APPENDIX G-2

CERTAIN INFORMATION ABOUT THE MASTER INDENTURE LOAN PORTFOLIO, AUTHORITY PROJECTS AND FUND BALANCES

The chart included in this **Appendix G-2** has been prepared by the Authority to provide, as of April 1, 2019, certain information about the Master Indenture Loan Portfolio and Authority Projects. Information is also provided about the Fund Balances existing under the Master Indenture as of April 1, 2019. In summary, as of April 1, 2019, the Trust Estate included the following:

		Principal	No. of Loans/	Total %
		Amount	Interests/Projects	of Portfolio (2)
Military Housing		\$149,996,479	6	41.54%
Uninsured Rental Loans (1)		118,017,808	96	32.68
Insured Rental Loans		54,044,011	15	14.97
Uninsured Business Loans (1)		25,192,323	59	6.98
Authority Projects		10,997,164	1	3.05
Participation Interests		2,866,601	8	0.79
	Total	\$361,114,385	185	100.00%

⁽¹⁾ Not including the uninsured loans for the Fort Carson and Air Force Academy loans which are listed as a separate line item "Military Housing."

For purposes of this chart, the loan program types set forth below fall into the following respective loan categories. See Part II—"COLORADO HOUSING AND FINANCE AUTHORITY—Programs to Date" for further information.

221 (D) 3	Insured Rental
221 (D) 4	Insured Rental
542 (C)	Insured Rental
BF B&I I	Participation Interests
BF B&I II	Participation Interests
BF CHFA DIRECT	Uninsured Business
BF CHFA RURAL	Uninsured Business
BF EDF	Uninsured Business
BF NON PROFIT	Uninsured Business
BF NON PROFIT REAL ESTATE	Uninsured Rental
BF QAL	Participation Interests
BF QIC	Participation Interests
BF SBA 504	Uninsured Business
CHFA NOTE	Authority Owned Projects
DIRECT BOND	Military Housing
HOF CHFA	Uninsured Rental
HOF FAF	Uninsured Rental
IRP	Uninsured Rental
MF 501(C)3	Uninsured Rental
SMART TAX EXEMPT	Uninsured Rental
SMART TAXABLE	Uninsured Rental

⁽²⁾ Percentage is based on principal amount.

MASTER INDENTURE LOAN PORTFOLIO AS OF 04-01-2019

Bond Issue	Borrower	Current Balance	Note Date	Maturity Date	Interest Rate	No. Days Past	Loan Program Type	Insurance Type (if any)	Location
MFP2000A	SENIOR HOUSING OPTIONS, INC. DEL NORTE NEIGHBORHOOD DEVELOPMENT	\$ 301,992 33,615	06/18/93	09/01/34	6.5%	0	MF 501(C)3		Denver
MFP2000A	CORPORATION		07/01/92	07/01/22	6.5	0	MF 501(C)3		Denver
MFP2000A	SENIOR CARE SYSTEMS OF COLORADO, INC.	223,340	08/31/92	09/01/22	6.5	0	MF 501(C)3		Pueblo
MFP2000A	JEFFERSON HILLS CORPORATION THE LAS ANIMAS/BENT COUNTY HOUSING	1,015,451 80,700	10/05/93	11/01/23	6.5	0	MF 501(C)3		Lakewood
MFP2000A	AUTHORITY	4,388	10/25/95	04/01/27	6.5	0	MF 501(C)3 SMART TAX		Las Animas
MFP2000A	COLORADO BLUESKY ENTERPRISES, INC	108,735	01/04/99	02/01/29	6.45	0	EXEMPT SMART TAX		Pueblo
MFP2000A	THE ENERGY OFFICE THE HOUSING AUTHORITY OF THE TOWN OF	167,632	09/12/00	10/01/30	6.75	0	EXEMPT		Grand Junction
MFP2000A MFP2000A	SPRINGFIELD	107,002	06/27/02	07/01/32	6.5	0	SMART TAXABLE		Springfield
Total		1,935,854							
MFP2005B	NORTHEAST PLAZA PARTNERS, RLLLP	825,194	05/26/06	06/01/37	5.4	0	SMART TAXABLE		Sterling
MFP2005B	PARKSIDE INVESTMENT GROUP LLLP	1,902,998	04/28/06	05/01/36	6.25	0	SMART TAXABLE		Longmont
MFP2005B MFP2005B	MOUNTAIN VIEW PLAZA INVESTMENT GROUP, LLLP	1,996,206	04/28/06	05/01/36	6.25	0	SMART TAXABLE		Longmont
Total		4,724,399	00/00/00	00/04/5					***
MFP2006A	WACKER HOLDINGS LLC	75,559	08/03/06	09/01/26	7.38	0	BF CHFA DIRECT		Wheat Ridge
MFP2006A	T.O. LLC	129,896	02/03/06	03/01/26	5.95	0	BF CHFA RURAL		Steamboat Springs
MFP2006A MFP2006A	HANSEN BIG ENERGY HOLDINGS LLC	226,301 255,844	09/08/06 06/21/06	10/01/26 07/01/26	6.2 6.2	0	BF CHFA RURAL BF CHFA RURAL		Nathrop Steamboat Springs
MFP2006A MFP2006A	WOW! CHILDREN'S MUSEUM	160,845	07/28/04	08/01/24	6.49	0	BF NON PROFIT		Lafayette
MFP2006A	COALITION FOR THE UPPER SOUTH	47,545	02/24/05	03/01/25	6.5	0	BF NON PROFIT		Lake George
MFP2006A	CORDOVANO & HONECK BUILDING FUND, LLC.	178,146	05/09/06	07/01/26	6.15	0	BF SBA 504		Englewood
MFP2006A	WEST END GROUP LLC	139,843	06/27/08	07/01/28	7.55	0	BF SBA 504		Boulder
MFP2006A	VOA SUNSET HOUSING LP	4,296,027	06/07/06	07/01/26	6.95	0	SMART TAXABLE		Denver
MFP2006A	THE RESERVE AT THORNTON II, LP	2,878,405	07/19/06	08/01/38	6.8	0	SMART TAXABLE		Thornton
MFP2006A	CASA DORADA LLC	1,608,576	08/25/06	09/01/24	7	0	SMART TAXABLE		Denver
MFP2006A MFP2006A	PINECREST AT COMMERCE CITY LLLP	2,698,162	01/30/07	02/01/27	7	0	SMART TAXABLE		Commerce City
Total		12,695,149							
MFP2007B	PRAIRIE CREEKS RESIDENCES LLC	736,733	06/20/97	07/01/37	3.5	0	542 (C)	542(C)	Strasburg
MFP2007B	BLUE SKY LIQUORS INC	140,037	07/01/06	07/01/26	5.8	0	BF B&I II	RD	Steamboat Springs
MFP2007B	DMS REAL ESTATE LLC	348,069	06/26/07	07/01/27	6.95	62	BF CHFA DIRECT		Ridgway
MFP2007B	NANCE PROPERTIES LLC	1,425,000	03/11/19	04/01/39	5.85	0	BF CHFA DIRECT		Arvada
MFP2007B	MILES EYE LLC	151,708	05/16/06	06/01/26	5.8	0	BF CHFA RURAL		Eagle
MFP2007B	JACB LLC (REO) (1)	565,388	N/A	N/A	N/A	N/A	BF CHFA RURAL		Steamboat Springs
MFP2007B	BOO LLC	261,289	09/05/07	10/01/27	6.85	0	BF CHFA RURAL		Steamboat Springs
	`	- ,				-			18-

⁽¹⁾ REO since September 2011.

