proud partner serving *agriculture*

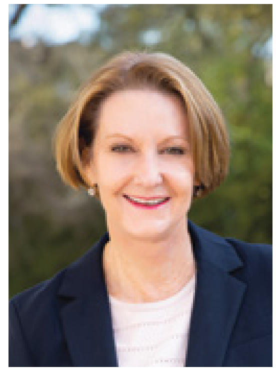
Fulfilling Our Mission to Support Agriculture and Rural America

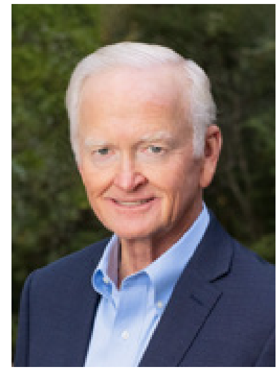
Farm Credit Bank of Texas is proud to stand with farmers, ranchers and businesses serving rural America who grappled with 2023's challenges – such as high input costs, volatile commodity prices and adverse weather conditions. During the most challenging times, Farm Credit embraces our mission to support farmers, ranchers and rural communities by providing competitive credit and superior service to our member-owners. We're grateful for your determination and honored that you trust Farm Credit as a vital partner. Thank you for the opportunity to serve you.

FARM CREDIT BANK OF TEXAS

Contents

To Our Stockholders


Amie Pala


Jimmy Dodson

Farm Credit Bank of Texas has a long, successful history of fulfilling its mission. This mission was more important than ever in 2023 as the banking and agricultural sectors faced unprecedented market conditions.

The banking sector as a whole experienced significant uncertainty, including persistent inflation that prompted the Federal Reserve to increase short-term interest rates at a historically fast pace. Inflation, rising interest rates and higher input costs reduced profitability for the bank and some borrowers. Due to prudent risk management practices over the years, we entered this volatile market environment from a position of financial strength. This allowed the bank to continue its most important role as a dependable source of funding to our affiliated associations and other agricultural partners.

Managing risk is a fundamental part of the banking business on which we intently focus every day. From credit to funding to technology and everything in between, the bank has sound processes to proactively identify and manage risk. To address the downstream impacts of growth and ever-increasing complexity of our business, we deployed a centralized enterprise risk management program. We continue to identify and manage the most significant risks to the bank's safety, soundness and strategic goals.

The bank achieved many important milestones in 2023, including the continued rollout of new end-to-end lending technology to our district associations. Currently, nine associations use the full suite of products on our *FarmView®* platform. Planning is underway for the remaining four associations to use significant components of the platform.

Our Mission

Enhance the quality of life in rural communities by using cooperative principles to provide competitive credit and superior service to our member-owners.

As a technology services provider, our priorities include:

- Providing competitive, innovative technology solutions to allow our association users to grow their business and increase their efficiency
- Continuing the delivery of technological enhancements to meet the financial needs of borrowers
- Delivering high-quality systems that are safe and secure with speed and top performance

We will focus our efforts in 2024 to optimize capital between the bank and associations. The district has experienced significant loan growth over the past 20 years. This has enhanced profitability, and allowed both the bank and its associations to adhere to the fundamental cooperative principle of returning profits to borrowers through robust patronage programs. Given the volatility of the 2023 economic environment, our emphasis in 2024 is on managing capital for long-term sustainability while affording our district's lending cooperatives the capacity and flexibility to continue fulfilling their mission to serve their borrowers.

We also are committed to investing in the development and well-being of our employees. People are the lifeblood of our organization, and their importance to the bank's future success cannot be overstated. A skilled and motivated workforce is the driving force behind the innovation, creativity and dedication that allow us to adapt to the ever-changing business environment.

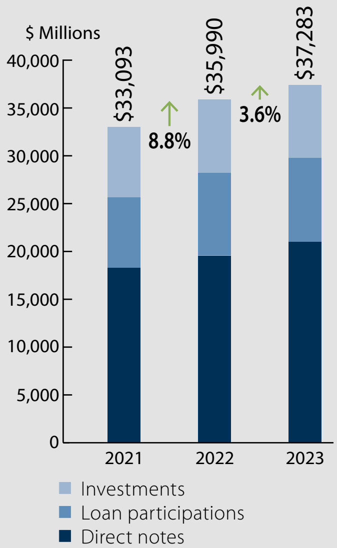
As we have for generations, Farm Credit Bank of Texas looks forward to continuing to resolutely support the success of American agriculture.

James F. "Jimmy" Dodson
Board Chair

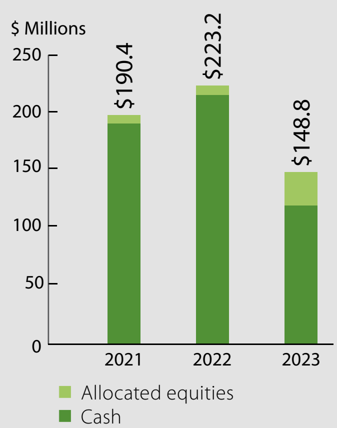
Amie Pala
Chief Executive Officer

Top Financial Indicators 2023

Asset Growth



Patronage Declared



Regulatory Capital and Liquidity Measures

	At Dec. 31, 2023	Regulatory Requirement
Common equity tier 1 ratio	8.50%	7.00%
Total capital ratio	13.41%	10.50%
Tier 1 leverage ratio	5.79%	5.00%
Liquidity	200 days	90 days
Capital level	$1.7 billion	

Credit Quality

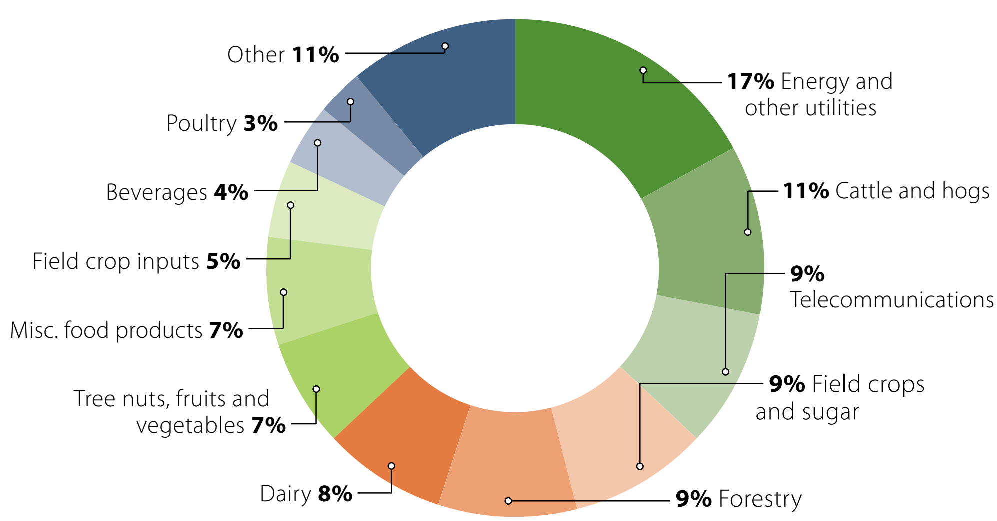
99.5%

Acceptable or Special Mention

Financial Highlights

At Year-End (in millions)	2023	2022	2021
Total loans	$ **29,725**	$ 28,264	$ 25,675
Total assets	**37,283**	35,990	33,093
Total liabilities	**35,597**	34,367	31,095
Total shareholders' equity	**1,687**	1,623	1,998
For the Year (in thousands)			
Net interest income	$ **350,017**	$ 386,162	$ 367,811
Provision for credit losses	**(37,854)**	(4,580)	(1,725)
Noninterest expense, net	**(112,255)**	(111,696)	(111,495)
Net income	$ **199,908**	$ 269,886	$ 254,591
Rate of return on:			
Average assets	**0.54%**	0.77%	0.84%
Average shareholders' equity	**12.04%**	14.55%	12.17%
Cash patronage declared	$ **121,075**	$ 215,648	$ 183,691

$8.7 Billion Participations Portfolio Segmented by Repayment Source



Loan participations provide diversification by both industry and geography.

FARM CREDIT BANK OF TEXAS

Key Accomplishments

Bank reports financial results in a challenging environment

Amid an interest rate environment and economic conditions that put pressure on earnings, the bank reported $199.9 million in net income, a decrease of 25.9% year over year. Overall credit quality remained very strong.

Assets reach new levels

Total assets increased 3.6% to $37.3 billion, and total loan volume increased 5.2% to $29.7 billion.

Bank maintains capital and liquidity

Our capital position and diversified loans and investments provide stability and opportunities for growth. We implemented changes to the bank's patronage programs to accommodate the economic environment and move toward a sustainable growth capitalization model.

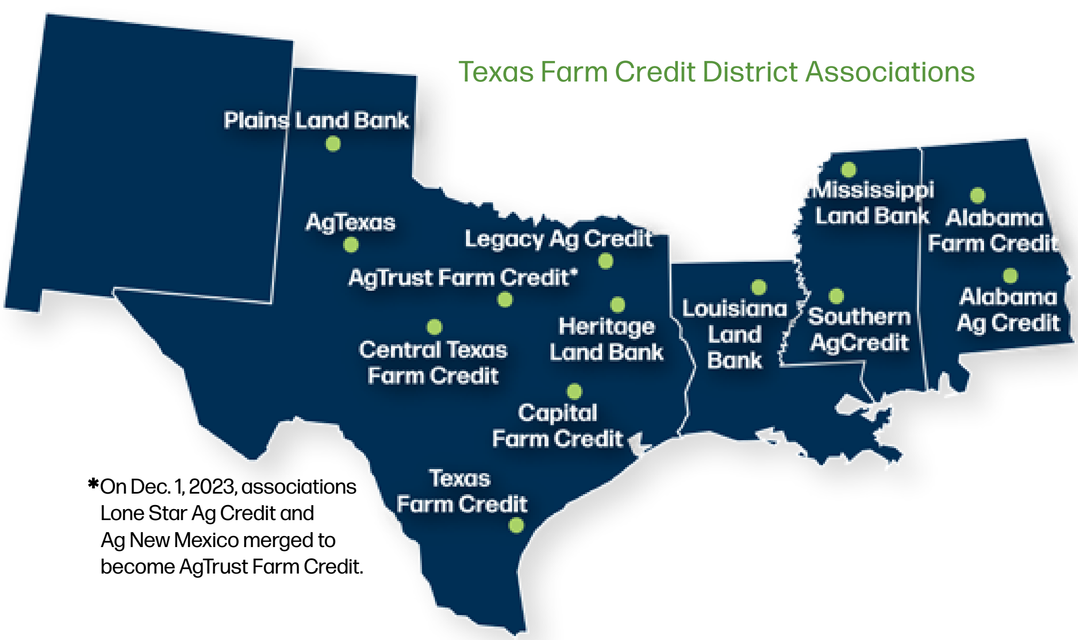
Cooperative business model lowers associations' cost of funds

We shared the bank's earnings with the lending cooperatives that own the bank by declaring $66.3 million in patronage on direct note volume, consisting of $46.4 million in cash and $19.9 million in allocated surplus.

Products and support services help associations serve their customers

Many operational and technology initiatives are enhancing security, risk management, computing platforms and the borrower experience. Three more associations converted to the *FarmView* financial services platform that we launched in 2020, and we rolled out additional functionality to all associations.

Texas Farm Credit District Associations



*On Dec. 1, 2023, associations Lone Star Ag Credit and Ag New Mexico merged to become AgTrust Farm Credit.

Cooperating for the benefit of our customers

Farm Credit, established in 1916, meets the critical need for dependable credit in rural America. It was structured as a nationwide network of customer-owned cooperatives that operate in the best interests of their members.

Our bank is one of four funding banks in the Farm Credit System. We are a federated cooperative, owned by 13 retail lending co-ops. We use our cooperative business model to help these associations thrive so they can support agriculture and rural communities.

Our goal is to give our associations a competitive edge in the marketplace by:

- Providing low-cost funding for their loans
- Managing interest rate risk for our entire district, insulating associations' earnings and capital against adverse effects of changes in rates
- Maintaining a large, diverse asset base so we can manage risk and generate earnings from sources other than our owners
- Centralizing key functions and services at the bank, such as technology and other services required for day-to-day business operations

Delivering value through cooperative returns

As a Farm Credit System funding bank, we obtain funding through the sale of highly rated Farm Credit notes and bonds.

We lend these funds to our associations and two other financing institutions at our cost, plus a wholesale spread. We then return as much of the spread to them as possible, reducing their funding cost. These earnings distributions are called cooperative returns or patronage dividends.

Our associations pass the value on to the farmers, ranchers, aquatic producers and harvesters, agribusinesses, rural homeowners and landowners they serve. Patronage effectively lowers members' borrowing costs — a unique benefit of doing business with a cooperative.

In total, the bank returned $121.1 million of its 2023 earnings in cash through five patronage programs and allocated another $27.7 million in equities to its affiliated lenders and one participation partner. The bank declared patronage on:

Affiliated lenders' direct notes (cash and equity)	$ 66.3 million
Loan participations (cash and equity)	59.0 million
Affiliated lenders' stock in the bank	17.1 million
Capitalized Participation Pool	3.8 million
Non-Capitalized Participation Pool	2.6 million
Total	$148.8 million

The bank distributed another $48.6 million in preferred stock dividends.

Creating greater efficiency, economies of scale

The bank provides services to our affiliated lenders in credit, accounting, technology, compliance, risk management, human resources and other areas.

We also provide credit expertise to help our associations support rural communities, agribusinesses and commercial operations in their territories. In addition, we partner with our associations and other institutions to finance agricultural production and processing, essential rural infrastructure and more. Our participations portfolio provides diversification

and is the bank's primary earnings engine.

Our priority for several years has been to deliver market-driven lending and accounting systems that are user-friendly, yet powerful enough to handle complex loans. Nine associations now use our *FarmView* lending and loan accounting system, representing about three-quarters of combined association loan volume. We continue to expand and improve the *FarmView* system based on association feedback.

Other support services in 2023 included beginning the rollout of new online banking payment options for association borrowers; improving the bank's disaster recovery infrastructure; enhancing cybersecurity, including better information security training and awareness for the district; and making significant infrastructure upgrades to modernize computing platforms.

We are a federated cooperative, owned by 13 retail lending co-ops. We use our cooperative business model to help these associations thrive so they can support agriculture and rural communities.

Caring for Community

For more than a century, the bank has provided reliable funding to its member-owners — associations that support the agricultural producers who strengthen our nation's food, fuel and fiber supply. This cooperative structure enables us to benefit our members and communities in many ways.

Our communities

As a cooperative, we understand the importance of service. We believe in community. Our commitment extends far beyond financial services; it's a heartfelt dedication to creating positive change where we live and work. Our actions transform lives.

We're committed to service and invest our time, attention and volunteer efforts into local communities and nonprofit organizations that align with our values. In addition to our regional support, with other Farm Credit banks we contribute to Farm Credit's national contributions program, which supports a range of agriculturally based initiatives across the nation.

Our employees: Fostering a culture of belonging

Diversity, Equity and Inclusion (DEI) Council

The Farm Credit Bank of Texas is committed to being an inclusive cooperative in which all people are treated with respect and valued for individual differences.

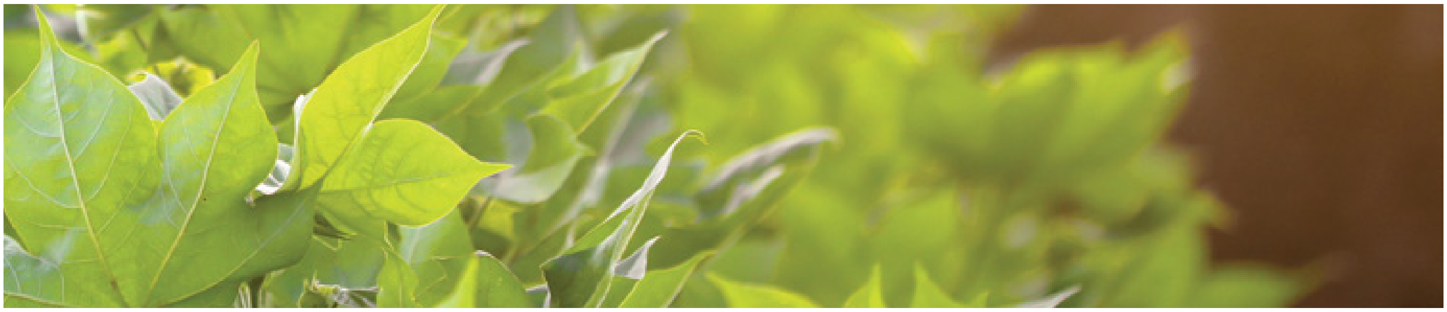
We view diversity as a business advantage. A diverse workforce of talented professionals contributes a rich perspective and broad knowledge that ultimately leads to strong financial performance and greater return to our stockholders. By embracing differences among people, we are ensuring the long-term success of our organization.