Bond Issue	Borrower	Current Balance	Note Date	Maturity Date	Interest Rate	No. Days Past	Loan Program Type	Insurance Type (if any)	Location
MFP2007B	VOYICH	278,838	12/10/07	01/01/28	7.35	0	BF CHFA RURAL		Craig
MFP2007B	FALL LINE VENTURES LLC	228,199	09/14/07	10/01/27	7.85	0	BF CHFA RURAL		Crested Butte
MFP2007B	RENAISSANCE PRESCHOOL INC	165,044	09/27/07	10/01/27	7.05	0	BF NON PROFIT		Parker
WII I 2007 D	THE GATHERING PLACE: A REFUGE FOR REBUILDING	103,044	07/2//07	10/01/27	7.03	Ü	BF NON PROFIT		1 dikei
MFP2007B	LIVES	2,044,743	02/01/19	08/01/38	4.73	0	REAL ESTATE		Denver
WII I 2007 D	LIVES	2,044,743	02/01/17	00/01/30	T./3	Ü	BF NON PROFIT		Deliver
MFP2007B	VOICES CARRY CHILD ADVOCACY CENTER	349,684	01/31/08	02/01/38	6.3	0	REAL ESTATE		Ft Collins
WIFT 2007 B	VOICES CARRY CHIED AD VOCACT CENTER	349,004	01/31/08	02/01/36	0.5	U	BF NON PROFIT		rt Collins
MFP2007B	SOARING EAGLES CENTER FOR AUTISM	1,459,181	05/04/18	05/01/38	5.5	0	REAL ESTATE		Pueblo West
MFP2007B	WEISENHORN	42,665	11/03/06	12/31/25	6.395	0	BF QAL	FSA	Holly
MFP2007B	GARCIA	402,555	02/26/09	03/01/29	7.55	0	BF SBA 504	15/1	Pagosa Springs
WII I 2007 B	GARCIA	568,119	02/20/07	03/01/27	7.55	Ü	SMART TAX		r agosa Springs
MFP2007B	CARE HOUSING/COTTONWOOD HOLDINGS, LLLP	300,117	12/04/07	02/01/27	6	0	EXEMPT		Windsor
WII I 2007 B	CARE HOUSING/COTTON WOOD HOLDINGS, ELLI	2,382,273	12/04/07	02/01/27	O	Ü	SMART TAX		Willuson
MFP2007B	FAIRWAYS I LLLP	2,302,273	07/05/07	04/01/23	5.8	0	EXEMPT		Boulder
WII I 2007B	TARWATOTEEE	1,862,328	07703707	04/01/23	5.0	Ü	SMART TAX		Doulder
MFP2007B	G.A.O. HOMES PARTNERS, RLLLP	1,002,320	11/25/08	12/01/28	6	0	EXEMPT		Denver
WH 1 2007 B	MONTE VISTA COMMUNITY CENTER HOUSING		11/25/00	12/01/20	· ·	Ü	SMART TAX		Benver
MFP2007B	AUTHORITY, INC.	356,205	04/09/08	05/01/43	6.9	0	EXEMPT		Alamosa
MFP2007B	LA ALMA HOUSING LTD	379,758	11/28/06	12/01/36	7.2	ő	SMART TAXABLE		Denver
MFP2007B	PARK AVENUE REDEVELOPMENT (BLOCK 1B) LLLP	4,417,323	02/07/08	03/01/28	6.7	0	SMART TAXABLE		Denver
MFP2007B	HC BRIGHTON SENIOR I, LP	1,414,128	02/01/19	07/01/27	6.89	0	SMART TAXABLE		Brighton
MFP2007B	MIRASOL SENIOR HOUSING PARTNERSHIP LLLP	979,145	12/01/18	01/01/38	7.7	ő	SMART TAXABLE		Loveland
MFP2007B	VILLAS AT SLOANS LAKE	1.552.971	03/10/08	04/01/28	6.875	0	SMART TAXABLE		Denver
MFP2007B	12TH & ELATI RESIDENCES LLC	2,087,103	09/24/08	10/01/28	7.1	0	SMART TAXABLE		Denver
MFP2007B	PLAZA TOWNHOMES AT MACON AND MOLINE LLLP	477,873	10/24/08	11/01/25	6.95	0	SMART TAXABLE		Aurora
MFP2007B	CENTRAL PARK AT STAPLETON LLLP	375,994	09/15/08	10/01/28	7.2	Ö	SMART TAXABLE		Denver
MFP2007B	42 VILLAGE AT PUEBLO LP	893,840	06/24/08	07/01/26	6.95	0	SMART TAXABLE		Pueblo
MFP2007B	ACI AFFORDABLE I LLLP	2,581,837	05/24/18	06/01/58	4.4	Ö	SMART TAXABLE		Aspen
MFP2007B		_,= -,,							
Total		28,928,031							
MFP2008A	ASCENT SOLAR TECHNOLOGIES INC	5,405,666	02/08/08	02/01/28	6.6	31	BF CHFA DIRECT		Thornton
MFP2008A	KOSLA	1,267,320	12/23/08	01/01/29	6.65	0	BF CHFA DIRECT		Leadville
MFP2008A	PRIMA MEADOW MOUNTAIN LLC	184,771	02/22/08	03/01/28	6.7	0	BF CHFA RURAL		Minturn
		1,259,899					SMART TAX		
MFP2008A	NDHC LIGGINS TOWER, LLC	, ,	02/12/08	01/01/39	6.3	0	EXEMPT		Denver
	,	4,073,189					SMART TAX		
MFP2008A	LUCKY STAR LIMITED PARTNERSHIP LLLP	, ,	01/24/08	06/01/49	6.15	0	EXEMPT		Pueblo
MFP2008A	VILLAGE ON ELIZABETH LLLP	807,627	05/20/08	06/01/26	7.2	0	SMART TAXABLE		Ft Collins
MFP2008A		,							
Total		12,998,472							
MFP2008B	FORT CARSON FAMILY HOUSIN	95,420,521	11/29/06	09/15/44	5.65	0	DIRECT BOND		Fort Carson
MFP2008B	FORT CARSON FAMILY HOUSING, LLC	9,852,723	11/29/06	09/15/44	5.65	0	DIRECT BOND		Fort Carson
MFP2008B	AIR FORCE ACADEMY	20,608,934	05/01/07	04/10/52	5.71	0	DIRECT BOND		Denver
MFP2008B	AIR FORCE ACADEMY MILITARY COMMUNITIES, LLC	11,728,968	05/01/07	04/10/52	5.71	0	DIRECT BOND		Colorado Springs
MFP2008B	AIR FORCE ACADEMY MILITARY COMMUNITIES, LLC	10,796,740	05/01/07	04/10/52	5.71	0	DIRECT BOND		Colorado Springs

Bond Issue	Borrower	Current Balance	Note Date	Maturity Date	Interest Rate	No. Days Past	Loan Program Type	Insurance Type (if any)	Location
MFP2008B MFP2008B	AIR FORCE ACADEMY MILITARY COMMUNITIES, LLC	1,588,593	05/01/07	04/10/52	5.71	0	DIRECT BOND		Denver
Total		149,996,479							
MFP2008C	RASA II ECONOMIC DEVELOPMENT CORPORATION (1)	1,798,439 887,758	07/13/09	03/01/51	3	0	542 (C) BF NON PROFIT	542(C)	Colorado Spgs
MFP2008C	COLORADO COALITION FOR THE HOMELESS ⁽¹⁾	932,454	06/03/08	07/01/33	3	0	REAL ESTATE BF NON PROFIT		Denver
MFP2008C	ROUNDUP FELLOWSHIP INC(1)	2,949,587	10/28/08	11/01/38	3	0	REAL ESTATE SMART TAX		Colorado Springs Denver
MFP2008C	ARCHDIOCESAN FAMILY HOUSING, INC. (1)	5,082,411	03/04/10	03/01/41	3	0	EXEMPT SMART TAX		Brighton
MFP2008C MFP2008C	HUGHES STATION BHA 2017 LLC ⁽¹⁾		10/27/08	11/01/48	3	0	EXEMPT		
Total		11,650,649		0.5/0.4/2=			- 1- (m)		_
MFP2009A	FORUM BUILDING HOUSING LLLP	230,538	05/23/97	06/01/27	5.85	0	542 (C)	542(C)	Denver
MFP2009A MFP2009A	WE'LL HAVE EQUITABLE RELOCATION, INC. ATLANTIS COMMUNITY INCORPORATED	223,239 56,415	12/29/89 05/30/91	01/01/20 07/01/23	7.75 7.875	0	MF 501(C)3 MF 501(C)3		Englewood Denver
MFP2009A MFP2009A	TOWNHOUSE PARK APARTMENTS	27,340	09/29/93	11/01/23	7.873 8	0	MF 501(C)3		La Junta
MITT 2009A	HOUSING AUTHORITY OF THE CITY OF FOUNTAIN,	302,920	09/29/93	11/01/23	0	U	WIF 301(C)3		Fountain
MFP2009A	COLORADO	302,920	02/24/93	03/01/23	6	0	MF 501(C)3		Toulitain
WII I 2007A	COLORADO	125,341	02/24/73	03/01/23	O	U	SMART TAX		Denver
MFP2009A	URBAN PEAK HOUSING CORPORATION	123,541	02/12/98	03/01/29	7	0	EXEMPT		Beliver
1411 1 200971	CREATE TEXAS HOUSING COST OR THON	2,857,093	02/12/90	03/01/29	,	Ü	SMART TAX		Longmont
MFP2009A MFP2009A	VILLAGE PLACE ASSOCIATES LLLP	2,037,093	12/08/06	01/01/27	6.35	0	EXEMPT		Longmont
Total		3,822,887							
MFP2012A MFP2012A	MOUNTAIN VIEW REDEVELOPMENT LLLP	10,009,954	07/19/12	07/01/51	5.24	0	542 (C)	542(C)	Denver
Total		10,009,954					- 1- (m)		_
MFP2012B MFP2012B	RESIDENCES AT UNIVERSITY HILLS, LLC	16,763,481	10/01/12	11/01/54	4.85	0	542 (C)	542(C)	Denver
Total MFP2013A MFP2013A	GRAND JUNCTION HOUSING AUTHORITY	16,763,481 1,288,240	05/21/12	07/01/34	1.75	0	542 (C)	542(C)	Grand Junction
Total MFP		1,288,240							
SURPLUS ASSETS MFP	FOREST MANOR LLLP	3,534,621	05/20/02	06/01/32	3.5	0	542 (C)	542(C)	Glendale
SURPLUS ASSETS MFP	HAMDEN SENIOR LLP	3,262,176	05/19/05	06/01/45	6.4	0	542 (C)	542(C)	Aurora
SURPLUS	BEAR VALLEY LLLP	3,768,879	09/30/05	10/01/45	6.35	0	542 (C)	542(C)	Denver

 $^{^{(1)}}$ To be reallocated to the 2019 Series A Bonds following the redemption of the 2009 Series A Bonds.