As part of our continued commitment to fostering a diverse, equitable and inclusive workplace, in 2023 we welcomed eight new members to our DEI Council. They join seven tenured members who have served as steadfast champions of DEI within our organization for several years.

By tapping the diverse backgrounds, experiences and perspectives of its members, the council leads initiatives that

Central Texas Food Bank: Volunteers – including Julie Cronin and William Flores – packaged 3,300 pounds of food, the equivalent of 9,429 meals for families in need

Members of the Farm Credit Bank of Texas DEI Council are, front (from left): Jenny Best, Blake Mitchell, Ann Michelle Ciampini and Girisha Pillai. Second row: Pete Nguyen, Joshua Squires, Pete Pichette and Kelly Roatch. Back row: Pia Hahn, Lynette Alcorn, David Camp, Taz Pereira and Theresa Bangert. Not pictured: Benjamin Arnold and Michelle Diswood.



promote equity and inclusivity across Farm Credit Bank of Texas. This council remains instrumental in positioning us to reflect today's marketplace and engage the communities we serve.

Supporting minority row crop farmers

Farm Credit is a mission-driven system of cooperative lending institutions, and supporting people of color in agriculture and rural communities is an integral part of our mission.

Each summer, the National Black Growers Council (NBGC), a nonprofit dedicated to championing the interests of Black row crop farmers, organizes a series of model farm field days. These events are a valuable forum for minority farmers to exchange insights and learn about grain storage, marketing, farm financing, farm management and other topics.

This year, Farm Credit Bank of Texas partnered with other Farm Credit System institutions to sponsor the NBGC event in South Carolina. Isaac Bennett, chief credit officer and a former NBGC advisory board member, hosted a dinner reception the night before the field day.

Partnerships to build expertise

With a unique set of careers available in the Farm Credit System, we consistently seek to recruit talented professionals of all backgrounds and identities to join us in accomplishing our mission.

In collaboration with the Farm Credit System, we support professional and

Farm Credit Bank of Texas team members attended a 2023 National Black Growers Council farm field day in South Carolina, including (from left): Abraham Tenah, Caroline Rydell, Jelissa Cruz, Katelyn Love and Isaac Bennett.

Festival Beach Food Forest: Blake Mitchell and Tafara Nyanhongo joined volunteers planting leafy greens and maintaining downtown Austin parkland where the public can forage for in-season produce.

student organizations, as well as historically Black colleges and universities (HCBUs). These partnerships help us identify diverse talent, expand our impact, and contribute to our commitment to diversity, equity and inclusion for our district.

The Farm Credit Council partners with Minorities in Agriculture, Natural Resources and Related Sciences (MANRRS) to offer the annual Farm Credit/MANRRS VIP Scholarship. The program also raises awareness of Farm Credit careers in such fields as finance, credit, capital markets, information technology and marketing.

Our member-owned cooperative structure is our strength.

The bank has a seat on Farm Credit's scholarship selection committee, and Bennett, the bank's chief credit officer, is a former MANRRS advisory board member.

An ongoing commitment

As a responsible financial institution that actively contributes to a sustainable future, we continue growing our support for initiatives that promote wise sustainable practices. We pursue these initiatives in tandem with the Farm Credit System and the agricultural community.

Stewardship: Farmers, ranchers lead the way

The agricultural community — farmers, ranchers and agribusinesses — embraces new technologies and champions sustainable practices because their livelihoods depend on it. Farmers and ranchers develop and adopt practices that are efficient and environmentally sound. From soil conservation to smart irrigation methods, today's producers strive to preserve resources for future generations using the latest data and equipment. As a funding bank, we're proud to support the associations who serve these agricultural producers.

Serving with integrity: Cooperative governance

As part of the Farm Credit System, the bank maintains a strong standards of conduct program that promotes ethical behavior. As a government-sponsored enterprise regulated by the Farm Credit Administration, we pride ourselves on maintaining exceptional transparency and consistency in our financial reporting. Our active involvement in Systemwide work groups, covering areas such as risk management, fraud prevention, accounting and cybersecurity, underscores our commitment to accountability and regulatory compliance. Furthermore, as a cooperative, our ownership lies with our valued associations, granting them a meaningful voice and say in decisions that directly benefit their communities. Our member-owned cooperative structure is our strength. It fosters deep integrity, accountability and stability that keeps us focused on what matters most to those we serve. We also distribute earnings to our stockholders, returning patronage dividends to rural communities and lowering the cost of borrowing.

Support for rural communities

Farm Credit Bank of Texas' leadership team is committed to our mission: To enhance the quality of life in rural communities by using cooperative principles to provide competitive credit and superior service to our member-owners. For example, Farm Credit works to support rural communities' access to reliable power, clean water, health care and modern telecommunications to help build a more sustainable and equitable future for all.

The bank participates in a Systemwide initiative to develop a framework to share our goals and accomplishments in a way that provides meaningful insights into Farm Credit's sustainable principles. We will continue developing a comprehensive strategy in alignment with the System.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Supporting Agriculture

Connecting young ag leaders, Farm Credit

Farm Credit has provided young farmers and ranchers with the financial resources they need for more than a century. We help in other ways, too. Through the Young Leaders Program — sponsored by the bank and district — in June 2023 we equipped 27 rising leaders and ag advocates by providing them with a firsthand view of the Farm Credit funding process and providing them with opportunities to interact with congressional leaders and policymakers.

Smith ■ Mills, N.M.

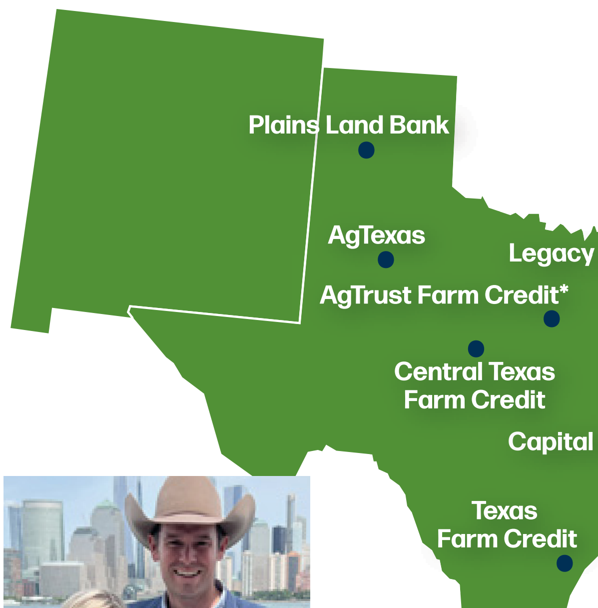
Brandon and Becky Smith, fifth-generation ranchers, own and operate Smith Cattle Company and Smith Land and Ranch Company LLC. The AgTrust Farm Credit* customers specialize in raising commercial cows, calves and yearlings, with a focus on grass.

McWhorter ■ Hereford, Texas

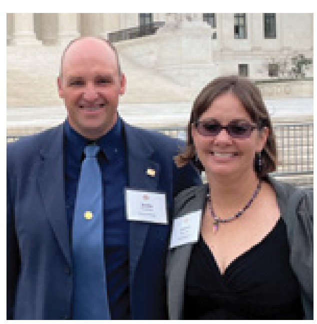
AgTexas Farm Credit customers Hank and Rebekah McWhorter own and operate a feedyard with 55,000 head of cattle in Hereford, Texas. They also oversee several thousand acres of pastureland and farm ground.

Aaron and Christine Ablondi
Larue, Texas
Heritage Land Bank

Trevor and Charley Beuerlein
West, Texas
AgTrust Farm Credit*



Chris Burger
Howardwick, Texas
Plains Land Bank



Justin and Amber Corzine
Stamford, Texas
Central Texas Farm Credit

Carrie and Jack Cowen
Abilene, Texas
Capital Farm Credit

*On Dec. 1, 2023, associations Lone Star Ag Credit and Ag New Mexico merged to become AgTrust Farm Credit.

Canterbury ■ Simsboro, La.

Louisiana Land Bank customers Clark and Angela Canterbury are fourth-generation farmers who manage 12 broiler houses for Raeford Farms and run a beef cattle operation. Clark also serves on the association's board of directors. They live in Lincoln Parish.

Bruton ■ Glen Allan, Miss.

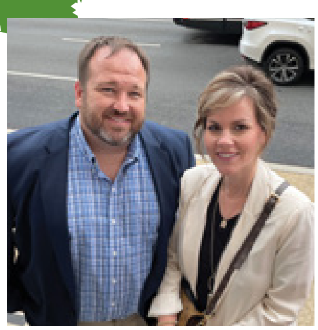
Barrett and Erica Bruton are Southern AgCredit customers and third-generation farmers. Together with Barrett's father, brother, uncles and cousins, they manage over 12,000 acres from Leland to Vickland, Mississippi, for the Bruton Planting Company.

Newby ■ Athens, Ala.

Jerry and Ashley Helums Newby have been partners in Newby Farms since 2005. They cultivate cotton, corn, wheat and soybeans and raise Holstein stocker steers. Jerry also serves on Alabama Farm Credit's Young Farmers Advisory Board.

Matt and Amanda Hazel
Fruitvale, Texas
Legacy Ag Credit

Kayla and Todd Otahal
Corpus Christi, Texas
Texas Farm Credit



Matthew and Kayla Poe
Pontotoc, Miss.
Mississippi Land Bank

Adam and Sarah Temple
Ashford, Ala.
Alabama Ag Credit

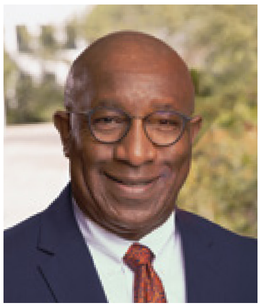
Our Leadership

Farm Credit Bank of Texas board members (from left): Dennis Anthony; Dorothy Nichols; M. Philip Guthrie; James F. "Jimmy" Dodson, chair; Linda C. Floerke, vice chair; John L. "Jack" Dailey; and Dr. Larry L. Boleman.

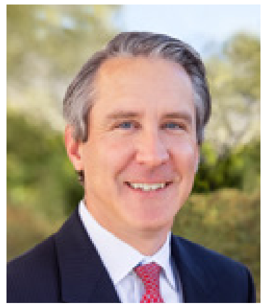
Farm Credit Bank of Texas Board of Directors

Our seven-member board of directors establishes policies for the bank, provides strategic direction, oversees management and ensures the bank operates in a safe and sound manner. The board members have extensive business and leadership experience in a variety of fields. Five directors are farmers or ranchers, elected by the local lending cooperatives that own the bank. Two board-appointed directors have backgrounds in banking, finance, government and law.

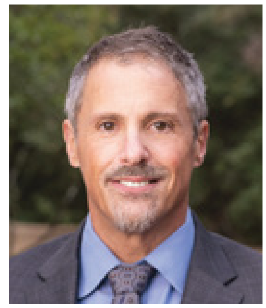
Amie Pala
chief executive officer



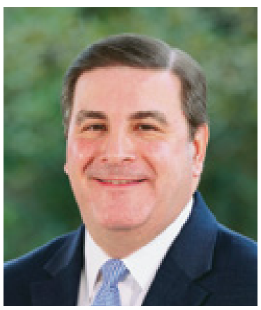
Isaac Bennett
chief credit officer



Brandon Blaut
chief operating officer



Scott Erlichman
chief information officer



Brian O'Keane
chief financial officer

Thomas Ringler
enterprise risk management

Nisha Rocap
chief audit executive

Nanci Tucker
chief administrative officer and general counsel

Executive Management Team

The bank's senior leaders draw on their experience in the Farm Credit System and in commercial banking, finance, information technology and agriculture.

In addition to overseeing day-to-day operations, this seasoned executive team works with the board of directors to establish the bank's business goals and strategies.

Brian O'Keane, chief financial officer, joined the bank in October 2023. He has more than 30 years of experience in the financial services, agribusiness and capital equipment industries, including 11 years in the Farm Credit System. Before joining Farm Credit Bank of Texas, he was global chief financial officer at Marex Capital Markets. Previously, he was chief financial officer at AgriBank, and held financial management positions at CNH Capital, the Quaker Oats Company and Exxon Mobil.

FARM CREDIT
BANK OF TEXAS

Five-Year Summary of Selected Financial Data

Farm Credit Bank of Texas

(dollars in thousands)	2023	2022	2021	2020	2019
Balance Sheet Data					
Cash, federal funds sold and overnight investments	**$ 390,569**	$ 443,165	$ 351,209	$ 336,531	$ 421,950
Investment securities	**6,610,429**	6,654,952	6,560,239	5,548,167	5,295,143
Loans	**29,725,476**	28,264,222	25,674,558	21,824,201	19,498,293
Less allowance for credit losses on loans	**37,873**	15,706	11,869	9,608	11,487
Net loans	**29,687,603**	28,248,516	25,662,689	21,814,593	19,486,806
Other assets	**594,718**	643,507	519,251	528,214	459,917
Total assets	**$ 37,283,319**	$ 35,990,140	$ 33,093,388	$ 28,227,505	$ 25,663,816
Obligations with maturities of one year or less	**$ 11,648,645**	$ 12,032,142	$ 11,895,213	$ 11,029,378	$ 9,660,506
Obligations with maturities greater than one year	**23,947,980**	22,334,635	19,199,783	15,206,594	14,159,127
Total liabilities	**35,596,625**	34,366,777	31,094,996	26,235,972	23,819,633
Preferred stock	**750,000**	750,000	750,000	750,000	700,000
Capital stock	**495,844**	471,029	410,373	359,988	335,262
Allocated retained earnings	**101,789**	74,043	66,490	59,765	52,451
Unallocated retained earnings	**860,572**	868,650	868,365	850,607	808,101
Accumulated other comprehensive loss	**(521,511)**	(540,359)	(96,836)	(28,827)	(51,631)
Total shareholders' equity	**1,686,694**	1,623,363	1,998,392	1,991,533	1,844,183
Total liabilities and shareholders' equity	**$ 37,283,319**	$ 35,990,140	$ 33,093,388	$ 28,227,505	$ 25,663,816
Statement of Income Data					
Net interest income	**$ 350,017**	$ 386,162	$ 367,811	$ 337,978	$ 271,611
(Provision for credit losses) Loan loss reversal	**(37,854)**	(4,580)	(1,725)	(1,081)	588
Noninterest expense, net	**(112,255)**	(111,696)	(111,495)	(85,760)	(69,245)
Net income	**$ 199,908**	$ 269,886	$ 254,591	$ 251,137	$ 202,954
Financial Ratios (unaudited)					
Rate of return on:					
Average assets	**0.54 %**	0.77 %	0.84 %	0.92 %	0.81 %
Average shareholders' equity	**12.04**	14.55	12.17	12.58	10.86
Net interest income to average earning assets	**0.96**	1.12	1.24	1.28	1.10
Net charge-offs (recoveries) to average loans	**0.07**	—	—	0.01	—
Total shareholders' equity to total assets	**4.52**	4.51	6.04	7.06	7.19
Debt to shareholders' equity (:1)	**21.10**	21.17	15.56	13.17	12.92
Allowance for credit losses on loans to total loans	**0.13**	0.06	0.05	0.04	0.06
Common equity tier 1 ratio	**8.50**	8.66	9.55	9.92	9.91
Tier 1 capital ratio	**13.12**	13.42	15.09	16.07	16.01
Total capital ratio	**13.41**	13.50	15.17	16.15	16.12
Permanent capital ratio	**13.16**	13.43	15.10	16.08	16.03
Tier 1 leverage ratio	**5.79**	5.94	6.37	7.11	7.26
Unallocated retained earnings (URE) and URE equivalents leverage ratio	**2.26**	2.50	2.73	2.99	3.06
Net Income Distributions					
Preferred stock cash dividends	**$ 50,797**	$ 46,400	$ 46,400	$ 54,818	$ 56,450
Patronage distributions declared					
Cash	**$ 121,075**	$ 215,648	$ 183,691	$ 152,562	$ 128,112
Allocated retained earnings	**27,746**	7,553	6,725	7,314	6,766

Management's Discussion & Analysis

(DOLLARS IN THOUSANDS, EXCEPT AS OTHERWISE NOTED)

The following commentary is a discussion and analysis of the financial position and the results of operations of the Farm Credit Bank of Texas (the Bank or FCBT) for the years ended December 31, 2023, 2022 and 2021. The commentary should be read in conjunction with the accompanying financial statements, notes to the financial statements (notes) and additional sections of this annual report. The accompanying financial statements were prepared under the oversight of the Bank's audit committee.

The Bank, together with its affiliated associations (Associations), are part of the federally chartered Farm Credit System (System). The district serves Texas, Alabama, Mississippi, Louisiana and most of New Mexico. The Bank provides funding to the District Associations, which, in turn, provide credit to their borrower-shareholders. As of December 31, 2023, the Bank served one Federal Land Credit Association (FLCA), 12 Agricultural Credit Associations (ACAs) and certain Other Financing Institutions (OFIs) which are not part of the System. The FLCA and ACAs are collectively referred to as Associations. See Note 1, "Organization and Operations," to the accompanying financial statements for an expanded description of the structure and operations of the Bank.

The accompanying financial statements exclude financial information of the Bank's affiliated Associations. The Bank and its Associations are collectively referred to as the "Texas District." The Bank separately publishes certain unaudited combined financial information of the Texas District, including a condensed statement of condition and statement of income, which can be found on the Bank's website at *www.farmcreditbank.com*.

Forward-Looking Information

This annual report contains forward-looking statements. These statements are not guarantees of future performance and involve certain risks, uncertainties and assumptions that are difficult to predict. Words such as "anticipates," "believes," "could," "estimates," "may," "should," "will," or other variations of these terms are intended to identify the forward-looking statements. These statements are based on assumptions and analyses made in light of experience and other historical trends, current conditions and expected future developments. However, actual results and developments may differ materially from our expectations and predictions due to a number of risks and uncertainties, many of which are beyond our control. These risks and uncertainties include, but are not limited to:.

- political, legal, regulatory, financial markets, and economic conditions and developments in the United States and abroad;
- economic fluctuations in the agricultural, rural infrastructure, international and farm-related business sectors, as well as in the general economy that can affect the availability of off-farm sources of income;
- weather-related, food safety, disease and other adverse climatic or biological conditions that periodically occur that impact agricultural productivity and income of Texas District borrowers;
- disruption of operations or disclosure of confidential information as a result of cybersecurity incidents;
- changes in United States government support of the agricultural industry and the System as a government-sponsored enterprise, as well as investor and rating agency reactions to events involving the U.S. government and government-sponsored enterprises;
- actions taken by the Federal Reserve System in implementing monetary, government and fiscal policy; and
- credit, interest rate, prepayment, and liquidity risk inherent in lending activities.

Critical Accounting Policies

The financial statements are reported in conformity with generally accepted accounting principles in the United States of America. Our significant accounting policies are critical to the understanding of our results of operations and financial position because some accounting policies require us to make complex or subjective judgments and estimates that may affect the value of certain assets or liabilities. We consider these policies critical because management has to make judgments about matters that are inherently uncertain. For a complete discussion of significant accounting policies, see Note 2, "Summary of Significant Accounting Policies," in the accompanying financial statements. The following is a summary of certain critical policies.

- *Allowance for credit losses* — Beginning on January 1, 2023, the Bank recorded an allowance for credit losses (ACL), consisting of an allowance for credit losses for loans (ACLL), reported as a reduction of loans on the Bank's balance sheet, an allowance for credit losses on unfunded commitments, including letters of credit and unused loan commitments, which is reported as a liability on the Bank's balance sheet, and the allowance for credit losses on investments, which is reported as a reduction of the investment balance on the Bank's balance sheet. These reserves are management's best estimate of the current expected credit losses over the remaining contractual life of financial assets, which takes into consideration relevant historical events, current conditions and reasonable and supportable forecasts of economic conditions that affect the collectability of the assets.

  The ACLL has two basic components: an asset-specific component involving individual loans that do not share risk characteristics with other loans, and a pooled component for estimated expected credit losses for pools of loans that share similar risk characteristics.

  Asset-specific component: Asset-specific loans are generally collateral dependent loans (including those loans for which foreclosure is probable) and nonaccrual loans. For an asset-specific loan, expected credit losses are measured as the difference between the amortized cost basis in the loan and the present value of expected future cash flows discounted at the loan's effective interest rate except that, for collateral-dependent loans, credit loss is measured as the difference between the amortized cost basis in the loan and the fair value of the underlying collateral. The fair value of the collateral is adjusted for the estimated cost to sell if repayment or satisfaction of a loan is dependent on the sale (rather than only on the operation) of the collateral.

Pooled component: Loans that are not included in the asset-specific component are evaluated collectively and segregated into loan pools considering the risk associated with the specific pool. Relevant risk characteristics include loan type and credit quality rating, or a combination of these classes. The allowance is determined based on a quantitative calculation of the expected life-of-loan loss percentage for each loan category by considering the probability of default, based on the migration of loans from performing to loss, by credit quality rating, and the loss given default, based on the aggregate net lifetime losses incurred per loan pool. The ACLL also considers factors for each loan pool to adjust for differences between the historical period used to calculate historical default and loss given default rates and expected macroeconomic forecasts. The macroeconomic forecasts incorporate macroeconomic variables, including the U.S. unemployment rate, Dow Jones Total Stock Market Index and U.S. corporate bond spreads. The Bank also considers loan and borrower characteristics, such as internal risk ratings, industry, and the remaining term of the loan, adjusted for expected prepayments. In addition to the quantitative calculation, the Bank considers the imprecision inherent in the process and methodology, emerging risk assessments and other subjective factors, which may lead to a management adjustment to the modeled ACLL results. Expected credit loss estimates also include consideration of expected cash recoveries on loans previously charged-off or expected recoveries on collateral dependent loans where recovery is expected through sale of the collateral. The economic forecasts are updated on a quarterly basis.

Prior to January 1, 2023, the allowance for credit losses on loans was determined based on a periodic evaluation of the loan portfolio, which includes loans that were impaired. Each of these individual loans was evaluated based on the borrower's overall financial condition, resources and payment record; the prospects for support from any financially responsible guarantor; and, if appropriate, the estimated net realizable value of any collateral. If the present value of expected future cash flows (or, alternatively, the fair value of the collateral) was less than the recorded investment in the loan (including accrued interest, net deferred loan fees or costs, and unamortized premium or discount), an impairment was recognized by making an addition to the allowance for loan losses with a corresponding charge to the provision for loan losses or by similarly adjusting an existing valuation allowance.

The allowance for credit losses on loans encompasses various judgments, evaluations and appraisals with respect to the loans and their underlying security that, by their nature, contain elements of uncertainty and imprecision. Changes in the reasonable and supportable macroeconomic forecasts of future conditions and the agricultural economy and the impact on borrower repayment capacity will cause these various judgments, evaluations and appraisals to change over time. Accordingly, actual circumstances could vary significantly from the Bank's expectations and predictions of those circumstances.

- *Valuation methodologies* — Management applies various valuation methodologies to assets and liabilities that often involve a significant degree of judgment, particularly when liquid markets do not exist for the particular items being valued. Quoted market prices are used when estimating fair values for certain assets for which an observable liquid market exists, such as most investment securities. Third-party valuation services are utilized by management to obtain fair values for the majority of the Bank's investments. Management utilizes significant estimates and assumptions to value items for which an observable liquid market does not exist. Examples of these items include nonperforming loans, other postretirement benefit obligations, and certain derivative and other financial instruments. These valuations require the use of various assumptions, including, among others, discount rates, repayment rates, cash flows, default rates, costs of servicing and liquidation values. The use of different assumptions could produce significantly different results, which could have material positive or negative effects on the Bank's results of operations.
- *Pensions and retirement plans* — The Bank and its affiliated Associations participate in the Texas District's defined benefit retirement plan (DB Plan). The DB Plan is noncontributory, and benefits are based on salary and years of service. As of January 1, 1996, the Bank and Associations froze participation in their defined benefit pension plan and offered defined contribution retirement plans to all employees hired subsequent to the freeze. The structure of the Texas District's single-employer DB Plan is characterized as multiemployer for participating employers' accounting purposes, since neither the assets, liabilities nor cost of any DB Plan is segregated or separately accounted for by participating employers (Bank and Associations). No portion of any surplus asset is available to any participating employer. Participating employers are jointly and severally liable for the DB Plan obligations. Upon withdrawal or termination of their participation in the DB Plan, a participating employer must pay all associated costs of its withdrawal from the DB Plan, including its unfunded liability (the difference between replacement annuities and the withdrawing employer's share of allocated DB Plan assets). As a result, participating employers of the DB Plan only recognize as cost the required contributions for the period and a liability for any unpaid contributions required for the period of their financial statements. DB Plan obligations, assets and the components of annual benefit expenses are recorded and reported upon combination only. The Bank records current contributions to the DB Plan as an expense in the current year.

  The liability and expense for other postemployment benefits is determined actuarially based on certain assumptions, including discount rate and mortality assumptions. The discount rate is used to determine the present value of our future benefit obligations. The Bank selected the discount rate by reference to the Aon AA Only Above-Median Yield Curve, actuarial analyses and industry norms. The Aon yield curves are determined based on actual corporate bond yields for bonds rated AA as of the measurement date. The discount rate at December 31, 2023, was 5.50% compared to 5.20% at December 31, 2022, and 3.15% at December 31, 2021.

OVERVIEW

General

The Bank's loan portfolio totaled $29.73 billion at December 31, 2023, a 5.17% increase from the prior year. The increase in the Bank's loan portfolio was due to an increase in the Bank's direct notes to Associations, partially offset by a decrease in the Bank's capital markets loan portfolio. The Bank's net income for 2023 was $199.9 million, a decrease of $70.0 million compared to 2022. The decrease in net income was the result of a $36.1 million decrease in net interest income, a $33.3 million increase in the provision for credit losses and a $4.9 million increase in operating expenses, partially offset by a $4.4 million increase in noninterest income. The decrease in net interest income was the result of a decrease of 21 basis points in the Bank's net interest rate spread to 0.84%, partially offset by a $1.89 billion increase in average earning assets. The decrease in net interest spread was due to an increase in the cost of debt of 154 basis points, partially offset by an increase in yields on average interest earning assets of 133 basis points.

Funding

During 2023, the System continued to have reliable access to the debt capital markets to support its mission of providing credit to farmers, ranchers and other eligible borrowers. The Federal Reserve raised the federal funds rate four times in 2023 for a total year-to-date increase of 100 basis points. As a result, funding costs for all Systemwide debt rose in 2023 due to higher Treasury yields, widening spreads and increased volatility.

Service Provider

During 2023, the Bank, in its role as an information technology provider to its affiliated Associations, continued to modernize and roll out its service offering branded FarmView®. The FarmView platform is an integrated suite of products for managing the full lending relationship. The suite of products includes sales management, origination, credit analysis, loan accounting, integrated cash management and document management solutions. The FarmView platform provides benefits directly to the converted Associations as well as their underlying borrowers.

Conditions in the Texas District

The Bank continues to fulfill its mission to support agriculture and rural communities by providing access to reliable and consistent credit in the midst of financial and macroeconomic volatility driven by factors such as elevated interest rates and persistently high inflation. Despite the challenging operating environment, credit quality at the Bank has remained strong. Volatility in risk ratings is likely to remain a concern in the near future due to the persistence of inflationary pressure, the relatively high cost of debt and an underlying recession risk.

The Consumer Price Index for All Urban Consumers increased by 3.1% for the 12-month period ending January 2024, above the long-term target of approximately 2.0%. However, recent inflation rates represent significant declines from the four-decade high of 9.1% reached in June 2022. Since July 2023, the Federal Open Market Committee (FOMC) has maintained the target federal funds rate within the 5.25 – 5.50% range. At the January 2024 FOMC meeting, the Committee stated that it does not expect it will be appropriate to reduce the target federal funds rate until it has gained greater confidence that inflation is moving sustainably toward 2.0%. Participants indicated that the policy rate was likely at or near its peak for this tightening cycle and that cuts in the federal funds rate were probable during 2024. Participants were resolute in their commitment to bring inflation down to the 2.0% long-run objective while achieving maximum employment.

On January 25, 2024, the U.S. Bureau of Economic Analysis (BEA) released an advance estimate of real gross domestic product (GDP) for the fourth quarter of 2023. U.S. real GDP increased at an annual rate of 3.3% during the fourth quarter of 2023, down from 4.9% during the previous quarter but up from 2.6% during the same period a year ago. The increase in real GDP during the fourth quarter primarily reflected higher levels of consumer spending, exports, and state and local government spending, among other categories. According to the International Monetary Fund's latest World Economic Outlook released in January 2024, U.S. real GDP growth is estimated to be 2.1% in 2024 and 1.7% in 2025, revised up from its October edition. Within the Texas District, the BEA estimated that third quarter 2023 annualized real GDP growth rates ranged from a low of 0.8% in Mississippi to a high of 7.7% in Texas. Retail trade was the leading contributor to growth in 39 states, including Texas, the state with the second-largest increase in real GDP during the third quarter of 2023. Nondurable-goods manufacturing was the leading contributor to growth in three states, including Louisiana, the state with the fifth-largest increase in real GDP.

The U.S. Bureau of Labor Statistics (BLS) indicated that the U.S. unemployment rate remained steady month-over-month (MOM) at 3.7% in January 2024, down from 3.8% in October but up from 3.4% during the same period a year ago. The December state unemployment rates in the Texas District ranged from a low of 2.6% in Alabama to a high of 4.0% in New Mexico and Texas.

The West Texas Intermediate (WTI) crude oil futures price (front-month) decreased during the fourth quarter of 2023 to an average of nearly $79 per barrel from an average of about $82 per barrel in the third quarter. The front-month WTI price similarly decreased by approximately 5.0% compared to a year ago. In the February 2024 edition of the Short-Term Energy Outlook, the U.S. Energy Information Administration estimated that the monthly average WTI spot price would be about $78 per barrel in 2024 and $75 per barrel in 2025. The WTI spot price closed at about $74 per barrel in January 2024.

On February 7, 2024, the U.S. Department of Agriculture (USDA) released its 2024 farm income forecast and updated prior-year estimates. After increasing by 30.3% year-over-year (YOY) in 2022 and reaching a record high, nominal net farm income is estimated to have decreased YOY by 16.0% to $155.9 billion in 2023 and is forecasted to continue declining by approximately 25.5% in 2024. Total production expenses are estimated to have increased by 2.3% YOY in 2023 to approximately $438.3 billion and are forecasted to continue rising by 3.8% in 2024. Direct government farm payments are estimated at $12.2 billion in 2023, down 21.8% from 2022. Additionally, direct government payments are forecasted to decrease by 15.9% in 2024. Interest expenses and livestock/poultry purchases are estimated to have seen the largest increases in 2023, while spending on fertilizer/lime/soil conditioners/fuels/oils, and feed are estimated to have declined YOY. Livestock/poultry purchases and labor expenses are forecasted to exhibit the largest increases in 2024. Farm sector assets are estimated to have increased by 6.6% in 2023 and are forecasted to continue rising by 4.7% in 2024, following expected increases in the value of farm real estate assets. Similarly, equity is forecasted to have increased by 6.8% in 2023 and to continue improving by 4.7% in 2024. The U.S. farm sector debt-to-asset ratio is estimated to have improved YOY from 12.9% in 2022 to 12.7% in 2023 but is forecasted to deteriorate slightly to 12.8% in 2024.

According to USDA's February 2024 World Agricultural Supply and Demand Estimates (WASDE) report, average farm prices for corn, wheat, and soybeans are estimated to have increased by approximately 9.0%, 15.7%, and 6.8%, respectively, YOY during the 2022/23 marketing year, while the average farm price for upland cotton is estimated to have declined by 7.2%. The prices of these crops are projected to decrease during the 2023/24 season from a range of nearly 9.2% (cotton) to 26.6% (corn). Barrow and gilt, broiler, and turkey prices are estimated to have decreased by 17.7%, 11.5%, and 9.3%, respectively, YOY in 2023, while steer prices are estimated to have risen by an average of 21.6%. Relatively small price increases (i.e., less than 2.6%) are projected for steers, barrows and gilts, and broilers in 2024, while turkey prices are projected to decline YOY by nearly 24.0%. USDA estimates that all-milk prices declined by 19.2% from an average of about $25.3 per hundredweight (/cwt.) in 2022 to an estimated average of $20.5/cwt. in 2023. All-milk prices are projected to increase in 2024 by about 2.3%.

Front-month random length lumber futures prices increased over the fourth quarter of 2023 by approximately 14.2%, leading to a YOY increase of 16.8% in 2023. Lumber futures prices were volatile in 2023, and this volatility will likely persist in 2024 as elevated interest rates continue to affect construction-related demand. Front-month lumber prices decreased by about 1.9% MOM in January 2024 and were down by 12.9% YOY.