Bond Issue	Borrower	Current Balance	Note Date	Maturity Date	Interest Rate	No. Days Past	Loan Program Type	Insurance Type (if any)	Location
ASSETS									
MFP SURPLUS ASSETS MFP	REDTAIL PONDS PERMANENT SUPPORTIVE HOUSING LLLP	2,153,198	03/01/16	04/01/46	3.75	0	542 (C)	542(C)	Fort Collins
SURPLUS ASSETS MFP	THE GATHERING PLACE: A REFUGE FOR REBUILDING LIVES	473,838	07/15/08	08/01/38	1	0	BF CHFA DIRECT		Denver
SURPLUS ASSETS MFP	BEYE-LOTZ	44,143	08/08/00	09/01/20	6.5	0	BF EDF		Grand Junction
SURPLUS ASSETS MFP	COLORADO COALITION FOR THE HOMELESS	605,905	02/02/01	03/01/26	6.99	0	BF EDF		Denver
SURPLUS ASSETS MFP	VOLUNTEERS OF AMERICA	143,950	08/01/01	09/01/21	7.5	0	BF EDF		Denver
SURPLUS ASSETS MFP	ELLIOTT	127,707	03/23/04	02/01/26	4.99	0	BF QAL	FSA	Sugar City
SURPLUS ASSETS MFP	THE HOUSING AUTHORITY OF THE COUNTY OF BOULDER, COLORADO	534,051	06/01/06	06/01/46	2	0	HOF CHFA		Lyons
SURPLUS ASSETS MFP	PINECREST AT COMMERCE CITY LLLP	414,506	01/30/07	02/01/27	3.25	0	HOF CHFA		Commerce City
SURPLUS ASSETS MFP	GRAND MESA APARTMENTS OF FRUITA, LLLP	370,009	04/06/04	05/01/37	3	0	HOF CHFA		Fruita
SURPLUS ASSETS MFP	12TH & ELATI RESIDENCES LLC	374,956	09/24/08	10/01/28	3	0	HOF CHFA		Denver
SURPLUS ASSETS MFP	ATLANTIS COMMUNITY INCORPORATED	213,296	12/13/95	05/01/26	7.6	0	MF 501(C)3		Denver
SURPLUS ASSETS MFP	THE UPTOWN PARTNERSHIP, INC	179,688	04/09/99	04/01/29	4.07	0	SMART TAX EXEMPT		Denver
SURPLUS ASSETS MFP	HOUSING AUTHORITY OF THE CITY OF STERLING, COLORADO	543,967	03/29/01	04/01/31	3.5	0	SMART TAX EXEMPT		Sterling
SURPLUS ASSETS MFP	THE EMPOWERMENT PROGRAM, INC.	159,214	07/26/01	08/01/31	3.5	0	SMART TAX EXEMPT		Denver
SURPLUS ASSETS	TRI-COUNTY SENIOR CITIZENS & HOUSING INC	162,754	01/22/02	02/01/32	3.5	0	SMART TAX EXEMPT		Monte Vista

Bond Issue	Borrower	Current Balance	Note Date	Maturity Date	Interest Rate	No. Days Past	Loan Program Type	Insurance Type (if any)	Location
MFP									
SURPLUS ASSETS MFP	MOFFAT COUNTY HOUSING AUTHORITY	154,382	08/31/03	09/01/33	6.5	0	SMART TAX EXEMPT		Craig
SURPLUS	ATH ANTING COLOUR WANTEN DICORDOR ATTER	1.062.405	05/12/04	06/01/20		0	SMART TAX		D
ASSETS MFP	ATLANTIS COMMUNITY INCORPORATED	1,062,405	05/13/04	06/01/39	6	0	EXEMPT		Denver
SURPLUS ASSETS	OLIN HOTEL APARTMENTS ASSOCIATES, LTD	343,902	11/22/02	12/01/32	6.3	0	SMART TAXABLE		Denver
MFP SURPLUS									
ASSETS MFP	HC BRIGHTON SENIOR II LP	2,121,248	08/25/17	09/01/47	5.1	0	SMART TAXABLE		Brighton
SURPLUS ASSETS									
Total		20,748,795							
MFP2016A MFP2016A	CHFA	10,997,164	10/25/16	10/01/41	3.9	0	CHFA NOTE		Denver
Total		10,997,164							
MFP2017A MFP2017A	WINDMILL RANCH 2016 LP	7,950,000	08/10/17	09/01/19	1.808	0	SMART TAXABLE		Brighton
Total		7,950,000							
MFP2018A	SUNSET TOWERS VOA AFFORDABLE HOUSING L.P	4,012,177	07/11/14	08/01/44	4.5	0	542 (C)	542(C)	Denver
MFP2018A	THE FOURTH QUARTER PARTNERS LLLP	1,322,846	11/01/14	12/01/49	4.5	0	542 (C)	542(C)	Denver
MFP2018A	VWC2 LLLP, A COLORADO LIMITED LIABILITY PARTNERSHIP	1,561,439	12/01/15	01/01/46	4.5	0	542 (C)	542(C)	Aurora
MFP2018A	VWC1 LLLP, A COLORADO LIMITED LIABILITY PARTNERSHIP	1,670,182	12/01/14	01/01/45	4.5	0	542 (C)	542(C)	Aurora
MFP2018A	FALCON RIDGE APARTMENTS LLLP	1,931,107	02/01/17	03/01/47	4.5	0	542 (C)	542(C)	Estes Park
MFP2018A	VOLK VENTURES LLC	1,122,060	12/28/06	01/01/37	5.84	0	BF B&Í I	RD	Montrose
MFP2018A	MCGUIRE	193,818	08/23/11	09/01/31	6.6	0	BF B&I I	RD	Meeker
MFP2018A	EMRY ENTERPRISES LLC	346,930	02/14/02	12/05/31	5.25	0	BF B&I II		Colorado Springs
MFP2018A	PAGOSA SPRINGS INN & SUITES	632,396	05/20/03	05/20/28	5.19	0	BF B&I II	RD	Pagosa Springs
MFP2018A	DR STEVEN J ZAPIEN DDS INC	47,846	05/28/02	06/01/22	7.25	0	BF CHFA DIRECT		Wheat Ridge
MFP2018A	GOLDEN PEARL LLC	56,698	01/26/04	02/01/24	7.12	0	BF CHFA DIRECT		Boulder
MFP2018A	JEJK INC DBA MERRY MAIDS	76,139	02/18/04	03/01/24	6.81	0	BF CHFA DIRECT		Boulder
MFP2018A	TIF LLC	115,798	04/27/05	05/01/25	6.93	0	BF CHFA DIRECT		Grand Junction
MFP2018A	BACKBONE MEDIA HOLDING	89,318	07/15/05	08/01/25	5.75	0	BF CHFA DIRECT		Carbondale
MFP2018A	DE LA CRUZ ASSOCIATES LLC	1,152,930	09/28/05	10/01/25	6.18	0	BF CHFA DIRECT		Boulder
MFP2018A	J D EAGLE LLP	389,342	09/28/06	10/01/26	6.55	0	BF CHFA DIRECT		EAGLE
MFP2018A	ALBION LLC	149,594	10/05/05	11/01/25	6.15	0	BF CHFA DIRECT		Boulder
MFP2018A	LHG INVESTMENTS LLC	132,259	09/17/07	10/01/27	7.2	0	BF CHFA DIRECT		Loveland
MFP2018A	HEET LLC	312,602	05/21/08	06/01/28	6.85	0	BF CHFA DIRECT		Castle Rock
MFP2018A	CARA 3 PROPERTIES LLC	134,901	10/30/08	11/01/28	7.15	0	BF CHFA DIRECT		Broomfield
MFP2018A	DR CAROL C JONES PC	133,379	07/28/05	08/01/25 08/01/25	5.7 5.65	0	BF CHFA RURAL		Leadville
MFP2018A	KAMDON LLC	121,203	07/21/05	08/01/25	3.03	U	BF CHFA RURAL		Holyoke

Bond Issue	Borrower	Current Balance	Note Date	Maturity Date	Interest Rate	No. Days Past	Loan Program Type	Insurance Type (if any)	Location
MFP2018A	MARKEL	174,755	10/27/05	11/01/25	5.65	0	BF CHFA RURAL		Frisco
MFP2018A	WAGONWHEEL ENTERPRISES LLC	83,100	01/04/06	02/01/26	5.8	0	BF CHFA RURAL		Steamboat Springs
MFP2018A	FORD	60,667	02/28/06	03/01/26	5.95	0	BF CHFA RURAL		Montrose
MFP2018A	PTRT PARTNERSHIP	190,164	03/16/06	04/01/26	5.95	0	BF CHFA RURAL		Salida
MFP2018A	POST OFFICE CROSSING LLC	179,877	05/04/06	06/01/26	5.95	0	BF CHFA RURAL		Eagle
MFP2018A	JESCO LLC	246,285	05/04/06	06/01/26	6.2	0	BF CHFA RURAL		Steamboat Springs
MFP2018A	WIGGINS II LLC	373,949	05/04/06	06/01/26	5.95	0	BF CHFA RURAL		Vail
MFP2018A	WALTON ENTERPRISES LLC	300,424	12/11/06	01/01/27	7.05	0	BF CHFA RURAL		Grand Junction
MFP2018A	DIANE HARTY SCHLAEFER LLC	47.501	06/21/07	07/01/27	6.95	0	BF CHFA RURAL		Frisco
MFP2018A MFP2018A	D & F LLC	149,259	01/28/08	02/01/28	7.2	0			Carbondale
		,			6.7	0	BF CHFA RURAL		
MFP2018A	CONKLIN CURRENT SOLUTIONS LLC	191,769	02/28/08	03/01/28	7	0	BF CHFA RURAL		Eagle
MFP2018A	CURRENT SOLUTIONS LLC	145,203	12/17/09	01/01/30		-	BF CHFA RURAL		Grand Junction
MFP2018A	THE EMPOWERMENT PROGRAM, INC.	5,931	07/21/99	08/01/19	7.5	0	BF EDF		Denver
MFP2018A	HARRIS PARK COURT LLC	105,849	06/25/03	07/01/23	6.49	0	BF EDF		Westminster
MFP2018A	THE RENAISSANCE PRESCHOOL INC	1,019,377	07/13/05	08/01/35	3	0	BF NON PROFIT		Parker
MFP2018A	LATIN AMERICAN EDUCATIONAL FOUNDATION INC	101,442	03/30/06	04/01/26	6.05	31	BF NON PROFIT		Denver
MFP2018A	9700 E. EASTER LANE, LLC	5,129,481	06/30/16	07/01/36	5.99	0	BF NON PROFIT		Littleton
MFP2018A	BOOKCLIFF AUTO PARTS INC	260,989	03/01/02	04/15/27	6.115	0	BF QIC	SBA	Grand Junction
MFP2018A	MIHAICH PROPERTIES LLC	149,629	03/30/04	06/01/24	6.71	0	BF SBA 504		Steamboat Springs
MFP2018A	HAERTLING.COM LLC	80,665	12/16/05	01/01/26	6.15	0	BF SBA 504		Louisville
MFP2018A	THE MAKEN DO LLC	145,334	01/28/10	03/01/30	7	0	BF SBA 504		Grand Junction
MFP2018A	M&L INVESTMENTS, LLC	67,343	02/16/11	03/01/31	6.5	0	BF SBA 504	SBA	Carbondale
MFP2018A	DUKE LLC	166,647	08/23/11	09/01/31	6.6	0	BF SBA 504		Idaho Springs
MFP2018A	DURANGO HOUSING PRESERVATION LP	506,885	10/01/05	10/01/40	6.7	0	HF HOF CHFA	542(C)	Durango
MFP2018A	HAMPDEN SENIOR I LP	692,147	05/19/05	06/01/45	4	0	HOF CHFA		Aurora
	HOUSING AUTHORITY OF THE COUNTY OF GRAND								
MFP2018A	DBA GRAND COUNTY HOUSING AUTHORITY THE HOUSING AUTHORITY OF THE CITY OF	202,027	08/20/04	09/01/34	6	0	HOF CHFA		Kremmling
MFP2018A	LEADVILLE, COLORADO	120,067	10/21/04	11/01/34	6	0	HOF CHFA		Leadville
MFP2018A	DENVER REVITALIZATION PARTNERSHIP VII, LTD	78,966	11/08/04	12/01/34	6	0	HOF CHFA		Denver
MFP2018A	CASTLE CREEK COMMONS EAST LLLP	212,077	10/10/05	11/01/35	6	0	HOF CHFA		Castle Rock
MFP2018A	HC BRIGHTON SENIOR I, LP	437,020	06/12/07	07/01/27	3.5	0	HOF CHFA		Brighton
MFP2018A	HAZEL COURT LLLP	255,744	02/25/11	03/01/26	7.8	0	HOF CHFA		Denver
MFP2018A	CORONA RESIDENCE	2,284,868	03/31/09	04/01/39	7.65	0	MF 501(C)3		Denver
MFP2018A	PRAIRIE CREEKS RESIDENCES LLC	706,410	12/10/04	01/01/35	6.5	0	SMART TAX		Strasburg
		, , , , , , , ,				-	EXEMPT		
MFP2018A	GUNNISON HOUSING AUTHORITY	363,861	10/27/13	11/01/33	5.75	0	SMART TAX		Gunnison
MFP2018A	HOUSING AUTHORITY OF THE CITY OF FOUNTAIN,	313,703	11/21/03	12/01/33	5.75	0	EXEMPT SMART TAX		Fountain
	COLORADO	,					EXEMPT		
MFP2018A	HOUSING AUTHORITY OF THE CITY OF TRINIDAD, COLORADO	473,834	02/17/04	03/01/34	5.75	0	SMART TAX EXEMPT		Trinidad
MFP2018A	PARK MEADOWS AFFORDABLE HOUSING LLC	1,184,796	04/02/02	01/01/45	5.25	0	SMART TAXABLE		Colorado Springs
MFP2018A	MERCY HOUSING COLORADO VIII	536,851	03/22/05	04/01/25	6.95	0	SMART TAXABLE		Durango
MFP2018A	FORT LUPTON HOUSING PARTNERS LP	829,190	03/01/05	04/01/21	6.58	0	SMART TAXABLE		Ft Lupton
MFP2018A	HILLSIDE POINTE LLLP	1,521,115	03/24/05	04/01/21	6.68	0	SMART TAXABLE		Colorado Springs

Bond Issue	Borrower	Current Balance	Note Date	Maturity Date	Interest Rate	No. Days Past	Loan Program Type	Insurance Type (if any)	Location
MFP2018A	KITTYHAWK & CANTERBURRY RENOVATION LLLP	2,612,194	12/01/18	08/01/26	6.75	0	SMART TAXABLE		Denver
MFP2018A	WEST 10TH AVE RESIDENCES	1,257,599	01/23/06	02/01/23	5.5	0	SMART TAXABLE		Denver
MFP2018A	LINDEN POINTE LLLP	1,276,357	01/23/06	02/01/22	6.06	0	SMART TAXABLE		Grand Junction
MFP2018A	PUEBLO VILLAGE APARTMENTS, LLC	1,419,647	03/31/06	04/01/23	5.5	0	SMART TAXABLE		Pueblo
MFP2018A	ARBOR VISTA LLLP	1,513,221	08/18/09	09/01/29	5.5	0	SMART TAXABLE		Grand Junction
MFP2018A	PALOMA VILLAS III, LLLP	1,204,491	12/22/08	01/01/29	6.85	0	SMART TAXABLE		Denver
MFP2018A	BROADWAY AFFORDABLE LLLP	455,748	08/05/10	09/01/30	7.25	0	SMART TAXABLE		Denver
MFP2018A	VILLAS AT THE BLUFF LLLP	1,308,366	04/15/10	05/01/30	6.65	0	SMART TAXABLE		Delta
MFP2018A	PARK AVENUE REDEVELOPMENT BLOCK 4B LLLP	3,540,553	11/08/10	12/01/40	6.6	0	SMART TAXABLE		Denver
MFP2018A	ARTSPACE LOVELAND LP	867,699	03/18/16	04/01/46	4.75	0	SMART TAXABLE		Loveland
MFP2018A	GREELEY ELDER HOUSING OWNER LLLP	1,028,473	03/11/16	04/01/46	5.25	0	SMART TAXABLE		Greeley
MFP2018A	AUBURN VENTURES LIMITED PARTNERSHIP	3,935,096	12/21/15	01/01/51	5.25	0	SMART TAXABLE		Castle Rock
MFP2018A	BROTHERS REDEVELOPMENT INC	670,268	09/30/14	10/01/49	6	0	SMART TAXABLE		Denver
MFP2018A	TOWN CENTER NORTH APARTMENTS LLLP	1,758,048	09/14/16	10/01/46	5.25	0	SMART TAXABLE		Wheat Ridge
MFP2018A	OAKSHIRE TRAILS LLLP	1,464,120	06/29/17	07/01/47	5.25	0	SMART TAXABLE		Pueblo
MFP2018A	ANTHRACITE PLACE APARTMENTS LLC	1,034,645	07/28/17	08/01/47	5.25	0	SMART TAXABLE		Crested Butte
MFP2018A	LHA MAPLEWOOD, LLLP	3,702,177	05/10/10	06/01/27	6.7	0	SMART TAXABLE		Lakewood
MFP2018A	GRACE APARTMENTS	364,142	04/09/09	05/01/21	7.25	0	SMART TAXABLE		Denver
MFP2018A	CASA DE ROSAL OWNERSHIP ENTITY LLLP	841,737	02/11/11	03/01/51	7.35	0	SMART TAXABLE		Denver
MFP2018A	OVERLAND TRAIL LLC	550,086	04/26/13	05/01/43	6	0	SMART TAXABLE		Sterling
MFP2018A									
Total Grand Total		66,604,832 361,114,385							