Lack of adequate precipitation and soil moisture was a concern for agricultural producers across several regions of the country during 2023. The year was among the driest and hottest on record for many cities. In 2024, the National Weather Service indicates that a strong El Niño is expected to continue through the rest of winter into early spring. The seasonal drought outlook from January through March 2024 indicates that an active southern storm track associated with El Niño conditions favors drought improvement and removal for parts of eastern Texas. Despite the likelihood that the southern region will see at least some precipitation associated with El Niño, these events are likely to be fast-moving. Drought persistence is expected for much of the Southern Plains.

Agricultural producers and processors were negatively impacted by several factors during 2023, including volatile commodity prices, high input costs, export market disruptions, geopolitical challenges, and adverse weather conditions. The Texas District's loan portfolio is well-supported by industry diversification and conservative advance rates. Additionally, a high percentage of the Texas Districts's borrowers primarily rely on non-farm sources of income to repay their loans.

Adoption of New Accounting Standard

Effective January 1, 2023, the Bank adopted the current expected credit losses (CECL) accounting guidance that replaced the incurred loss guidance. CECL established a single allowance framework for all financial assets carried at amortized cost, certain off-balance sheet credit exposures, and changed the impairment recognition model for available-for-sale securities. The guidance requires management to consider in its estimate of allowance for credit losses (ACL) relevant historical events, current conditions and reasonable and supportable forecasts that affect the collectibility of the assets. The adoption of this guidance resulted in a cumulative effect transition adjustment at January 1, 2023 reflecting an increase in the Bank's ACL of $8.4 million on outstanding loans and unfunded commitments and a corresponding decrease in retained earnings. The adoption did not warrant a cumulative effect transition adjustment for the Bank's available-for-sale securities.

RESULTS OF OPERATIONS

Net Income

The Bank's net income of $199.9 million for the year ended December 31, 2023, reflects a decrease of 25.93% from 2022, while 2022 net income of $269.9 million increased by 6.01% from 2021.

The return on average assets was 0.54% for the year ended December 31, 2023, compared to 0.77% and 0.84% for the years ended December 31, 2022, and December 31, 2021, respectively.

Changes in the major components of net income for the referenced periods are outlined in the table below:

	Year Ended December 31,	
	2023 vs. 2022	2022 vs. 2021
Net income (prior period)	**$ 269,886**	$ 254,591
Increase due to:		
Increase in interest income	**535,505**	264,173
Increase in interest expense	**(571,650)**	(245,822)
(Decrease) increase in net interest income	**(36,145)**	**18,351**
Increase in provision for credit losses	**(33,274)**	(2,855)
Increase (decrease) in noninterest income	**4,354**	(1,634)
(Increase) decrease in noninterest expense	**(4,913)**	1,433
Total change in net income	**(69,978)**	15,295
Net income	**$ 199,908**	$ 269,886

Discussion of the changes in components of net income is included in the following narrative.

Interest Income

Total interest income for the year ended December 31, 2023, was $1.45 billion, an increase of $535.5 million, or 58.59%, compared to 2022. Total interest income for the year ended December 31, 2022, was $914.0 million, an increase of $264.2 million, or 40.65%, compared to 2021.

The increase in interest income for 2023 was due to an increase in average interest earning assets of $1.89 billion and a 133 basis point increase in the yield on average interest earning assets. The increase for 2022 was due primarily to a $4.79 billion increase in average interest earning assets as well as a 47 basis point increase in the yield on average interest earning assets.

The following table illustrates the impact that volume and yield changes had on interest income over these periods:

	Year Ended December 31,	
	2023 vs. 2022 (1)	2022 vs. 2021 (1)
Increase in average earning assets	**$ 1,887,730**	$ 4,793,399
Average yield (prior year)	**2.66%**	2.19%
Interest income variance attributed to change in volume	**50,267**	104,684
Average earning assets (current year)	**36,296,293**	34,408,563
Increase in average yield	**1.33%**	0.47%
Interest income variance attributed to change in yield	**485,238**	159,489
Net change in interest income	**$ 535,505**	$ 264,173

(1) The change in interest income is not solely due to changes in volume or rate and has been allocated in proportion to the absolute dollar amount of the change in volume and rate.

Interest Expense

Total interest expense for the year ended December 31, 2023, was $1.10 billion, an increase of $571.7 million, or 108.30%, compared to the same period of 2022. Total interest expense for the year ended December 31, 2022, was $527.9 million, an increase of $245.8 million, or 87.16%, compared to the same period of 2021. The increase in interest expense for 2023 was due primarily to an increase of $2.01 billion in interest-bearing liabilities as well as a 154 basis point increase in the average cost of debt. The increase in 2022 was due primarily to the effects of a 60 basis point increase in the average cost of debt and an increase of $5.08 billion in interest-bearing liabilities. Average interest-bearing liabilities increased as a result of the growth in average interest-earnings assets.

During 2023, 2022 and 2021, the Bank reduced its interest expense by calling and replacing fixed-rate debt totaling $375.0 million, $125.0 million and $3.98 billion, respectively. The Bank also called and replaced $775.0 million and $25.0 million in callable floating rate notes during 2023 and 2022, respectively. During the years ended December 31, 2023, 2022 and 2021, the Bank recognized concession expense of $915 thousand, $174 thousand and $7.2 million, respectively.

The following table illustrates the impact that volume and rate changes had on interest expense over these periods:

	Year Ended December 31,	
	2023 vs. 2022 [(1)]	2022 vs. 2021 [(1)]
Increase in average interest-bearing liabilities	**$ 2,007,825**	$ 5,080,615
Average rate (prior year)	**1.61%**	1.01%
Interest expense variance attributed to change in volume	**32,252**	51,206
Average interest-bearing liabilities (current year)	**34,891,926**	32,884,101
Increase (decrease) in average rate	**1.54%**	0.60%
Interest expense variance attributed to change in rate	**539,398**	194,616
Net change in interest expense	**$ 571,650**	$ 245,882

(1) The change in interest expense is not solely due to changes in volume or rate and has been allocated in proportion to the absolute dollar amount of the change in volume and rate.

Net Interest Income

Net interest income, the excess of interest income over interest expense, decreased by $36.1 million from 2022 to 2023, and increased by $18.4 million from 2021 to 2022. The decrease in net interest income in 2023 is primarily due to a 21 basis point decrease in the interest rate spread, the difference between the average rate received on interest-earning assets and the average rate paid on interest-bearing liabilities, partially offset by the impact of an increase in average interest earning assets of $1.89 billion. The increase in average interest earning assets was driven by growth in the direct notes to Texas District Associations, partially offset by declines in the Bank's capital markets loan portfolio.

Net interest income in 2022 increased $18.4 million from 2021. The increase in 2022 was due to the effects of a $4.79 billion increase in average interest-earning assets, partially offset by a 13 basis point decrease in the interest rate spread. The Bank's increase in average interest earning assets included growth in direct notes to Texas District Associations and the Bank's capital markets loan portfolio and the investment portfolio.

ANALYSIS OF NET INTEREST INCOME

	2023			2022			2021		
	Average Balance	**Interest**	**Average Yield**	Average Balance	Interest	Average Yield	Average Balance	Interest	Average Yield
Loans	**$ 29,234,034**	**$ 1,212,718**	**4.15%**	$ 27,573,140	$ 793,581	2.88%	$ 23,469,353	$ 577,290	2.46%
Investments	**7,062,259**	**236,801**	**3.35%**	6,835,423	120,433	1.76%	6,145,810	72,551	1.18%
Total earning assets	**36,296,293**	**1,449,519**	**3.99%**	34,408,563	914,014	2.66%	29,615,163	649,841	2.19%
Interest-bearing liabilities	**34,891,926**	**1,099,502**	**3.15%**	32,884,101	527,852	1.61%	27,803,486	282,030	1.01%
Impact of capital	**$ 1,404,367**			$ 1,524,462			$ 1,811,677		
Net interest spread			**0.84%**			1.05%			1.18%
Impact of capital			**0.12%**			0.07%			0.06%
Net Interest Income and margin		**$ 350,017**	**0.96%**		$ 386,162	1.12%		$ 367,811	1.24%

Provision for Credit Losses

As previously discussed, on January 1, 2023, the Bank adopted the CECL accounting guidance for determining the allowance for credit losses. Prior to January 1, 2023, the allowance for loan losses was based on probable and estimable losses inherent in the loan portfolio.

The Bank's provision for credit losses on loans for 2023 was $37.9 million, an increase of $33.3 million from the $4.6 million provision for credit losses in 2022. The provision for credit losses for the twelve months ended December 31, 2023, is primarily due to an increase in specific reserves of $32.7 million resulting from credit deterioration among select borrowers in the agribusiness, production and intermediate-term and energy sectors. The Bank also increased general reserves by $5.2 million due to more challenging economic forecasts than the prior year.

The Bank's provision for credit losses for 2022 was $4.6 million, an increase of $2.9 million from the $1.7 million provision for credit losses recorded in 2021. The provision for credit losses for the twelve months ended December 31, 2022, primarily reflects an increase in specific reserves for two borrowers in the agribusiness sector as well as increases in general reserves due to isolated credit deterioration and loan growth.

The Bank's provision for credit losses for 2021 was $1.7 million, an increase of $644 thousand from the $1.1 million provision for credit losses recorded for 2020. The provision for credit losses was mainly driven by $1.3 million in reserves for credit deterioration on a limited number of borrowers within the electric utility sector. In addition to the specific reserves, the Bank reversed $1.5 million in reserves associated with the COVID-19 pandemic and added $1.9 million in general provision due to loan growth and some credit deterioration on select loans in the agribusiness sector.

Noninterest Income

Noninterest income for the year ended December 31, 2023, was $50.8 million, an increase of $4.4 million, or 9.38%, compared to 2022. The increase was driven by a $5.6 million increase in patronage income, a $2.0 million gain on extinguishment of debt, a $1.8 million increase in fees for services related to Associations and a $1.2 million gain on a swap unwind and , partially offset by higher interest payments on collateral received from counterparties for cleared derivatives and valuation losses on the Rural Business Investment Companies (RBICs).

Noninterest income for the year ended December 31, 2022, was $46.4 million, a decrease of $1.6 million, or 3.40%, compared to 2021. The decrease reflected lower prepayment fees as the loan prepayment rate decreased from the rising interest rate environment, partially offset by higher patronage income.

Noninterest income for the year ended December 31, 2021, was $48.0 million, an increase of $842 thousand, or 1.78%, compared to 2020. The increase was primarily due to an increase of $4.0 million in net gains on investment valuations in RBICs and a $1.5 million increase in fees for loan-related services during 2021, partially offset by a decrease in other income.

Noninterest Expense

Noninterest expense totaled $163.0 million for 2023, an increase of $4.9 million, or 3.11%, from 2022. The increase in noninterest expenses reflects an increase in occupancy and equipment of $6.1 million due to an increase in computer software-related depreciation, partially offset by lower salaries and employee benefits of $1.0 million.

Noninterest expense totaled $158.1 million for 2022, a decrease of $1.4 million, or 0.90%, from 2021. The decrease reflected lower professional fees of $8.1 million, partially offset by an increase of $6.9 million in Farm Credit System Insurance Corporation (FCSIC) premiums due to a premium rate of 20 basis points and increased outstanding debt.

Noninterest expense totaled $159.5 million for 2021, an increase of $26.6 million, or 19.99%, from 2020. The increase primarily consisted of a $7.0 million increase in salaries and employee benefits expense, a $6.8 million increase in FCSIC insurance premiums and a $3.7 million increase in occupancy and equipment due to computer software maintenance expense and related depreciation.

The expense for FCSIC insurance premiums is directly impacted by the premium rate assessed by FCSIC. The FCSIC board meets periodically throughout the year to review premium rates. The premium rates were 18 basis points in 2023, 20 basis points in 2022 and 16 basis points in 2021. In February 2024, FCSIC determined that it would assess a premium rate of 10 basis points for 2024.

Operating expense (salaries and employee benefits, occupancy and equipment, FCSIC premiums, and other operating expenses) statistics are set forth below for each of the three years ended December 31:

	2023	2022	2021
Excess of net interest income over operating expense	**$ 186,998**	$ 228,056	$ 208,272
Operating expense as a percentage of net interest income	**46.6 %**	40.9 %	43.4 %
Operating expense as a percentage of net interest income and noninterest income	**40.7**	36.6	38.4
Operating expense as a percentage of average loans	**0.56**	0.57	0.68
Operating expense as a percentage of average earning assets	**0.45**	0.46	0.54

CORPORATE RISK PROFILE

Overview

The Bank is in the business of funding and participating in agricultural and other loans which requires us to take certain risks in exchange for compensation for the risks undertaken. Management of risks inherent in our business is essential for our current and long-term financial performance. Our goal is to mitigate risk, where appropriate, and to properly and effectively identify, measure, price, monitor and report risks in our business activities.

The major types of risk to which we have exposure are:

- *structural risk* — risk inherent in our business and related to our structure (an interdependent network of lending institutions);
- *credit risk* — risk of loss arising from an obligor's failure to meet the terms of its contract or failure to perform as agreed;
- *interest rate risk* — risk that changes in interest rates may adversely affect our operating results and financial condition;
- *liquidity risk* — risk of loss arising from the inability to meet obligations when they come due without incurring unacceptable losses;
- *operational risk* — risk of loss resulting from inadequate or failed internal processes or systems, errors by employees, external cyber risk and data security or external events;
- *reputational risk* — risk of loss resulting from events, real or perceived, that shape the image of the Bank, the System or any System entities, including the impact of investors' perceptions about agriculture, the reliability of district or System financial information, or the overt actions of any district or System institution; and
- *political risk* — risk of loss of support for the System and agriculture by the federal and state governments.

Structural Risk Management

Structural risk results from the fact that the Bank, along with its related Associations, is part of the Farm Credit System (System), which is composed of banks and associations that are cooperatively owned, directly or indirectly, by their borrowers. While System institutions are financially and operationally interdependent, this structure at times requires action by consensus or contractual agreement. Further, there is structural risk in that only the banks are jointly and severally liable for the payments of Systemwide debt securities. Although capital at the association level reduces a bank's credit exposure with respect to its direct loans to its affiliated associations, this capital may not be available to support the payment of principal and interest on Systemwide debt securities.

In order to mitigate this risk, the System utilizes two integrated contractual agreements — the Amended and Restated Contractual Interbank Performance Agreement (CIPA), and the Third Amended and Restated Market Access Agreement (MAA). Under provisions of the CIPA, a score (CIPA score) is calculated that measures the financial condition and performance of each district using various ratios that take into account the Texas District's and Bank's capital, asset quality, earnings, interest-rate risk and liquidity. The CIPA score is then compared against the agreed-upon standard of financial condition and performance that each district must achieve and maintain. The measurement standard established under the CIPA is intended to provide an early-warning mechanism to assist in monitoring the financial condition of each district. The performance standard under the CIPA is based on the average CIPA score over a four-quarter period.

The MAA is designed to provide for the timely identification and resolution of individual bank financial issues and establishes performance criteria and procedures for the banks that provide operational oversight and control over a bank's access to System funding.

As required by the the CIPA, the banks and the Federal Farm Credit Banks Funding Corporation (Funding Corporation) undertake a periodic formal review of the CIPA to consider whether any amendments are appropriate. In connection with the most recent review, the banks and the Funding Corporation agreed to enter into the Amended and Restated CIPA, which was effective on January 1, 2024.

Periodically, the CIPA model and the MAA performance criteria are reviewed to take into consideration current performance standards in the financial services industry or regulatory changes. As a result of the changes to regulatory capital ratio requirements that became effective January 1, 2017, the performance criteria set forth in the MAA are as follows:

- the defined CIPA scores,
- the tier 1 leverage ratio of a bank, and
- the total capital ratio of a bank.

A bank's tier 1 leverage ratio is tier 1 capital (primarily unallocated retained earnings, the bank's common stock and preferred stock less certain regulatory required deductions) divided by non-risk adjusted assets. A bank's total capital ratio is the sum of the bank's common equity tier 1 capital, additional tier 1 capital and tier 2 capital elements, minus regulatory deductions and adjustments, divided by risk-adjusted assets.

If a bank fails to meet the above performance criteria, it will be placed into one of three categories. Each category gives the other System banks progressively more control over a bank that has declining financial performance under the MAA performance criteria. A "Category I" bank is subject to additional monitoring and reporting requirements; a "Category II" bank's ability to participate in issuances of Systemwide debt securities may be limited to refinancing maturing debt obligations; and a "Category III" bank may not be permitted to participate in issuances of Systemwide debt securities. A bank exits these categories by returning to compliance with the agreed-upon performance criteria.