As of April 1, 2019, the total Fund Balances held in the various Funds and Accounts under the Master Indenture were \$92,956,506. As of the same date, the moneys in these Funds and Accounts were invested in the following types of Investment Securities:

Investment Type	Amount
Federal Home Loan Bank	\$ 9,650,000
Federal Home Loan Mortgage Corporation	3,152,000
Federal National Mortgage Association	4,818,000
FGLMC	6,334,496
FNMA	4,662,153
GNMA MBS	6,942,537
Investment Agreements (1)	10,313,804
Money Market Funds	47,083,515
•	\$92,956,506

⁽¹⁾ See "Part I—CERTAIN PROGRAM ASSUMPTIONS – Investments" for more information about the outstanding investment agreements and repurchase agreements.



APPENDIX H

FEDERAL INSURANCE PROGRAMS

<u>Federal Insurance Programs</u>. There are various programs under which mortgage loans for families of low and moderate income may be insured by the FHA, including Section 221(d)(3) and 221(d)(4) of the National Housing Act of 1934, as amended, Section 223(f) pursuant to Section 207 of the National Housing Act and Section 542(c) of the Housing and Community Development Act of 1992, as amended.

The Section 542(c) program provides for FHA insurance of multi-family loans pursuant to risk-sharing agreements between HUD and qualified state or local housing agencies, such as the Authority. Under the Section 542(c) program, housing finance agencies may apply to qualify as a participating "HFA." HUD assigns to participating HFAs the authority to originate loans to be insured under this program and the responsibility to administer the program within the guidelines of the risk-sharing agreement, providing, among other matters, that in the event of a loan default with respect to a loan insured under the Section 542(c) program, the HFA is required to share with HUD in any loss arising as a consequence of the loan default. The Authority has been approved as a participating HFA and has entered into a Risk-Sharing Agreement with HUD dated as of April 26, 1994, as subsequently amended (the "CHFA Risk-Sharing Agreement"). Under the CHFA Risk-Sharing Agreement, the Authority has assumed 50% of the risk of loss associated with the Mortgage Loans insured pursuant thereto. See "Part II—COLORADO HOUSING AND FINANCE AUTHORITY—Obligations of the Authority" for a description of Section 542(c) claims relating to certain outstanding mortgage loans which may increase the general obligations of the Authority.

The Section 221(d)(4) mortgage insurance program provides for FHA insurance of multi-family loans for rental housing intended for low- and moderate-income families and displaced persons. FHA itself processes insurance applications, which involve several stages. Processing in connection with newly constructed projects may proceed through Site Appraisal and Market Analysis ("SAMA") and "firm commitment" stages prior to receiving FHA insurance at the time of "initial endorsement" by FHA evidencing its commitment to insure construction advances or to provide insurance upon completion of construction of the project. FHA insurance commitments in connection with projects which are being substantially rehabilitated may proceed through a feasibility stage, as well as the firm commitment stage. Processing may include the SAMA or feasibility stages or both stages may be bypassed, with direct application to FHA for a firm commitment. After receipt of the FHA firm insurance commitment, the borrower proceeds to initial closing of the mortgage loan. At the initial closing, the borrower executes the mortgage note and a mortgage securing the mortgage note, which FHA then initially endorses for mortgage insurance and the initial loan advance is made. Amounts remaining to be advanced under the mortgage are disbursed, contingent upon FHA approval and the fulfillment of certain other obligations of the borrower. FHA and the Authority, as mortgagee, review the final closing documents and the mortgage note is finally endorsed upon a determination by the Authority and FHA that all requirements of final endorsement have been satisfied. Increases in the maximum insurable amount of the mortgage loan approved by FHA and the Authority, as mortgagee, are funded at this time.

FHA Insurance Claims in the Event of Default. Under the Section 542(c) program, an event of default exists when the mortgagor fails to make any payment due under the mortgage or fails to perform any covenant under the mortgage (including covenants in the related CHFA Regulatory Agreement). In the event of a default continuing for a period of 30 days, and in the case of a covenant default, if the Authority accelerates the debt and the mortgagor fails to pay the full amount due, the Authority is entitled to receive FHA insurance benefits to the extent described and upon compliance with the applicable FHA claims procedures. The proceeds of the initial claim payment, however, must be used to retire any bonds or other financing mechanisms securing the mortgage loan within 30 days of the initial claim payment, and any excess claim funds remaining after such retirement or repayment must be returned to HUD. See the discussion of redemption provisions in Part I. Within 30 days of receiving

Debenture"), dated the same date as the initial claim payment is issued and in an amount equal to the full initial claim amount, less any excess funds returned to HUD as described above. The Authority Debenture must be supported by the full faith and credit of the Authority, will have a term of five years and will bear interest at HUD's published debenture rate as provided in the applicable regulations. Interest on the Authority Debenture will be due and payable annually on the anniversary date of the initial claim payment, with principal being due at maturity.

The Authority is required to file an application for final settlement in accordance with applicable HUD procedures not later than 30 days after either (a) sale of the mortgaged property after foreclosure or after acquisition by deed-in-lieu of foreclosure or (b) expiration of the term of the Authority Debenture. At the time of final settlement, the amount of the "total loss," as provided in the applicable regulations, will be shared by HUD and the Authority based upon the respective percentage of risk specified in the applicable mortgage note and addendum to the Risk-Sharing Agreement.

Under the Section 221(d)(4) program, an event of default is defined as a failure to make any payment due under the mortgage or to perform any other mortgage covenant (which includes covenants in the related financing documents and FHA Regulatory Agreement) if the mortgagee, because of such failure, has accelerated the debt. In the event of a default continuing for a period of 30 days, the mortgagee (i.e., the Authority so long as it is the mortgagee under the mortgage loans) is entitled to receive FHA insurance benefits upon compliance with the applicable FHA claims procedures. In the event of a default on the Mortgage Loan, the FHA will pay insurance benefits equal to the sum of (i) the unpaid principal amount of the Mortgage Loan computed as of the date of default, (ii) certain eligible payments (such as taxes, insurance, special assessments, water rates and payments made by the mortgagee, with the approval of HUD, for the preservation of the Project), and (iii) interest on the insurance proceeds from the date the mortgagee is entitled to receive insurance benefits at the applicable FHA debenture rate (which interest may be limited in the event that certain notices are not given to the FHA within the prescribed time periods). The FHA insurance benefits are reduced, however, by (i) any net income received by the mortgagee from the Project subsequent to the default, (ii) any amounts received by the mortgagee on account of the mortgage loan after a default, (iii) amounts held in escrow by the mortgagee for the account of the Borrower and available to be applied to the outstanding indebtedness under the mortgage loan, and (iv) unless the mortgagee forecloses and conveys title to the Project to the FHA, an amount equal to 1% of the unpaid principal balance of the mortgage loan. Due to the 30-day grace period before the mortgagee is entitled to receive insurance benefits. FHA insurance benefits do not include one month's interest on the unpaid principal balance of the Mortgage Loan.