The criteria for the tier 1 leverage ratio and the total capital ratio are:

	Tier 1 Leverage Ratio	Total Capital Ratio
Category I	<5.0%	<10.5%
Category II	<4.0%	<8.0%
Category III	<3.0%	<7.0%

During the year ended December 31, 2023, all System banks met the agreed-upon standards for the tier 1 leverage ratio and total capital ratio required by the MAA. As of December 31, 2023, all System banks met the agreed-upon standard of financial condition and performance required by the CIPA. During the year ended December 31, 2023, the System banks met the defined CIPA score required by the MAA.

Credit Risk Management

Credit risk arises from the potential inability of an obligor to meet its repayment obligation and exists in our outstanding loans, letters of credit, unfunded loan commitments, investment portfolio and derivative counterparty credit exposures. We manage credit risk associated with our lending activities through an assessment of the credit risk profile of individual obligors. We set our own underwriting standards and lending policies, approved by the Board of Directors, that provide direction to loan officers. Underwriting standards include, among other provisions, an expectation that lending decisions include evaluations of:

- *character* — borrower integrity and credit history;
- *capacity* — repayment capacity of the borrower based on cash flows from operations or other sources of income;
- *collateral* — protects the lender in the event of default and represents a potential secondary source of loan repayment;
- *capital* — ability of the operation to survive unanticipated risks; and
- *conditions* — structure of the transaction, including limitations on usage of loan funds, financial covenants and monitoring requirements.

The retail credit risk management process begins with an analysis of the borrower's credit history, repayment capacity and financial position. Repayment capacity focuses on the borrower's ability to repay the loan based on cash flows from operations or other sources of income, including non-farm income. Real estate loans with terms greater than 10 years must be secured by first liens on real estate. As required by Farm Credit Administration regulations, each institution that makes loans on a secured basis must have collateral evaluation policies and procedures.

This credit risk-rating process uses a two-dimensional loan rating structure, incorporating a 14-point probability of default rating scale to identify and track the probability of borrower default and a separate 4-point scale addressing loss given default. The 14-point probability of default rating scale provides for nine "acceptable" categories, one "other assets especially mentioned" (OAEM) category, two "substandard" categories, one "doubtful" category and one "loss" category. The loss given default scale establishes ranges of anticipated principal loss if the loan defaults. This process incorporates objective and subjective criteria to identify inherent strengths, weaknesses and risks in a particular relationship. Existing borrower relationships are periodically reviewed to ensure that the assigned probability of default and loss given default ratings appropriately reflect the risk of the transaction.

By buying and selling loans or interests in loans to or from other institutions within the System or outside the System, we limit our exposure to individual borrowers and industries. This also allows us to manage growth and capital, and to improve geographic diversification.

Portfolio credit risk is also evaluated with the goal of managing the concentration of credit risk. Concentration risk is reviewed and measured by industry, commodity, geography and customer limits.

Loans

The Bank's loan portfolio consists of direct notes receivable from its affiliated Associations and qualifying other financing institutions (OFIs), and the Bank's capital markets loan portfolio. See Note 1, "Organization and Operations," Note 2, "Summary of Significant Accounting Policies," and Note 4, "Loans and Allowance for Credit Losses on Loans," to the accompanying financial statements for further discussions.

The Bank's capital markets loan portfolio predominantly includes participations, syndications and purchased whole loans, along with other financing structures within our lending authorities. The Bank also refers to the capital markets portfolio as participations purchased. In addition to purchasing loans from our Associations, which may exceed their hold limits, the Bank seeks the purchase of participations and syndications originated outside of the Texas District's territory by other System institutions, commercial banks and other lenders. Our capital markets loan portfolio depends to a significant degree on our relationships with other Farm Credit institutions. These loans may be held as earning assets of the Bank or sub-participated to the associations or to other System entities.

Gross loan volume of $29.73 billion at December 31, 2023, reflected an increase of $1.46 billion, or 5.17%, from December 31, 2022. The increase in the loan portfolio from 2022 to 2023 was attributable to a $1.47 billion increase in the Bank's direct loans to Associations and OFIs. Gross loan volume of $28.26 billion at December 31, 2022, reflected an increase of $2.59 billion, or 10.09%, from December 31, 2021. The increase in the loan portfolio from 2021 to 2022 was attributable to a $1.35 billion increase in the Bank's capital markets loan portfolio and a $1.24 billion increase in the Bank's direct loans to Associations and OFIs.

The Bank has purchased loan participations and Federal Agricultural Mortgage Corporation (Farmer Mac) guaranteed agricultural mortgage-backed securities (AMBS) from Associations in Capitalized Participation Pool (CPP) program transactions. CPP purchases result in pay downs on the Associations' direct notes at the time of purchase. There were no CPP loan purchases for the year ended December 31, 2023. CPP loans held at December 31, 2023, totaled $90.6 million and were included in loans on the balance sheet. The balance of the Farmer Mac AMBS CPP was $8.5 million at December 31, 2023, and is included in investment securities on the balance sheet.

The Bank also purchased loans from Associations in Non-Capitalized Participation Pool (NCPP) program transactions. NCPP purchases result in pay downs on the Associations' direct notes at the time of purchase. NCPP loan purchases for the year ended December 31, 2023, totaled $50.6 million with $1.0 million in net stock retirements. NCPP loans held at December 31, 2023, totaled $198.7 million and are included in loans on the balance sheet.

The following table presents each loan category as a percentage of the total loan portfolio:

	December 31,		
	2023	2022	2021
Direct notes receivable from Associations and OFIs	**70.7 %**	69.2 %	71.3 %
Participations purchased	**29.3**	30.8	28.7
Total	**100.0 %**	100.0 %	100.0 %

The following table discloses the credit quality of the Bank's loan portfolio:

	December 31,		
	2023	2022	2021
Acceptable	**99.0 %**	99.4 %	99.1 %
OAEM (special mention)	**0.5**	0.3	0.7
Substandard/Doubtful	**0.5**	0.3	0.2
Total	**100.0 %**	100.0 %	100.0 %

The acceptable loans credit quality classification (as a percentage of total loans) as of December 31, 2023, decreased slightly as compared to December 31, 2022. Acceptable loans credit quality classification (as a percentage of total loans) as of December 31, 2022 increased slightly as compared to December 31, 2021.

The increase in special mention loans credit quality classification (as a percentage of total loans) as of December 31, 2023 compared to December 31, 2022, was primarily due to downgrades of loans from acceptable, driven by isolated credit deterioration in the agribusiness, production and intermediate-term and energy sectors as well as select credits with larger exposures. The deterioration does not imply a larger potential migration across the loan portfolio.

The Bank's capital markets loan portfolio's concentration of credit risk in various commodities is shown in the following table at December 31:

	Percentage of Portfolio		
Commodity Group	**2023**	2022	2021
Rural electric	**14 %**	15 %	16 %
Livestock	**12**	11	12
Dairy	**8**	9	10
Communications	**7**	7	7
Miscellaneous food products	**6**	7	6
Grain mill products	**6**	6	6
Meat products	**5**	5	5
Beverages	**4**	4	3
Timber	**3**	3	3
Other	**35**	33	32
Total	**100 %**	100 %	100 %

The diversity of states underlying the Bank's capital markets loan portfolio is reflected in the following table:

	December 31,		
States**	**2023**	2022	2021
Texas	**17 %**	16 %	19 %
California	**7**	8	7
Illinois	**6**	7	5
Pennsylvania	**4**	4	4
Colorado	**4**	4	4
All other states	**62**	61	61
Total	**100 %**	100 %	100 %

** In all presentations of geographic distribution in this annual report, the distribution is based on the state in which the borrower is headquartered and may not be representative of their operations or business activities.

The balance of the Bank's Association direct notes sold to another System bank was $4.35 billion at both December 31, 2023 and 2022 and $3.85 billion at December 31, 2021.

Association Direct Notes and Association Loan Portfolios

The Bank's loan portfolio consisted of 70.7% of direct note receivables from Associations and OFIs at December 31, 2023. Terms of direct notes to Associations and OFIs are specified in a separate general financing agreement between each Association and OFI and the Bank, and all assets of each Association secure the direct notes to the Bank. A new general financing agreement between the Bank and each Association and OFI was executed and became effective October 1, 2023. The terms of the new general financing agreement were substantially the same terms as the previous general financing agreement which was executed in 2020.

Each Association is a federally chartered instrumentality of the United States and is regulated by the Farm Credit Administration (FCA). See Note 1, "Organization and Operations," to the accompanying financial statements for further discussion of the Farm Credit System.

Effective December 1, 2023, two of the Bank's affiliated Associations, Ag New Mexico Farm Credit Services, ACA and Lone Star, ACA, merged and are doing business as AgTrust Farm Credit, ACA.

Direct notes from the Associations located in Texas represent the majority of the Bank's direct notes from all Associations. However, these notes are collateralized by a diverse loan portfolio, both in terms of geography and underlying commodities, which helps to mitigate the concentration risk often associated with one state or locale. Associations in each state have commodity diversification that is being augmented by purchases of loan participations.

The credit exposure of the Bank's loans to Associations, which are evidenced by direct notes with full recourse, is dependent on the Associations' creditworthiness and the ability of their borrowers to repay loans made to them. The credit risk to the Bank is mitigated by diversity in the Associations' loan portfolios in terms of underlying collateral and repayment sources, geography and range of individual loan amounts. In addition, the risk-bearing capacities of the Associations are assessed quarterly by the Bank. Each Association maintains an allowance for credit losses on loans determined by its management and is capitalized to serve its unique market area. Associations are subject to FCA regulations concerning minimum capital, loan underwriting and portfolio management, and are audited annually by independent auditors. In addition, Associations are required by the general financing agreement with the Bank to provide copies of their risk-based internal credit review reports and other audit/examination reports. The Associations are required to maintain a risk-based internal credit review program including procedures addressing: reviewer qualification and independence, review frequency, accuracy of risk ratings, credit administration, regulatory compliance, scope selection, documentation of audit committee approval of reviewers and audit committee review of the internal control reports. The Bank completes an annual risk-based review of Association loan portfolios to verify the accuracy of assigned risk ratings and, in certain cases, the appropriateness of lending and credit administration practices.

As of December 31, 2023, all Associations, except for one, were in compliance with their general financing agreements with the Bank. The Association, with a direct note payable to the Bank of approximately $619 million, defaulted on two of the covenants in the general financing agreement with the Bank. The Bank waived the covenant violations in February 2024. The event of default is not expected to have an adverse impact on the Bank's or District's financial condition or results of operations. The credit quality designation for the direct note payable remained classified as acceptable and no allowance for credit losses has been recorded for the direct note payable.

Loans held by the combined Associations totaled $28.96 billion at December 31, 2023, an increase of $1.30 billion, or 4.70%, from loan volume at December 31, 2022. In 2022 and 2021, Association loan volume increased by $1.88 billion and $3.71 billion, respectively.

The combined Associations' concentration of credit risk in various agricultural commodities is shown in the following table at December 31:

	Percentage of Portfolio		
Commodity Group	**2023**	2022	2021
Livestock	**39 %**	40 %	40 %
Crops	**16**	16	16
Timber	**7**	7	8
Cotton	**4**	4	5
Dairy	**5**	4	4
Poultry	**3**	3	4
Rural home	**1**	1	1
Other	**25**	25	22
Total	**100 %**	100 %	100 %

The diversity of states underlying the combined Associations' loan portfolio is reflected in the following table:

	December 31,		
States	**2023**	2022	2021
Texas	**64 %**	64 %	66 %
Mississippi	**7**	7	7
Alabama	**7**	8	8
Louisiana	**4**	4	4
All other states	**18**	17	15
Total	**100 %**	100 %	100 %

The combined Associations' loans by size are shown in the following table:

Size (thousands)	December 31, 2023
<$250	**14 %**
$250-$500	**12**
$500-$1,000	**13**
$1,000-$5,000	**32**
$5,000-$25,000	**25**
$25,000-$100,000	**4**
Total	**100 %**

Credit quality at the Associations remained strong, with loans classified as "acceptable" or "other assets especially mentioned" (special mention) as a percentage of total loans of 99.2%, 99.2% and 99.1% at December 31, 2023, 2022 and 2021, respectively. Association nonearning assets as a percentage of total loans at December 31, 2023, were 0.44%, compared to 0.56% and 0.44% at December 31, 2022 and 2021, respectively.

From the perspective of the Texas District, the loan portfolio consists only of retail loans. The diversity of the commodity types and income sources supporting Texas District loan repayment further mitigates credit risk at the Bank.

The following table illustrates the Texas District's loan portfolio by major commodity segments at December 31:

	Percentage of Portfolio		
Commodity Group	**2023**	2022	2021
Livestock	**33 %**	33 %	33 %
Crops	**14**	14	14
Timber	**6**	6	7
Dairy	**6**	6	6
Cotton	**3**	3	4
Poultry	**3**	3	3
Rural home	**1**	1	1
Other	**34**	34	32
Total	**100 %**	100 %	100 %

The following table reflects the Texas District's geographic distribution, by major states, at December 31:

	Percentage of Portfolio		
States	**2023**	2022	2021
Texas	**53 %**	53 %	55 %
Alabama	**6**	6	7
Mississippi	**5**	6	6
Louisiana	**4**	4	4
California	**3**	4	3
All other states	**29**	27	25
Total	**100 %**	100 %	100 %

High-Risk Assets

Nonperforming loan volume is composed of nonaccrual loans and loans 90 days past due still accruing interest. High-risk assets consist of nonperforming loans and other property owned (OPO).

The following table discloses the components of the Bank's high-risk assets at December 31:

	2023	2022	2021
Nonaccrual loans	**$ 43,025**	$ 29,994	$ 5,753
Loans past due 90 days or more and still accruing interest	**—**	—	—
Total nonperforming loans	**43,025**	29,994	5,753
Other property owned	**$ —**	—	—
Total high-risk assets	**43,025**	$ 29,994	$ 5,753

High-risk assets at December 31, 2023, increased by $13.0 million, or 43.45%, from $30.0 million at December 31, 2022. At December 31, 2023, $5.0 million, or 11.72%, were current as to principal and interest, compared to $25.4 million, or 78.94% at December 31, 2022. There were no OPO balances at December 31, 2023, December 31, 2022, and December 31, 2021.

The increase in nonaccrual loans at December 31, 2023, resulted from credit deterioration among select borrowers in the real estate mortgage and production and intermediate-term sectors. The increase in nonaccrual loans at December 31, 2022, was primarily attributable to isolated credit deterioration in the agribusiness sector.

Allowance for Credit Losses on Loans and Allowance for Credit Losses on Unfunded Commitments

As previously discussed, on January 1, 2023, the Bank adopted the CECL accounting guidance for determining the allowance for credit losses. Prior to January 1, 2023, the allowance for credit losses was based on probable and estimable losses inherent in the loan portfolio.

The allowance for credit losses on loans at December 31, 2023, totaled $37.9 million, compared to $15.7 million at December 31, 2022, and $11.9 million at December 31, 2021. Excluding the impact of the adoption of the CECL accounting guidance of $8.4 million as previously discussed, the increase during 2023 was primarily due to an increase in specific reserves and related charge-offs resulting from credit deterioration among select borrowers in the agribusiness, production and intermediate-term and energy sectors. The Bank also increased general reserves due to more challenging economic forecasts than the prior year. The allowance for credit losses on unfunded commitments on letters of credit (LOC) and unfunded commitments totaled $5.0 million, $2.1 million and $1.4 million at December 31, 2023, 2022 and 2021, respectively. The allowance for credit losses on loans and the allowance for credit losses on unfunded commitments in its entirety is related to risks identified in the Bank's participation portfolio.

The following table provides an analysis of key statistics related to the allowance for credit losses on loans and allowance for credit losses on unfunded commitments at December 31:

	2023	2022	2021
Allowance for credit losses on loans and allowance for credit losses on unfunded commitments as a percentage of:			
Average loans	**0.15 %**	0.06 %	0.06 %
Loans at year end			
Total loans	**0.14**	0.06	0.05
Participations	**0.49**	0.20	0.18
Nonaccrual loans	**99.75**	59.21	231.17
Total nonperforming loans	**99.75**	55.17	165.55
Net charge-offs (recoveries) to average loans	**0.07**	—	—
Provision expense to average loans	**0.13**	0.02	0.01

The activity in the allowance for credit losses for loans and the allowance for credit losses on unfunded commitments is discussed further in Note 4, "Loans and Reserves for Credit Losses," to the accompanying financial statements.

Interest Rate Risk Management

Asset/liability management is the Bank's process for directing and controlling the composition, level and flow of funds related to the Bank's and Texas District's interest-rate-sensitive assets and liabilities. The Bank is able to manage the balance sheet composition by using various debt issuance strategies and hedging transactions to match its asset cash flows. Management's objective is to generate adequate and stable net interest income in a changing interest rate environment.

The Bank uses a variety of techniques to manage its financial exposure to changes in market interest rates. These include monitoring the difference in the maturities or repricing cycles of interest-rate-sensitive assets and liabilities; simulating changes in net interest income under various interest rate scenarios; and monitoring the change in the market value of interest-rate-sensitive assets and liabilities under various interest rate scenarios. The Bank measures interest rate risk on a quarterly basis.

The interest rate risk inherent in an Association's loan portfolio is substantially mitigated through its funding relationship with the Bank. The Bank manages the Texas District's interest rate risk through its direct loan pricing and funding processes. Under the Farm Credit Act of 1971, as amended, an Association is obligated to borrow only from the Bank unless the Bank approves borrowing from other funding sources. An Association's indebtedness to the Bank, under a general financing agreement between the Bank and the Association, represents demand borrowings by the Association to fund the majority of its loan advances to Association members and is secured by the total assets of the Association.

The Bank's net interest income is determined by the difference between income earned on loans and investments and the interest expense paid on funding sources, typically Systemwide bonds and discount notes. The Bank's level of net interest income is affected by both changes in market interest rates and timing differences in the maturities or repricing cycles of interest-bearing assets and liabilities. Depending upon the direction and magnitude of changes in market interest rates, the Bank's net interest income may be affected either positively or negatively by the mismatch in the maturity or the repricing cycle of interest-rate-sensitive assets and liabilities.

The Bank maintains a loan pricing philosophy that loan rates should be based on competitive market rates of interest. The Associations offer a wide variety of products, including SOFR- and prime-indexed variable-rate loans and loans with fixed-rate terms ranging from under one year to 30 years. The interest rates on these loans are directly related to the Bank's cost to issue debt in the capital markets and a credit spread added for borrower risk.

The Bank offers an array of loan programs to associations that are designed to meet the needs of the Associations' borrowers. These loan programs have varying repayment terms, including fixed and level principal payments, and a choice of payment frequencies, such as monthly, quarterly, semiannual and annual payments. Additionally, the Bank offers a choice of prepayment options to meet customer needs.

FCBT uses complex modeling tools to manage and measure the risk characteristics of its earning assets and liabilities, including gap and simulation analyses. The following interest rate gap analysis sets forth the Bank's interest-earning assets and interest-bearing liabilities outstanding as of December 31, 2023, which are expected to mature or reprice in each of the future time periods shown:

Interest Rate Gap Analysis

as of December 31, 2023

	Interest-Sensitive Period						
	One Month or Less	More Than One Through Six Months	More Than Six Through Twelve Months	**Total Twelve Months or Less**	More Than One Year but Less Than Five Years	More Than Five Years and Non-Rate-Sensitive	**Total**
Interest-Earning Assets							
Total loans	$ 8,294,707	$ 2,231,948	$ 1,704,781	**$ 12,231,436**	$ 10,058,847	$ 7,435,193	**$ 29,725,476**
Total investments	2,502,854	566,649	697,408	**3,766,911**	1,824,069	1,331,849	**6,922,829**
Total interest-earning assets	10,797,561	2,798,597	2,402,189	**15,998,347**	11,882,916	8,767,042	**36,648,305**
Interest-Bearing Liabilities							
Total interest-bearing funds	9,762,409	3,104,510	2,157,186	**15,024,105**	12,233,173	7,876,046	**35,133,324**
Excess of interest-earning assets over interest-bearing liabilities	—	—	—	**—**		1,514,981	**1,514,981**
Total interest-bearing liabilities	9,762,409	3,104,510	2,157,186	**15,024,105**	12,233,173	9,391,027	**$ 36,648,305**
Interest rate sensitivity gap	$ 1,035,152	$ (305,913)	$ 245,003	**$ 974,242**	$ (350,257)	$ (623,985)	
Cumulative interest rate sensitivity gap	$ 1,035,152	$ 729,239	$ 974,242	**$ 974,242**	$ 623,985		

The amount of assets or liabilities shown in each of the time periods was determined based on the earlier of repricing date, contractual maturity or anticipated loan payments, or projected exercise date on callable debt. To reflect the expected cash flow and repricing characteristics of the Bank's balance sheet, an estimate of expected prepayments on loans and mortgage-related investments is used to adjust the maturities of the loans and investments in the earning assets section of the gap analysis. Changes in market interest rates will affect the volume of prepayments on loans and mortgage-related investments. Correspondingly, adjustments have been made to reflect the characteristics of callable debt instruments and the effect derivative financial instruments have on the repricing structure of the Bank's balance sheet. The "interest rate sensitivity gap" line reflects the mismatch, or gap, in the maturity or repricing of interest-rate-sensitive assets and liabilities. A gap position can be either positive or negative. A positive gap indicates that a greater volume of assets than liabilities reprices or matures in a given time period, and conversely, a negative gap indicates that a greater volume of liabilities than assets reprices or matures in a given time period. On a 12-month cumulative basis, the Bank has a positive gap position, indicating that the Bank has positive exposure to rising interest rates. This would occur when interest income on maturing or repricing interest-bearing assets increases sooner than interest expense on maturing or repricing interest-bearing liabilities.

The cumulative gap, which is a static measure, does not take into consideration the changing value of options available to the Bank in order to manage this exposure, specifically the ability to exercise or not exercise options on callable debt. These options are considered when projecting the effects of interest rate changes on net interest income and on the market value of equity in the following tables.

Interest rate risk exposure as measured by simulation modeling calculates the Bank's expected net interest income and market value of equity based upon projections of interest-rate-sensitive assets, liabilities, derivative financial instruments and interest rate scenarios. The Bank monitors its financial exposure to multiple interest rate scenarios. The Bank's policy guideline for the maximum percentage reduction is 16% for net interest income and 20% for market value of equity as a result of a 200 basis point shock in interest rates. The Bank manages its interest rate risk exposure within these guidelines. At December 31, 2023, projected annual net interest income would decrease by 1.17%, if interest rates were to decrease by 100 basis points, and would decrease by 1.77% if interest rates were to decrease by 200 basis points. At December 31, 2023, projected annual net interest income would increase by 2.06% if interest rates were to increase by 100 basis points and by 3.62% if interest rates were to increase by 200 basis points. Market value of equity is projected to increase by 11.30% as a result of a 100 basis point decrease in interest rates and to increase by 25.51% if interest rates were to decrease by 200 basis points at December 31, 2023. Market value of equity is projected to decrease by 8.50% if interest rates were to increase by 100 basis points at December 31, 2023, and decrease by 14.85% if interest rates were to increase by 200 basis points.

The following tables set forth the Bank's projected sensitivity to interest rate movements as prescribed by policy as of December 31, 2023, based on the Bank's interest-earning assets and interest-bearing liabilities:

	December 31, 2023			
	+200	**+100**	**-100**	**-200**
Change in net interest income	3.62 %	2.06 %	(1.17)%	(1.77)%
Change in market value of equity	(14.85)	(8.50)	11.30	25.51

The Bank may use derivative financial instruments to manage its interest rate risk and liquidity position. Fair value and cash flow interest rate swaps for asset/liability management purposes may be used to change the repricing characteristics of liabilities to match the repricing characteristics of the assets they support. The Bank does not hold, and is restricted by policy from holding, derivative financial instruments for trading purposes and is not a party to leveraged derivative transactions.

At December 31, 2023, the Bank held interest rate caps with a notional amount of $115.0 million (net fair value asset of $217 thousand) and pay-fixed interest rate swap contracts with a notional amount of $1.40 billion (net fair value asset of $2.1 million, net of posted variation margin). See Note 17, "Derivative Instruments and Hedging Activity," to the accompanying financial statements for further discussion. For derivative instruments that are designated and qualify as cash flow hedges, the effective portion of the gain or loss on the derivative is reported as a component of other comprehensive income and reclassified into earnings in the same period or periods during which the hedged transaction affects earnings. Gains and losses on the derivative representing either hedge ineffectiveness or hedge components excluded from the assessment of effectiveness are recognized in current earnings. For derivative instruments that are designated and qualify as a fair value hedge, the gain or loss on the derivative as well as the offsetting loss or gain on the hedged item (principally, debt securities) attributable to the hedge risk are recognized in current earnings. The Bank includes the gain or loss on the hedged items in the same line item (interest expense) as the offsetting loss or gain on the related pay-floating interest rate swaps. To the extent that the derivatives have a negative fair value, the Bank has a payable on the instrument and the counterparty is exposed to the credit risk of the Bank. To the extent that the derivatives have a positive fair value, the Bank has a receivable on the instrument and is therefore exposed to credit risk from the counterparty. To manage this credit risk, the Bank monitors the credit ratings of its counterparties and has bilateral collateral agreements with counterparties. During the third quarter of 2020, the Bank began clearing cash flow hedges through a futures commission merchant (FCM), with a clearinghouse or central counterparty (CPP). At December 31, 2023, the Bank continues to clear all cash flow hedges through an FCM, with a clearinghouse or CPP.

At December 31, 2023, the notional amount of cleared cash flow hedges was $1.40 billion with associated posted initial margin of $41.0 million. At December 31, 2023, all cleared cash flow hedges were in an asset position and the Bank received cash collateral from the counterparty of $43.2 million. Cleared derivatives require the payment of initial and variation margin as a protection against default. During 2023, a bond matured that was hedged by a LIBOR swap and the Bank choose to unwind the swap and eliminate the LIBOR exposure ahead of the LIBOR cession date of June 30, 2023. The Bank recorded a $1.2 million gain as a result of this swap unwind, which was recognized in noninterest income.

Excluding centrally cleared cash flow hedges, the Bank had counterparty credit risk exposure to three counterparties totaling $217 thousand at December 31, 2023.

The Bank's activity in derivative financial instruments for 2023 is summarized in the table below:

Activity in Derivative Financial Instruments
(Notional Amounts)

(in millions)	Pay-Fixed Swaps	Interest Rate Caps	Total
Balance at January 1, 2023	$ 1,425	$ 115	$ 1,540
Additions	500	—	500
Maturities/amortizations	(525)	—	(525)
Balance at December 31, 2023	**$ 1,400**	**$ 115**	**$ 1,515**

Liquidity Risk Management

The Bank's liquidity risk management practices ensure the Texas District's ability to meet its financial obligations. These obligations include the repayment of Systemwide debt securities as they mature, the ability to fund new and existing loan and other funding commitments, and the ability to fund operations in a cost-effective manner. A primary objective of liquidity risk management is to plan for unanticipated changes in the capital markets.

The Bank's primary source of liquidity is the ability to issue Systemwide debt securities, which are the general unsecured joint and several obligations of the System banks as discussed below. As a secondary source of liquidity, the Bank maintains an investment portfolio composed primarily of high-quality liquid securities. The securities provide a stable source of income for the Bank, and their high quality ensures the portfolio can quickly be converted to cash should the need arise.

While the Bank's primary source of liquidity is the ability to access the capital markets to issue Systemwide debt, the Bank also maintains other contingency funding sources including repurchase agreements with several commercial banks, a $75.0 million uncommitted federal funds line of credit and reciprocal emergency lending agreements with other System entities. These alternative funding sources are subject to various terms and conditions, and as a result, there can be no assurance that funding will be available if needed by the Bank. In addition, the Funding Corporation provides contingency financing mechanisms which include emergency and non-emergency purchases of federal funds from counterparties and direct issuance of Systemwide debt securities to institutional investors.

FCSIC insures the timely payment of principal and interest on Systemwide debt securities. FCSIC maintains the Farm Credit Insurance Fund for this purpose and for certain other purposes. In the event a System bank is unable to timely pay principal and interest on any insured debt obligation for which that Bank is primarily liable, FCSIC must expend amounts in the Insurance Fund to the extent available to insure the timely payment of principal and interest on the debt obligation. The provisions of the Farm Credit Act providing for joint and several liability of the System banks on the debt obligation cannot be invoked until the Insurance Fund is exhausted. However, because of other mandatory and discretionary uses of the Insurance Fund, there is no assurance that there will be sufficient funds to pay the principal or interest on the insured debt obligation. The insurance provided through use of the Insurance Fund is not an obligation of and is not a guarantee by the U.S. government.

FCSIC has an agreement with the Federal Financing Bank, a federal instrumentality subject to the supervision and direction of the U.S. Treasury, pursuant to which the Federal Financing Bank would advance funds to FCSIC under limited circumstances. Under its existing statutory authority, FCSIC may use these funds to provide assistance to the System banks in exigent market circumstances that threaten the System banks' ability to pay maturing debt obligations. The agreement provides for advances of up to $10 billion and will remain in full force and effect until terminated by either the Federal Financing Bank or the FCSIC. The decision whether to seek funds from the Federal Financing Bank is at the discretion of FCSIC, and each funding obligation of the Federal Financing Bank is subject to various terms and conditions and, as a result, there can be no assurance that funding would be available if needed by the System.

FCA regulations require each System bank to maintain a minimum of 90 days of liquidity coverage on a continuous basis, assuming no access to the capital markets. Liquidity coverage is defined as the number of days that maturing Systemwide debt securities could be funded with cash and eligible liquidity investments maintained by the Bank. Regulations on liquidity reserve requirement divided the existing eligible liquidity reserve requirement into three levels: Level 1 consists of cash and cash-like instruments and must provide 15 days of coverage; Level 2 consists primarily of government guaranteed securities and must provide 30 days of coverage (combined with Level 1); and Level 3 consists primarily of agency guaranteed securities and must provide a total of 90 days of coverage (combined with Level 1 and Level 2). Additionally, regulations require the Bank to maintain a supplemental liquidity reserve above the 90-day minimum to cover cash flow requirements unique to the Bank. At December 31, 2023, the Bank met all individual level criteria and had a total of 200 days of liquidity coverage, as compared with 197 days at December 31, 2022.

Funding Sources

The Bank continually raises funds to support its mission to provide credit and related services to the rural and agricultural sectors, repay maturing Systemwide debt securities and meet other obligations. As a government-sponsored enterprise, the Bank has access to the nation's and world's capital markets. This access provides us with a dependable source of competitively priced debt that is critical to support our mission of providing funding to the rural and agricultural sectors. Moody's Investors Service (Moody's) rates the System's long-term debt as Aaa and short-term debt as P-1. These are the highest ratings available from this rating agency. S&P Global Ratings and Fitch Ratings maintain the long-term sovereign credit rating of the U.S. government at AA+, which directly corresponds to their AA+ long-term debt rating of the System. These rating agencies base their ratings on many quantitative and qualitative factors, including the System's status as a government-sponsored enterprise. Material changes to the factors considered could result in a different debt rating. However, as a result of the System's financial performance, credit quality and standing in the capital markets, we anticipate continued access to funding necessary to support System needs. The U.S. government does not guarantee, directly or indirectly, Systemwide debt securities.

The types and characteristics of securities are described in Note 10, "Bonds and Notes," to the accompanying financial statements. As a condition of the Bank's participation in the issuance of Systemwide debt securities, the Bank is required by regulation to maintain specified eligible assets as collateral in an amount equal to or greater than the total amount of bonds and notes outstanding for which the Bank is liable. At December 31, 2023, the Bank had excess collateral of $1.49 billion. Management expects the Bank to maintain sufficient collateral to permit its continued participation in Systemwide debt issuances in the foreseeable future.

The Bank receives ratings from two rating agencies:

- On May 24, 2023, Fitch Ratings placed the U.S. sovereign's AAA long-term issuer default rating (IDR) on rating watch negative. On May 26, 2023, the System and the Farm Credit System banks', including the Farm Credit Bank of Texas, long-term IDR, short-term IDR and government support ratings were placed on rating watch negative. On August 1, 2023, Fitch Ratings lowered the U.S. sovereign's long-term IDR to AA+ from AAA; the F1+ short term rating was affirmed. The outlook on the long-term debt rating was revised to stable. Subsequently, on August 2, 2023, Fitch Ratings lowered the long-term IDR for the System to AA+ from AAA and affirmed the F1+ short term rating. The outlook on the long-term debt rating was revised to stable. Fitch Ratings also lowered the individual long-term IDRs of the Farm Credit System banks, including the Farm Credit Bank of Texas, to A+. The short-term IDRs were affirmed at F1+. The outlook on the long-term IDR for each System bank was revised to stable from rating watch negative.