Mortgage insurance benefits under the Section 221(d)(4) program are payable in cash unless the mortgagee files a written request for payment in debentures. If debentures are issued to the mortgagee in payment of the FHA mortgage insurance benefits, they are issued as of the date of default, registered as to principal and interest, pay interest semi-annually at the applicable debenture rate and mature twenty (20) years from their date of issue. FHA debentures are, however, redeemable at the option of the FHA on any interest payment date upon three-months' prior notice at a price equal to their principal amount plus accrued interest. Payment of mortgage insurance benefits are conditioned upon the satisfactory performance of certain obligations required pursuant to the insurance program, including maintenance of certain escrow accounts, annual inspections, maintenance of property insurance and maintenance of specified records. See "Part II—CERTAIN BONDOWNERS' RISKS—Conditions to Payment of FHA Insurance."

APPENDIX I

DESCRIPTION OF SECTION 8 SUBSIDY PROGRAM

The description of the Section 8 Program contained herein is meant to be a general overview only and is qualified in its entirety by reference to the applicable provisions of the United States Housing Act of 1937, as amended, and the regulations promulgated thereunder.

General. The Section 8 Program is authorized and implemented pursuant to Section 8 of the United States Housing Act of 1937, as amended (the "1937 Housing Act"), and regulations promulgated thereunder. In general, it provides housing rental subsidy payments to owners of dwelling units occupied by low income families (defined generally as families whose annual income does not exceed 80% of median income for the area as determined by HUD) and very low-income families (defined as families whose annual income does not exceed 50% of the median income for the area as determined by HUD). The subsidy is provided in the form of housing assistance payments and covers the difference between the HUD approved rents for the dwelling unit and the amount the tenant is required to pay each month. Specifically, the housing assistance payments to the owner represent the differences between the "contract rents" for all eligible units in a rental dwelling, as established by HUD from time to time, and the eligible tenants' rental contributions, generally 30% of family income.

Subsidy Contracts. The Section 8 rent subsidy program is administered by HUD through contracts with eligible governmental units responsible for the administrative aspects of the Section 8 program. The Authority presently administers the program for over 16,000 Section 8 assisted rental units in 261 developments in the State of Colorado pursuant to a Project Based Section 8 Contract Administration Annual Contributions Contract between HUD and the Authority (the "PB-ACC"). In general, the payment of subsidies under the Section 8 program is made to the Authority pursuant to the PB-ACC. The Authority then provides the subsidies to owners of the developments pursuant to a housing assistance payments contract between the Authority and the owner for each development (each, a "HAP Contract"). While the majority of the properties follow this model, the developer may also execute an HAP Contract directly with HUD. The Authority is the mortgagee for many of the developments receiving subsidies under both of the above described situations.

The initial HAP Contracts were for a term of 20 years if FHA insured, or otherwise for 20 year initial terms with automatic renewals for additional 5 year terms not to exceed 30 or 40 years overall or the term of the related Mortgage Loan, whichever was less. As described below under "Recent Developments," terms of many such HAP Contracts have been restructured.

The PB-ACC obligates HUD to provide funds to the Authority with which to make housing assistance payments to the owner pursuant to the HAP Contracts and HUD requirements; the HAP Contract establishes the housing assistance payments to be made for the account of the owner of a development in an amount sufficient to provide housing assistance payments. In general, this amount may not exceed the total of the contract rents, plus utilities allowances approved by HUD for all the contract units in the project. With respect to the initial HAP Contracts, Congress budgeted sufficient funds for the housing assistance payments scheduled to be paid over the life of the HAP Contract; to the extent that amount proves insufficient HUD is obligated to reserve or allocate funds to make such payments, subject to annual appropriations at the direction of the Congress. With respect to restructured or renewed HAP Contracts, housing assistance payments subsequent to the initial year are also subject to annual appropriations at the direction of the Congress.

Occupancy Restrictions. Pursuant the 1937 Housing Act not more than 25% of the dwelling units which were available for occupancy under HAP Contracts before October 1, 1981 and leased thereafter must be available for leasing by low-income families other than very low-income families; and not more than 15% of the dwelling units that became available for occupancy under HAP Contracts must

be available for leasing by low-income families other than very low-income families. Subsequent legislation requires that not less than 40% of the dwelling units that become available for occupancy in any fiscal year shall be available for leasing only by families whose annual income does not exceed 30% of area median income (as determined by HUD and adjusted for family size) at the time of admission.

Amount and Payment of Subsidy. The contract rent initially established for each unit in a development is intended to be at a level sufficient to pay the debt service and operating costs (and, in most cases, a return to the owner) attributable to such unit in its first year of operation. Contract rents are also required to compare reasonably to the rents of comparable unassisted units. For each assisted unit, the amount of the subsidy actually payable by the Authority for the account of the owner is equal to the contract rent less the payment to be made to the owner by the tenant(s), as approved by HUD. The tenant payment to the owner is generally equal to 30% of family income, although each assisted family is generally required to pay a minimum rent of \$25 a month. The proportion of the contract rent actually paid by HUD and that actually paid by tenants may vary depending upon tenant income.

Adjustments of Subsidy Amounts. Each Section 8 Contract Rent is renewed pursuant to the Multifamily Assisted Housing Reform and Affordability Act and adjusted with an automatic Operating Cost Adjustment Factor, budget-based rent adjustment, or a Rent Comparability Study as outlined in the Section 8 Renewal Guide administered by HUD. Adjustments in Contract Rents are available to owners of assisted mortgaged properties on at least an annual basis pursuant to the application of a formula adjustment procedure determined by HUD. Rent adjustments are determined by multiplying the Contract Rent in effect for a particular property on the anniversary date of the HAP Contract by the applicable formula adjustment procedure.

Vacancies and Debt Service. Generally, the housing assistance payment is payable with respect to the dwelling unit only when it is occupied by an eligible family. However, the law and regulations provide for payment of the subsidy under certain circumstances when the dwelling unit is not occupied.

Upon occurrence of a vacancy in a dwelling unit, a subsidy amounting to 80% of the contract rent is payable for a vacancy period of sixty days subject to compliance by the sponsor with certain conditions relating primarily to a diligent effort to rent the subsidized unit. The payment of a subsidy with respect to a vacant dwelling unit may continue after such sixty day period for up to twelve months in an amount equal to that portion of the contract rent that is attributable to debt service on the permanent financing of the dwelling unit, if (a) a good faith effort is being made to rent the unit, (b) the unit provides decent, safe, and sanitary housing and (c) the owner has demonstrated to the satisfaction of HUD that the project can achieve financial soundness within a reasonable period of time. No such payment may be made if the owner of the development is receiving revenues in excess of the cost incurred by the owner with respect to the development. No restrictions apply to the number of times during the term of the mortgage that the owner may receive the benefit of the subsidy for debt service on vacancy units.

The regulations provide that HUD and the Authority may reduce the number of Contract units if the owner fails for a substantial period of time to lease or make available for leasing by eligible families a sufficient percentage of Contract units.

Pledge of Subsidy as Security for the Bonds. HUD regulations permit the owners and the Authority to pledge the federal housing assistance payments as security for the financing of the developments. The Authority requires the owner to pledge as security for an Authority mortgage loan such federal housing assistance payments, with HUD approval, by an assignment of the HAP Contract to the Authority. The Authority has generally pledged the revenues received from each such mortgage loan to the payment of any bonds issued by the Authority to finance such mortgage loan.

The regulations provide that in the event of foreclosure, or assignment or sale to the Authority in lieu of foreclosure, or in the event of an assignment or sale agreed to by the Authority and approved by

HUD (which approval shall not be unreasonably delayed or withheld), subsidy payments will continue in accordance with the HAP Contracts.

Compliance with Subsidy Contracts. The PB-ACC and the HAP Contracts each contain numerous agreements on the part of the Authority and the owners. Housing subsidies will continue as long as the owner complies with the requirements of the HAP Contracts and has leased the assisted units to eligible tenants or has satisfied the criteria for receiving assistance for vacant units. The Authority, which has primary responsibility for administering the HAP Contracts, subject to review and audit by HUD, may require the owner to cure any default under the HAP Contract and may abate housing assistance payments and recover overpayments pending remedy of the default. If the default is not cured, the Authority may terminate the HAP Contract or take other corrective actions, in its discretion or as directed by HUD. HUD has an independent right to determine whether the owner is in default and to take corrective action and apply appropriate remedies.

If HUD determines that the Authority has failed to fulfill its obligations, HUD may, after notice to the Authority giving it a reasonable opportunity to take corrective action, require that the Authority assign to HUD all rights under the HAP Contract.

Recent Developments. Over the years there have been numerous proposals and pronouncements from Members of Congress, the Administration and HUD officials which address the future of HUD and the various programs operating pursuant to Section 8 of the 1937 Housing Act. The primary subject of these proposals and pronouncements have been projects which have FHA-insured mortgages with terms ranging from 30 to 40 years and which have Section 8 HAP Contracts with substantially shorter terms. Efforts to address this subject are often referred to, generally and without specific import, as "Portfolio Reengineering" or "Mark to Market." The purpose of these programs is primarily the restructuring of Section 8 assistance to match current market rents and, for FHA-insured mortgage loans, restructuring such mortgage loans through partial prepayments. There is no assurance that such restructurings will be provided by HUD, as they are subject, among other things, to the availability of Congressional appropriations. The failure or inability to renew HAP Contracts could adversely affect the sufficiency of revenues available to development owners to make timely payments on their Mortgage Loans. Express exemptions from restructuring are provided for mortgages originated under state and local governmental lending programs if in conflict with applicable law or agreements.

In addition, HUD is currently contemplating rebidding the Section 8 contract administration currently performed by eligible governmental entities, including the Authority under its PB-ACC, the term of which expires on December 31, 2018 unless sooner terminated or extended by HUD.



APPENDIX J

FORM OF AUTHORITY CONTINUING DISCLOSURE UNDERTAKING

CONTINUING DISCLOSURE UNDERTAKING

This Continuing Disclosure Undertaking (this "Disclosure Certificate") is executed and delivered by the COLORADO HOUSING AND FINANCE AUTHORITY, a body corporate and political subdivision of the State of Colorado (the "Authority"), in connection with the issuance of the Authority's Multi-Family/Project Class I Bonds, 2019 Series B-1 (the "2019 Series B-1 Bonds") and Multi-Family/Project Class I Bonds, 2019 Series B-2 (the "2019 Series B-2 Bonds" and, together with the 2019 Series B-1 Bonds, the "Series Bonds"). The Series Bonds are being issued pursuant to the Master Indenture of Trust dated as of March 1, 2000, as amended (the "Master Indenture") and the 2019 Series B Indenture dated as of August 1, 2019 (the "Series Indenture" and, together with the Master Indenture, the "Indenture"), each between the Authority and Wells Fargo Bank, National Association, as Trustee (the "Trustee").

BACKGROUND

- 1. The Series Bonds are being issued to provide funds expected to be used to fund a loan, to make deposits to certain funds and accounts, to pay certain costs of issuance of the Series Bonds, and to otherwise attain the goals of the Authority pursuant to the Colorado Housing and Finance Authority Act.
- 2. In order to allow the Participating Underwriter (as defined in Rule 15c2-12 defined below) of the Series Bonds to comply with Rule 15c2-12 promulgated by the Securities and Exchange Commission under the Securities and Exchange Act of 1934 (17 CFR Part 240, § 240.15c2-12) as amended to the date hereof ("Rule 15c2-12"), the Authority has agreed to make certain continuing disclosure undertakings for the benefit of owners (including beneficial owners) of the Series Bonds.
- 3. This Disclosure Certificate is intended to satisfy the requirements of said Rule 15c2-12, as in effect on the date hereof.

AUTHORITY COVENANTS AND AGREEMENTS

Section 1. <u>Definitions</u>.

- (a) "Annual Financial Information" means the financial information or operating data with respect to the Authority or other obligated person described in Section 2(f) hereof, as applicable, delivered at least annually pursuant to Sections 2(a) and 2(b) hereof, of the type set forth in the sections of the final Official Statement, including, but not limited to, such financial information and operating data set forth in **Appendix B**—"OUTSTANDING MASTER INDENTURE OBLIGATIONS," and **Appendix G-2**—"CERTAIN INFORMATION ABOUT THE MASTER INDENTURE LOAN PORTFOLIO, AUTHORITY PROJECTS AND FUND BALANCES."
- (b) "Audited Financial Statements" means the annual financial statements for the Authority or other obligated person described in Section 2(f) hereof, as applicable, prepared in accordance with generally accepted accounting principles consistently applied, as in effect from time to time, audited by a firm of certified public accountants.
- (c) "Bonds" shall mean, collectively, the Series Bonds together with any additional bonds, notes or other obligations of the authority authorized and issued under the Master Indenture.
 - (d) "Borrower" means the person that is obligated to repay a Loan made by the Authority.

- (e) "EMMA" means the MSRB's Electronic Municipal Market Access System, with a portal at http://emma.msrb.org.
 - (f) "Events" means any of the events listed in Section 2(e) hereof.
- (g) "Financial Obligation" means a (i) debt obligation; (ii) derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation; or (iii) a guarantee of (i) or (ii). The term Financial Obligation shall not include municipal securities as to which a final official statement has been provided to the MSRB consistent with Rule 15c2-12.
- (h) "Loan" or "Loans" means a loan or loans of proceeds of Bonds made by the Authority under the Master Indenture.
- (i) "MSRB" means the Municipal Securities Rulemaking Board. The current address of the MSRB is 1300 I Street, NW, Suite 1000, Washington, DC 20005; fax: 202-898-1500.
- (j) "Official Statement" means the Official Statement delivered in connection with the original issue and sale of the Series Bonds.
 - (k) "Participating Underwriter" means Jefferies LLC., as representative of the underwriters.
- (l) "Rule 15c2-12" means Rule 15c2-12 promulgated by the SEC under the Securities Exchange Act of 1934, as amended (17 CFR Part 240, § 240.15c2-12), as the same may be amended from time to time.
 - (m) "SEC" means the Securities and Exchange Commission.
 - (n) "State" means the State of Colorado.

Section 2. Provision of Annual Information and Reporting of Events.

- (a) Commencing with the fiscal year ending December 31, 2019 and annually while the Series Bonds remain outstanding, the Authority agrees to provide or cause to be provided annually to EMMA (with a copy, upon request, to the Underwriter) the following information relating to the Authority:
 - i. Annual Financial Information; and
 - ii. Audited Financial Statements, if prepared.
- (b) Such Annual Financial Information shall be provided not later than 240 days after the end of each fiscal year for the Authority (i.e., each December 31). If not provided at the same time as the Annual Financial Information, the Audited Financial Statements will be provided when available.
- (c) The Authority may provide Annual Financial Information and Audited Financial Statements relating to the Authority by specific reference to other documents, including information reports and official statements relating to other debt issues of the Authority, which have been submitted to EMMA or other repositories as required by Rule 15c2-12; provided, however, that if the document so referenced is a final official statement within the meaning of Rule 15c2-12, such final official statement must also be available from the MSRB. The Authority shall clearly identify each such other document so incorporated by cross-reference.

- (d)(1) At any time the Series Bonds are outstanding, in a timely manner not in excess of ten (10) business days after the occurrence of an Event, the Authority shall provide to EMMA notice of the occurrence of any of the following Events with respect to the Series Bonds:
 - (A) principal and interest payment delinquencies;
 - (B) unscheduled draws on debt service reserves reflecting financial difficulties;
 - (C) unscheduled draws on credit enhancements reflecting financial difficulties;
 - (D) substitution of credit or liquidity providers, or their failure to perform;
 - (E) adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Series Bonds, or other material events affecting the tax status of the Series Bonds;
 - (F) tender offers;
 - (G) defeasances;

and

- (H) rating changes;
- (I) bankruptcy, insolvency, receivership, or similar event of any obligated person;

(J) default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a Financial Obligation of the obligated person, any of which reflect financial difficulties.

For the purposes of the Event identified in paragraph (2)(d)(1)(I) hereof, the Event is considered to occur when any of the following occur: (i) the appointment of a receiver, fiscal agent or similar officer for an obligated person in a proceeding under the U.S. Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the obligated person, or if such jurisdiction has been assumed by leaving the existing governing body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or (ii) the entry of an order confirming a plan of reorganization, arrangement or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the obligated person.

- (2) At any time the Series Bonds are outstanding, in a timely manner not in excess of ten (10) business days after the occurrence of an Event, the Authority shall provide to EMMA notice of the occurrence of any of the following Events with respect to the Series Bonds, if material:
 - (A) non-payment related defaults;
 - (B) modifications to the rights of the beneficial owners of the Series Bonds;
 - (C) bond calls;
 - (D) release, substitution or sale of property securing repayment of the Series Bonds;