  On January 25, 2024, Fitch Ratings affirmed the Bank's long-term and short-term issuer default ratings (IDR) at A+ and F1+, respectively, with a stable outlook.
- On December 7, 2023, Moody's affirmed the Bank's issuer rating at Aa3, its noncumulative preferred stock rating at Baa1 (hyb), and its a1 baseline credit assessment, with a stable outlook. On February 14, 2024, Moody's affirmed the Bank's issuer rating at Aa3, with a stable outlook.

The following table provides a summary of the period-end balances of the debt obligations of the Bank:

	December 31,		
(dollars in thousands)	**2023**	2022	2021
Bonds outstanding	**$ 33,067,825**	$ 30,737,944	$ 27,552,088
Average effective interest rates	**3.46 %**	2.57 %	0.99 %
Average remaining life (years)	**3.4**	3.7	3.4
Discount notes outstanding	**$ 2,065,499**	$ 3,233,798	$ 3,238,340
Average effective interest rates	**5.27 %**	3.51 %	0.09 %
Average remaining life (days)	**82**	142	111

During the years ended December 31, 2023, 2022 and 2021, the Bank reduced its interest expense by calling and replacing fixed-rate debt totaling $375.0 million, $125.0 million and $3.98 billion, respectively. The Bank also called and replaced $775.0 million and $25.0 million in callable floating rate notes in 2023 and 2022, respectively. During the years ended December 31, 2023, 2022 and 2021, the Bank recognized concession expense of $915 thousand, $174 thousand and $7.2 million, respectively. During 2023, the Bank extinguished debt totaling $125.0 million and recorded a gain of $2.0 million as a result of the extinguishment, which was recognized in noninterest income.

The following table provides a summary of the average balances of the debt obligations of the Bank:

	Year Ended December 31,		
	2023	2022	2021
Average interest-bearing liabilities outstanding	**$ 34,891,926**	$ 32,884,101	$ 27,803,486
Average interest rates on interest-bearing liabilities	**3.15 %**	1.61 %	1.01 %

Investments

As permitted under FCA regulations, a bank is authorized to hold eligible investments for the purposes of maintaining a diverse source of liquidity, managing short-term surplus funds and managing interest rate risk. The Bank is authorized to hold an amount not to exceed 35.0% of loans outstanding. The Bank's holdings are within this limit as of December 31, 2023.

FCA regulations also define eligible investments by specifying credit criteria and percentage of investment portfolio limit for each investment type. If an investment no longer meets eligibility criteria, the investment becomes ineligible for inclusion in the liquidity portfolio.

At December 31, 2023, the Bank had no investments which were ineligible for liquidity purposes.

As previously discussed, on January 1, 2023, the Bank adopted the CECL accounting guidance which amended existing impairment guidance for held-to-maturity and available-for-sale investments to incorporate an allowance, which will allow for the reversal of credit impairments in the event that the credit of an issuer improves. The Bank did not have a cumulative effect transition for its investments with the adoption on January 1, 2023.

At December 31, 2023, there was no credit impairment on securities. At December 31, 2022, the Bank held no securities that were designated as other-than-temporarily impaired investments (OTTI) and the Bank recognized no credit losses related to OTTI securities.

The Bank's investments are all considered available-for-sale, and include a liquidity portfolio and a portfolio of other investments. The liquidity portfolio had a fair value of $6.60 billion at December 31, 2023, and consisted primarily of federal agency-guaranteed collateralized mortgage-backed securities (MBS), corporate debt, agency-guaranteed debt, U.S. Treasury securities, asset-backed securities (ABS) and certificates of deposit. The majority of the liquidity portfolio's MBS includes Government National Mortgage Association (GNMA), Federal National Mortgage Association (FNMA) and Federal Home Loan Mortgage Corporation (FHLMC) securities.

The Bank's liquidity investment portfolio consisted of the following at December 31:

	2023		2022	
	Amortized Cost	**Fair Value**	Amortized Cost	Fair Value
Agency-guaranteed debt	**$ 28,728**	**$ 28,171**	$ 54,888	$ 53,301
Certificates of deposit	**250,000**	**250,245**	200,000	199,009
Corporate debt	**197,968**	**195,032**	240,914	234,778
Federal agency collateralized mortgage-backed securities:				
GNMA	**3,135,926**	**2,725,312**	3,070,832	2,683,020
FNMA and FHLMC	**2,465,791**	**2,321,141**	2,652,701	2,469,209
U.S. Treasury securities	**895,725**	**887,919**	841,444	818,844
Asset-backed securities	**195,178**	**194,110**	188,983	186,521
Total liquidity investments	**$ 7,169,316**	**$ 6,601,930**	$ 7,249,762	$ 6,644,682

There were no sales of investments in 2023, 2022 or 2021.

The Bank's other investments consisted of Federal Agricultural Mortgage Corporation (Farmer Mac) guaranteed agricultural mortgage-backed securities (AMBS), purchased from Associations as part of the Bank's CPP program. The Farmer Mac AMBS are not included in the Bank's liquidity portfolio. The Farmer Mac securities are backed by loans originated by the Associations and previously held by the Associations under the Farmer Mac long-term standby commitments to purchase agreements.

Farmer Mac is a government-sponsored enterprise and is examined and regulated by FCA. It provides secondary market arrangements for agricultural and rural home mortgage loans that meet certain underwriting standards. Farmer Mac is authorized to provide loan guarantees or be a direct pooler of agricultural mortgage loans. Farmer Mac is owned by both System and non-System investors and its board of directors has both System and non-System representation. Farmer Mac is not liable for any debt or obligation of any System institution and no System institution other than Farmer Mac is liable for any debt or obligation of Farmer Mac.

The Bank's other investment portfolio consisted of Farmer Mac AMBS securities at December 31:

	2023		2022	
	Amortized Cost	**Fair Value**	Amortized Cost	Fair Value
Agricultural mortgage-backed securities	**$ 9,441**	**$ 8,499**	$ 11,595	$ 10,270

Capital Adequacy

Total shareholders' equity at December 31, 2023, was $1.69 billion compared to $1.62 billion and $2.00 billion at December 31, 2022 and 2021, respectively. The total shareholders' equity increase of $63.3 million during 2023 was due primarily to net income of $199.9 million, partially offset by cash patronage declared of $121.1 million and the net issuance of capital stock of $24.8 million. The Bank declared cash patronage of $121.1 million which included $46.4 million in direct loan patronage, $51.1 million in patronage on certain participations, $17.1 million in patronage based on the Associations' and OFIs' stock investment in the Bank, and $6.4 million in CPP and NCPP patronage. The Bank paid allocated retained earnings in 2023 of direct loan patronage of $19.9 million and patronage on certain participations of $7.9 million.

Preferred stock totaled $750.0 million at December 31, 2023, 2022 and 2021. Class B noncumulative subordinated perpetual preferred stock included $300.0 million of Class B Series 2 issued in July 2013 (Class B-2 preferred stock), $100.0 million of Class B Series 3 issued in June 2018 (Class B-3 preferred stock), and $350.0 million of Class B Series 4 issued in July 2020 (Class B-4 preferred stock). Preferred stock is the sole obligation of the Bank and is not guaranteed by another System institution. Such obligations are not Systemwide Debt Securities, and therefore, are not subject to the joint and several obligations of the System banks nor are they guaranteed or insured by the Insurance Fund.

Dividends on the Class B-2 preferred stock, if declared by the board of directors at its sole discretion, are noncumulative and are payable quarterly in arrears on the fifteenth day of March, June, September and December. Prior to September 15, 2013, dividends were paid at an annual fixed rate of 6.75% of par value of $100 per share. Subsequent to September 15, 2023, dividends are paid at an annual rate of the 3-Month CME Term SOFR plus a "Tenor Spread Adjustment" of 0.26161%, plus 4.01%.

Dividends on the Class B-3 preferred stock, if declared by the board of directors at its sole discretion, are noncumulative and are payable quarterly in arrears on the fifteenth day of March, June, September and December in each year, commencing September 15, 2018, at an annual fixed rate of 6.20% of par value of $1,000 per share up to, but excluding June 15, 2028, from and after which date will be paid at a rate of the 3-Month USD LIBOR plus 3.223% or the Alternative Rate determined at that time.

Dividends on the Class B-4 preferred stock, if declared by the board of directors at its sole discretion, are noncumulative and are payable quarterly in arrears on the fifteenth day of March, June, September and December in each year, commencing September 15, 2020, at an annual fixed rate of 5.70% of par value of $1,000 per share up to, but excluding, September 15, 2025, from and after which date will be paid at an annual rate of the 5-year Treasury rate as of the most recent five-year reset dividend determination date plus 5.415%.

The Class B preferred stock ranks senior to all of our outstanding common stock. “Dividend/patronage stopper” clauses in the preferred stock offerings require the payment or declaration of current period dividends on the preferred stock issuances before any other patronage can be declared, and were required before payment of the December 31, 2023, stock investment and direct note patronages to Associations and OFIs.

Accumulated other comprehensive loss decreased $18.8 million, or 3.49%, to $521.5 million at December 31, 2023, from $540.4 million at December 31, 2022. The decrease was driven by a $38.1 million decrease in unrealized losses on the Bank's investments, partially offset by a $19.0 million decrease in net unrealized gains on cash flow derivatives and $220 thousand change in postretirement benefit plans. The decrease in unrealized net losses on investments and the decrease in net unrealized gains on cash flow derivatives were a result of changes in interest rates during 2023.

Capital adequacy is evaluated using various ratios for which the FCA has established regulatory minimums. Regulatory ratios remained well above regulatory minimums, including the conservation and leverage buffers at December 31, 2023.

The following table reflects the Bank’s capital ratios at December 31:

	2023	2022	2021	2020	2019	Total Regulatory Requirement Including Capital Conservation Buffers
Permanent capital ratio	**13.16%**	13.43%	15.10%	16.08%	16.03%	7.00%
Common equity tier 1 ratio	**8.50**	8.66	9.55	9.92	9.91	7.00
Tier 1 capital ratio	**13.12**	13.42	15.09	16.07	16.01	8.50
Total capital ratio	**13.41**	13.50	15.17	16.15	16.12	10.50
Tier 1 leverage ratio	**5.79**	5.94	6.37	7.11	7.26	5.00
UREE leverage ratio	**2.26**	2.50	2.73	2.99	3.06	1.50

Operational Risk Management

Operational risk is the risk of loss resulting from inadequate or failed processes or systems, human factors, external cyber risk and data security, or external events, including the execution of unauthorized transactions by employees, errors relating to transaction processing and technology, breaches of the internal control system and the risk of fraud by employees or persons outside the System. The board of directors is required, by regulation, to adopt an internal control policy that provides adequate direction to the institution in establishing effective control over and accountability for operations, programs and resources. The policy must include, at a minimum, the following items:

- direction to management that assigns responsibility for the internal control function to an officer or officers of the institution;
- adoption of internal audit and control procedures;
- direction for the operation of a program to review and assess its assets;
- adoption of loan, loan-related assets and appraisal review standards, including standards for scope of review selection and standards for work papers and supporting documentation;
- adoption of asset quality classification standards;
- adoption of standards for assessing credit administration, including the appraisal of collateral; and
- adoption of standards for the training required to initiate a program.

In general, we address operational risk through the organization’s internal governance structure. Exposure to operational risk is typically identified with the assistance of senior management, and internal audit plans are risk-based and are re-evaluated on an annual basis, or more frequently, if necessary. The board of directors is responsible for defining the role of the audit committee in providing oversight and review of the institution’s internal controls.

Reputational Risk Management

Reputational risk is defined as the negative impact resulting from events, real or perceived, that shape the image of the Bank, the System or any of its entities. The Bank and its Associations could be harmed if its reputation were impacted by negative publicity about the System as a whole, an individual System entity or the agriculture industry in general.

Reputational risk is the direct responsibility of each System entity. For reputational issues that have broader consequences for the System as a whole, System governance will communicate guidance to the System supporting those business practices that are consistent with our mission.

Political Risk Management

We, as part of the System, are an instrumentality of the federal government and are intended to further governmental policy concerning the extension of credit to or for the benefit of agricultural and rural America. The System and its borrowers may be significantly affected by federal legislation that affects the System directly, such as changes to the Farm Credit Act, or indirectly, such as agricultural appropriations bills. Political risk to the System is the risk of loss of support for the System or agriculture by the U.S. government.

We manage political risk by actively supporting the Farm Credit Council (Council), which is a full-service, federal trade association representing the System before Congress, the executive branch and others. The Council provides the mechanism for “grassroots” involvement in the development of System positions and policies with respect to federal legislation and government actions that impact the System. Additionally, we take an active role in representing the individual interests of System institutions and their borrowers before Congress. In addition to the Council, each district has its own council, which is a member of the Council. The district councils represent the interests of their members on a local and state level, as well as on a federal level.

Human Capital

The Bank recognizes that its people are the key to success and, therefore, strive to make the workplace attractive for all employees. Effective human capital management results from the recruitment and retention of a highly qualified workforce that is aligned with the Bank's core values and mission. The Bank has an onboarding program dedicated to familiarizing all new hires with the Bank's culture and values. The mission of effectively serving the needs of rural America and agriculture drives the organizational culture.

The Bank's human capital strategy is unique to its organization and is impacted by the geography and workforce demographics in the communities in which it serves. Human capital management is carried out under the oversight of the Bank's board of directors.

The Bank has adopted a Human Capital Plan (Plan) that focuses on three broad areas: (1) assessment of workforce and performance management, (2) succession planning and (3) diversity and inclusion.

Assessment of Workforce and Performance Management

The Plan provides a description of the Bank's workforce and an assessment of strengths and weaknesses within the workforce. The Plan generally takes into account effective strategies to evaluate the workforce including reviewing job descriptions to make sure the skills needed are accurately defined, engaging in a performance review process to assess skills desired against skills employees have, and training to address gaps.

Succession Program

Succession planning is necessary to ensure that talent and skills are available and essential knowledge and organization culture are maintained when employees in key positions depart. The Plan also provides for management succession planning and strategies with the main objective of identifying critical workforce positions and developing a targeted pool of potential successors.

Diversity and Inclusion

Diversity and inclusion are embedded within each phase of the employment life cycle including recruitment, onboarding, new employee immersion and employee retention and development. Effective diversity and inclusion strategies require a continuous cultivation of a welcoming, inclusive and collaborative environment that values the life experiences of all employees.

At December 31, 2023, the Bank employed 288 full-time employees of which 38% were women, 62% were men and 40% were minorities based on employee self-reporting. The statistics are for the Bank only and other System institutions' information may vary from these statistics, as the composition of each System institution's workforce is impacted by the demographics of its unique service area.

LIBOR Transition

On March 5, 2021, the United Kingdom’s Financial Conduct Authority (the UK FCA) announced that the ICE Benchmark Administration (IBA) (the entity regulated by the UK FCA that is responsible for calculating the London Inter-Bank Offered Rate (LIBOR)) had notified the UK FCA of its intent, among other things, to cease providing certain US dollar LIBOR settings as of June 30, 2023. In the announcement, the UK FCA confirmed that all 35 LIBOR tenors (including with respect to US dollar LIBOR) would be discontinued or declared non-representative as of either: (a) immediately after December 31, 2021, or (b)immediately after June 30, 2023.

The Bank implemented a LIBOR transition plan in accordance with Farm Credit Administration’s guidance and analyzed potential risks associated with the LIBOR transition, including, but not limited to, financial, market, accounting, operational, legal, tax, reputational and compliance risks through the cessation date of June 30, 2023.

At December 31, 2023, substantially all variable-rate financial instruments had transitioned to other rates, primarily SOFR. Any remaining variable-rate financial instruments indexed to LIBOR will be transitioned to a non-LIBOR indexed rate on the next scheduled reset date to the extent they remain outstanding at that date.

Cybersecurity

Risk Management and Strategy

Cyber risk is the risk of loss, disruption, or damage to the reputation of the Bank due to the failure or unauthorized or erroneous use of its information systems. The Bank has a risk management policy and procedures to assess, identify and manage material risks from cybersecurity threats with the goal of providing the appropriate level of protection to maintain confidentiality, integrity and availability of the Bank, Associations', and borrowers' information.

The Bank engages in a variety of activities to assess cybersecurity risks and implements layers of controls to prevent, detect or mitigate these risks. The effectiveness of the controls is tested through internal and external audits and assessments, including regular penetration tests, vulnerability scans and business continuity/disaster recovery tests. The Bank leverages one or more industry standards or frameworks such as the National Institute of Standards and Technology, Center for Internet Security, International Organization for Standardization to guide its cybersecurity management activities.