- (E) the consummation of a merger, consolidation, or acquisition involving an obligated person or the sale of all or substantially all of the assets of the obligated person, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms;
- (F) appointment of a successor or additional trustee or a change in the name of a trustee; and
- (G) incurrence of a Financial Obligation of the obligated person, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a Financial Obligation of the obligated person, any of which affect security holders.
- (e) At any time the Series Bonds are outstanding, the Authority shall provide, in a timely manner, to EMMA, with a copy to the Underwriter, notice of any failure of the Authority to timely provide the Annual Financial Information as specified in Sections 2(a) and 2(b) hereof.
- of the Bonds issued and outstanding under the Master Indenture, the Authority will use its best efforts to confirm that such Borrower has separately agreed to provide to the Authority Annual Financial Information and Audited Financial Statements with respect to itself not later than 180 days after the end of each fiscal year for such Borrower and notice of Events with respect to itself not later than 5 days after the occurrence of the Event to the extent that such Borrower continues to constitute an "obligated person" in respect of the Bonds issued and outstanding under the Master Indenture. Obligated person means a Borrower, the principal amount of whose Loans equals or exceeds ten percent (10%) of the aggregate principal amount due under all Loans held under the Master Indenture. The Authority has agreed to forward to EMMA such Audited Financial Statements promptly upon receipt from such Borrower. The Authority has no obligation to examine or review such Audited Financial Statements to verify the accuracy or completeness of such Audited Financial Statements, and is not otherwise obligated to make such continuing disclosure undertakings on behalf of the Borrower.
- Section 3. <u>Method of Transmission</u>. Subject to technical and economic feasibility, the Authority shall employ such methods of electronic or physical information transmission as is requested or recommended by the MSRB unless otherwise required by law.
- Section 4. <u>Enforcement.</u> The obligations of the Authority hereunder shall be for the benefit of the owners (including beneficial owners) of the Series Bonds. The owner or beneficial owner of any Series Bonds is authorized to take action to seek specific performance by court order to compel the Authority to comply with its obligations under this Disclosure Certificate, which action shall be the exclusive remedy available to it or any other owners or beneficial owners of the Series Bonds; provided, that any owner or beneficial owner of Series Bonds seeking to require the Authority to comply with this Disclosure Certificate shall first provide at least 30 days' prior written notice to the Authority of the Authority's failure, giving reasonable detail of such failure following which notice the Authority shall have 30 days to comply. Any such action shall be brought only in a court of competent jurisdiction in the City and County of Denver, Colorado. Breach of the obligations of Authority hereunder shall not constitute an Event of Default under the Indenture and none of the rights and remedies provided by the Indenture shall be available to the owners of the Series Bonds or the Trustee therein appointed.
- Section 5. <u>Additional Information</u>. Nothing in this Disclosure Certificate shall be deemed to prevent the Authority from disseminating any other information, using the means of dissemination set forth in this Disclosure Certificate or any other means of communication, or including any other annual information or notice of occurrence of an event which is not an Event, in addition to that which is

required by this Disclosure Certificate; provided that the Authority shall not be required to do so. If the Authority chooses to include any annual information or notice of occurrence of an event in addition to that which is specifically required by this Disclosure Certificate, the Authority shall have no obligation under this Disclosure Certificate to update such information or include it in any future annual filing or Event filing.

Section 6. <u>Term.</u> This Disclosure Certificate shall be in effect from and after issuance and delivery of the Series Bonds and shall extend to the earliest of (i) the date all principal and interest on the Series Bonds shall have been deemed paid or legally defeased pursuant to the terms of the Indenture; (ii) the date that the Authority and each person named or described in Section 2(f) hereof shall no longer constitute an "obligated person" with respect to the Series Bonds within the meaning of Rule 15c2-12; or (iii) the date on which those portions of Rule 15c2-12 which require this Disclosure Certificate are determined to be invalid by a court of competent jurisdiction in a non-appealable action, have been repealed retroactively or otherwise do not apply to the Series Bonds, the determination of (i), (ii) or (iii) herein to be made in any manner deemed appropriate by the Authority, including by an opinion of counsel experienced in federal securities law selected by the Authority.

Section 7. <u>Amendments and Waivers</u>. Notwithstanding any other provision of this Disclosure Certificate, the Authority may amend this Disclosure Certificate from time to time, and any provision of this Disclosure Certificate may be waived, without the consent of the owners or beneficial owners of the Series Bonds upon the Authority's receipt of an opinion of counsel experienced in federal securities laws to the effect that such amendment or waiver will not adversely affect compliance with Rule 15c2-12. Any Annual Financial Information containing amended operating data or financial information will explain, in narrative form, the reasons for the amendment and the impact of the change in the type of operating data or financial information being provided. If an amendment changes the accounting principles to be followed in preparing financial statements, the Annual Financial Information for the year in which the change is made will present a comparison between the financial statements or information prepared on the basis of the new accounting principles and those prepared on the basis of the former accounting principles. The Authority shall provide notice of such amendment or waiver to EMMA as required by Rule 15c2-12 and the Underwriter.

Section 8. <u>Beneficiaries</u>. This Disclosure Certificate shall inure solely to the benefit of the Authority, the Underwriter and the owners (including beneficial owners) from time to time of the Bonds, and shall create no rights in any other person or entity.

Dated as of August 7, 2019.

AUTHORITY
By:
Chief Financial Officer

COLORADO HOUSING AND FINANCE



APPENDIX K

Remarketing Agents under Master Indenture

Remarketing Agents for Adjustable Rate Bonds

In connection with the Adjustable Rate Bonds outstanding under the Master Indenture, the Authority has entered into remarketing agreements (the "Remarketing Agreements") with the respective remarketing agents set forth in the following table (the "Remarketing Agents").

Outstanding Remarketing Agents under Master Indenture as of April 1, 2019

Series of Bonds	Remarketing Agents
2000 Series A-1	Barclays Capital Inc.
2005 Series B-2	RBC Capital Markets
2006 Series A-1	Barclays Capital Inc.
2007 Series B-1	J.P. Morgan Securities LLC
2007 Series B-2	J.P. Morgan Securities LLC
2008 Series A-1	RBC Capital Markets
2008 Series B	RBC Capital Markets
2008 Series C-3	RBC Capital Markets
2009 Series A-1	Barclays Capital Inc.
2013 Series A	J.P. Morgan Securities LLC
2018 Series A-2	Barclays Capital Inc.

The Remarketing Agents are Paid by the Authority

The Remarketing Agents' responsibilities include determining the interest rate from time to time and remarketing the respective Adjustable Rate Bonds that are optionally tendered by the owners. The Remarketing Agents are appointed by the Authority and are paid by the Authority for their respective services. As a result, the interests of the Remarketing Agents may differ from those of existing holders and potential purchasers of Adjustable Rate Bonds.

The Remarketing Agents May Purchase Adjustable Rate Bonds for their Own Account

The Remarketing Agents are permitted, but not obligated, to purchase the tendered Adjustable Rate Bonds for their own account. The Remarketing Agents, in their sole discretion, may acquire tendered Adjustable Rate Bonds for their own inventory in order to achieve a successful remarketing of the Adjustable Rate Bonds (i.e., because there otherwise are not enough buyers to purchase the Adjustable Rate Bonds) or for other reasons. However, the Remarketing Agents are not obligated to purchase Adjustable Rate Bonds, and may cease doing so at any time without notice. The Remarketing Agents may also make a market in the Adjustable Rate Bonds by purchasing and selling such Adjustable Rate Bonds other than in connection with an optional tender and remarketing. Such purchases and sales may be at or below par. However, the Remarketing Agents are not required to make a market in the Adjustable Rate Bonds. If the Remarketing Agents purchase Adjustable Rate Bonds for their own account, they may offer those Adjustable Rate Bonds at a discount to par to some investors. The Remarketing Agents may also sell any Adjustable Rate Bonds they have purchased to one or more affiliated investment vehicles for collective ownership or enter into derivative arrangements with affiliates or others in order to reduce its exposure to the Adjustable Rate Bonds. The purchase of Adjustable Rate Bonds by the Remarketing Agents may create the appearance that there is greater third party demand for the Adjustable Rate Bonds in the market than is actually the case. The practices described above also may reduce the supply of Adjustable Rate Bonds that may be tendered in a remarketing.

Adjustable Rate Bonds may be Offered at Different Prices on any Date

The Remarketing Agents are required to determine on the rate determination date the applicable rate of interest that, in their judgment, is the lowest rate that would permit the sale of the respective Adjustable Rate Bonds at par plus accrued interest, if any, on the date the rate becomes effective (the "Effective Date"). The interest rate will reflect, among other factors, the level of market demand for such Adjustable Rate Bonds (including whether the Remarketing Agents are willing to purchase such remarketed Bonds for their own account). The Remarketing Agreements require that the Remarketing Agents use their best efforts to sell respective tendered Adjustable Rate Bonds at par, plus accrued interest. There may or may not be Adjustable Rate Bonds tendered and remarketed on a rate determination date or an Effective Date, the Remarketing Agents may or may not be able to remarket any respective Adjustable Rate Bonds tendered for purchase on such date at par and the Remarketing Agents may sell such Bonds at varying prices to different investors on such date or any other date. The Remarketing Agents are not obligated to advise purchasers in a remarketing if they do not have third party buyers for all of the Adjustable Rate Bonds at the remarketing price.

The Ability to Sell the Adjustable Rate Bonds other than through Tender Process may be Limited

While the Remarketing Agents may buy and sell the Adjustable Rate Bonds, they are not obligated to do so and may cease doing so at any time without notice. Thus, investors who purchase the Adjustable Rate Bonds, whether in a remarketing or otherwise, should not assume that they will be able to sell their Adjustable Rate Bonds other than by tendering the Adjustable Rate Bonds in accordance with the tender process.