In addition, the Bank has a cybersecurity incident response plan that assesses the nature and scope of an incident, the information systems and types of information accessed or misused, steps to be taken to resume business activities and reporting to the board of directors, FCA, customers (former, current, and potential) and employees.

No cybersecurity threats or incidents have materially impacted the Bank during the past three years.

Recent Accounting Pronouncements

The recent accounting pronouncements are described in Note 2, “Summary of Significant Accounting Policies,” to the accompanying financial statements.

Regulatory Matters

At December 31, 2023, there were no Associations operating under written agreements with the Farm Credit Administration (FCA).

On January 13, 2023, FCA issued an advance notice of proposed rulemaking on the regulatory capital framework for Farmer Mac. The comment period ended on April 26, 2023.

On October 5, 2023, the Farm Credit Administration approved a final rule on cyber risk management that requires each System institution to develop and implement a comprehensive, written cyber risk management program. Each institution's cyber risk plan must require the institution to take the actions to assess internal and external risk factors, identify potential system and software vulnerabilities, establish a risk management program for the risks identified, develop a cyber risk training program, set policies for managing third-party relationships, maintain robust internal controls and establish institution board reporting requirements. The final rule will become effective on January 1, 2025.

On October 12, 2023, the FCA approved a final rule on young, beginning and small (YBS) farmer and rancher activity. The objectives of the rule are to expand the YBS activities of direct-lender associations to a diverse population of borrowers, to reinforce the supervisory responsibilities of the banks that fund the direct-lender associations, and require the banks to annually review and approve the associations' YBS programs and to require each direct-lender association to enhance the strategic plan for its YBS program. FCA will transition to a new YBS reporting system in 2024 to provide a clearer picture of YBS lending by allowing the agency to better break down and categorize loan data. The final rule became effective February 1, 2024.

On November 9, 2023, the Farm Credit Administration approved a final rule to amend and reorganize regulations governing conservatorships and receiverships. The rule implements provisions of the 2018 Farm Bill concerning FCA's appointment of the Farm Credit System Insurance Corporation (FCSIC) as the conservator or receiver of any distressed System institution except the Federal Agricultural Mortgage Corporation. The final rule will became effective on January 17, 2024.

Report of Management

The financial statements of the Farm Credit Bank of Texas (Bank) are prepared by management, which is responsible for their integrity and objectivity, including amounts that must necessarily be based on judgments and estimates. The financial statements have been prepared in conformity with generally accepted accounting principles appropriate in the circumstances, except as noted. Other financial information included in this annual report is consistent with that in the financial statements.

To meet its responsibility for reliable financial information, management depends on the Bank's accounting and internal control systems, which have been designed to provide reasonable, but not absolute, assurance that assets are safeguarded and transactions are properly authorized and recorded. The systems have been designed to recognize that the cost of controls must be related to the benefits derived. To monitor compliance, the internal audit staff of the Farm Credit Bank of Texas audits the accounting records, reviews accounting systems and internal controls, and recommends improvements as appropriate. The financial statements are audited by PricewaterhouseCoopers LLP (PwC), independent auditors. In addition, our independent auditors have audited our internal control over financial reporting as of December 31, 2023. In addition, the Bank is examined by the Farm Credit Administration.

In the opinion of management, the financial statements are true and correct and fairly state the financial position of the Farm Credit Bank of Texas at December 31, 2023, 2022 and 2021. The independent auditors have direct access to the audit committee, which is composed solely of directors who are not officers or employees of the Bank.

The undersigned certify that we have reviewed the December 31, 2023, annual report of the Farm Credit Bank of Texas, that the report has been prepared in accordance with all applicable statutory or regulatory requirements, and that the information included herein is true, accurate and complete to the best of our knowledge and belief.

James F. Dodson
Chair of the Board

Amie Pala
Chief Executive Officer

Brian O'Keane
Executive Vice President, Chief Financial Officer

February 29, 2024

Report of Audit Committee

The audit committee (Committee) is composed of the entire board of directors of the Farm Credit Bank of Texas (Bank). The Committee oversees the Bank's system of internal controls and the adequacy of management's action with respect to recommendations arising from those internal control activities. The Committee's approved responsibilities are described more fully in the Audit Committee Charter, which is available on request or on the Bank's website at *www.farmcreditbank.com*. In 2023, 12 Committee meetings were held, with some of these meetings including executive sessions between the Committee and PricewaterhouseCoopers LLP (PwC) and the Bank's internal auditor. The Committee approved the appointment of PwC as independent auditors for 2023.

Management is responsible for the Bank's internal controls and for the preparation of the financial statements in accordance with accounting principles generally accepted in the United States of America. PwC is responsible for performing an independent audit of the Bank's financial statements in accordance with auditing standards generally accepted in the United States of America in addition to the Bank's internal control over financial reporting and to issue a report thereon. The Committee's responsibilities include monitoring and overseeing these processes.

In this context, the Committee reviewed and discussed the Bank's audited financial statements for the year ended December 31, 2023, with management and PwC. The Committee also reviewed with PwC the matters required to be discussed by Auditing Standard No. 16 (Communications with Audit Committees).

PwC has provided to the Committee the written communications regarding their independence. The Committee discussed with appropriate representatives of PwC the firm's independence from the Bank. The Committee also approved the non-audit service provided by PwC and concluded that the service was not incompatible with maintaining the auditor's independence. Furthermore, throughout 2023 the Committee has discussed with management and PwC such other matters and received such assurances from them as the Committee deemed appropriate. Both PwC and the Bank's internal auditor directly provided reports on significant matters to the committee.

M. Philip Guthrie, Chair
Dr. Larry L. Boleman, Vice Chair
Dennis Anthony
John L. Dailey
James F. Dodson
Linda C. Floerke
Dorothy Nichols

Audit Committee Members

February 29, 2024

Report on Internal Control Over Financial Reporting

The Farm Credit Bank of Texas' (Bank's) principal executive officer and principal financial officer are responsible for establishing and maintaining adequate internal control over financial reporting for the Bank's financial statements. For purposes of this report, "internal control over financial reporting" is defined as a process designed by, or under the supervision of, the Bank's principal executive officer and principal financial officer, or persons performing similar functions, with review by the Bank's board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting information used in the preparation of the financial statements for external purposes in accordance with generally accepted accounting principles in the United States of America (GAAP). Internal controls over financial reporting include those policies and procedures that: (1) pertain to the maintenance of records that in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Bank; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial information in accordance with GAAP, and that receipts and expenditures are being made only in accordance with authorizations of management and directors of the Bank; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Bank's assets that could have a material effect on its financial statements.

The Bank's management has completed an assessment of the effectiveness of internal controls over financial reporting as of December 31, 2023. In making the assessment, management used the updated Internal Control – Integrated Framework promulgated by the Committee of Sponsoring Organizations of the Treadway Commission on May 14, 2013, commonly referred to as the "COSO 2013 Framework."

Based on the assessment performed, the Bank concluded that as of December 31, 2023, the internal control over financial reporting was effective based upon the COSO criteria. Additionally, based on this assessment, the Bank determined that there were no material weaknesses in the internal control over financial reporting as of December 31, 2023. A review of the assessment performed was reported to the Bank's audit committee.

The effectiveness of the Bank's internal control over financial reporting as of December 31, 2023, has been audited by PricewaterhouseCoopers LLP, independent auditors, which expresses an unqualified opinion on the effectiveness of the Bank's internal control over financial reporting as of December 31, 2023.

Evaluation of Disclosure Controls and Procedures

As of December 31, 2023, management of the Farm Credit Bank of Texas (Bank) carried out an evaluation with the participation of the Bank's management, including the chief executive officer (CEO) and chief financial officer (CFO), of the effectiveness of the design and operation of their respective disclosure controls and procedures [1] with respect to this annual stockholder report. This evaluation is based on testing of the design and effectiveness of key internal controls, certifications and other information furnished to the principal executive officer and principal financial officer of the Bank, as well as incremental procedures performed by the Bank. Based upon and as of the date of the Bank's evaluation, the CEO and the CFO concluded that the disclosure controls and procedures are effective in alerting them on a timely basis of any material information relating to the Bank that is required to be disclosed by the Bank in the annual and quarterly stockholder reports it files or submits to the Farm Credit Administration. There have been no significant changes in the Bank's internal control over financial reporting[2] that occurred during the quarter ended December 31, 2023, that have materially affected, or are reasonably likely to materially affect, the Bank's internal control over financial reporting.

[1] For purposes of this discussion, "disclosure controls and procedures" are defined as controls and procedures of the Bank that are designed to ensure that the financial information required to be disclosed by the Bank in this annual stockholder report is recorded, processed, summarized and reported, within the time periods specified under the rules and regulations of the Farm Credit Administration.

[2] For purposes of this discussion, "internal control over financial reporting" is defined as a process designed by, or under the supervision of, the Bank's principal executive officer and principal financial officer, or persons performing similar functions, and effected by the Bank's board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the Bank's financial statements for external purposes in accordance with generally accepted accounting principles and includes those policies and procedures that: (1) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the Bank; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of the Bank's financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Bank are being made only in accordance with authorizations of management and directors of the Bank; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Bank's assets that could have a material effect on the Bank's financial statements.

Certification

I, Amie Pala, certify that:

1. I have reviewed the 2023 Annual Report of the Farm Credit Bank of Texas (Bank).
2. Based on my knowledge, this annual stockholder report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual stockholder report.
3. Based on my knowledge, the financial statements and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Bank as of, and for, the periods presented in this report.
4. The Bank's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures[1] and internal control over financial reporting[2] for the Bank and have:
   (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Bank is made known to us, particularly during the period in which this annual stockholder report is being prepared;
   (b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   (c) evaluated the effectiveness of the Bank's disclosure controls and procedures and presented in this annual stockholder report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this annual stockholder report based on such evaluation; and
   (d) disclosed in this annual stockholder report any change in the Bank's internal control over financial reporting that occurred during the Bank's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the Bank's internal control over financial reporting.
5. The Bank's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Bank's auditors and the Bank's audit committee:
   (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Bank's ability to record, process, summarize and report financial information; and
   (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the Bank's internal control over financial reporting.

Amie Pala

Amie Pala
Chief Executive Officer

February 29, 2024

(1) See footnote 1 on evaluation of disclosure controls and procedures report

(2) See footnote 2 on evaluation of disclosure controls and procedures report

Certification

I, Brian O'Keane, certify that:

1. I have reviewed the 2023 Annual Report of the Farm Credit Bank of Texas (Bank).
2. Based on my knowledge, this annual stockholder report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual stockholder report.
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Bank as of, and for, the periods presented in this report.
4. The Bank's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures[1] and internal control over financial reporting[2] for the Bank and have:
   (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Bank is made known to us, particularly during the period in which this annual stockholder report is being prepared;
   (b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   (c) evaluated the effectiveness of the Bank's disclosure controls and procedures and presented in this annual stockholder report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this annual stockholder report based on such evaluation; and
   (d) disclosed in this annual stockholder report any change in the Bank's internal control over financial reporting that occurred during the Bank's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the Bank's internal control over financial reporting.
5. The Bank's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Bank's auditors and the Bank's audit committee:
   (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Bank's ability to record, process, summarize and report financial information; and
   (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the Bank's internal control over financial reporting.

Brian O'Keane
Executive Vice President, Chief Financial Officer

February 29, 2024

[1] See footnote 1 on evaluation of disclosure controls and procedures report

[2] See footnote 2 on evaluation of disclosure controls and procedures report

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Farm Credit Bank of Texas

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying balance sheets of Farm Credit Bank of Texas (the "Company") as of December 31, 2023, 2022 and 2021, and the related statements of comprehensive income, of changes in shareholders' equity and of cash flows for the years then ended, including the related notes (collectively referred to as the "financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2023, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2023, 2022 and 2021, and the results of its operations and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2023, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Change in Accounting Principle

As discussed in Note 2 to the financial statements, the Company changed the manner in which it accounts for the allowance for credit losses in 2023.

Basis for Opinions

The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express opinions on the Company's financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the relevant ethical requirements relating to our audit, which include standards of the American Institute of Certified Public Accountants (AICPA) Code of Professional Conduct and the Farm Credit Administration's independence rules set forth in 12 CFR Part 621, Accounting and Reporting Requirements, Subpart E, Auditor Independence.

We conducted our audits in accordance with the auditing standards of the PCAOB and in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the financial statements included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that

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respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Allowance for Credit Losses on Loans (ACLL) – Pooled Component

As described in Notes 2 and 4 to the financial statements, the allowance for credit losses on loans was $37.9 million, of which a majority is related to the pooled component as of December 31, 2023. The ACLL represents management's estimate of credit losses over the remaining expected life of loans and takes into consideration relevant information about past events, current conditions and reasonable and supportable macroeconomic forecasts of future conditions. Management's process and methodology to establish the ACLL has two basic components: an asset-specific component and a pooled component. In estimating the pooled component of the ACLL, loans are evaluated collectively and segregated into loan pools considering the risk associated with the specific pool. Relevant risk characteristics include loan type and credit quality rating, or a combination of these classes. Management uses a two-dimensional risk rating model that incorporates a scale to identify and track the probability of borrower default and a separate scale addressing loss given default. Probability of default is management’s assumption of the probability that a borrower will experience a default and loss given default is management’s assumption as to the anticipated principal loss on a specific loan assuming default has occurred or is expected to occur. The ACLL is determined based on a quantitative calculation of the expected life-of-loan loss percentage for each loan pool by considering the probability of default and the loss given default.

The principal considerations for our determination that performing procedures relating to the pooled component of the ACLL is a critical audit matter are (i) the significant judgment by management in developing the estimate of the pooled component of the ACLL; (ii) a high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating audit evidence related to management's probability of default and loss given default significant assumptions and (iii) the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the financial statements. These procedures included testing the effectiveness of controls relating to management’s ACLL estimation process, including controls over the probability of default and loss given default significant assumptions. These procedures also included, among others (i) testing management’s process for developing the estimate of the pooled component of the ACLL; (ii) evaluating the appropriateness of the methodology and model; (iii) testing the completeness and accuracy of certain data used in the estimate; and (iv) evaluating the reasonableness of the significant assumptions used by management related to probability of default and loss given default. Professionals with specialized skill and knowledge were used to assist in evaluating (i) the appropriateness of the methodology and model and (ii) the reasonableness of the probability of default and loss given default assumptions.

PricewaterhouseCoopers LLP

Austin, Texas
February 29, 2024

We have served as the Company’s auditor since at least 2002. We have not been able to determine the specific year we began serving as auditor of the Company.

Balance Sheets

Farm Credit Bank of Texas

(dollars in thousands)	December 31, 2023	2022	2021
Assets			
Cash	**$ 78,170**	$ 141,487	$ 156,986
Federal funds sold and overnight investments	**312,399**	301,678	194,223
Investment securities	**6,610,429**	6,654,952	6,560,239
Loans	**29,725,476**	28,264,222	25,674,558
Less allowance for credit losses on loans	**37,873**	15,706	11,869
Net loans	**29,687,603**	28,248,516	25,662,689
Accrued interest receivable	**146,887**	122,465	67,762
Premises and equipment, net	**118,123**	134,754	148,218
Other assets	**329,708**	386,288	303,271
Total assets	**$ 37,283,319**	$ 35,990,140	$ 33,093,388
Liabilities and Shareholders' Equity			
Liabilities			
Bonds and notes, net	**$ 35,133,324**	$ 33,971,742	$ 30,790,428
Accrued interest payable	**205,045**	135,676	63,051
Allowance for credit losses on unfunded commitments	**5,045**	2,052	1,430
Preferred stock dividends payable	**13,798**	11,600	11,600
Patronage payable	**50,839**	46,071	39,017
Other liabilities	**188,574**	199,636	189,470
Total liabilities	**35,596,625**	34,366,777	31,094,996
Commitments and Contingencies (Note 14)			
Shareholders' Equity			
Preferred stock	**750,000**	750,000	750,000
Capital stock	**495,844**	471,029	410,373
Allocated retained earnings	**101,789**	74,043	66,490
Unallocated retained earnings	**860,572**	868,650	868,365
Accumulated other comprehensive loss	**(521,511)**	(540,359)	(96,836)
Total shareholders' equity	**1,686,694**	1,623,363	1,998,392
Total liabilities and shareholders' equity	**$ 37,283,319**	$ 35,990,140	$ 33,093,388

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

Statements of Comprehensive Income

Farm Credit Bank of Texas

(dollars in thousands)	Year Ended December 31, 2023	2022	2021
Interest Income			
Loans	**$ 1,212,718**	$ 793,581	$ 577,290
Investment securities	**236,801**	120,433	72,551
Total interest income	**1,449,519**	914,014	649,841
Interest Expense			
Bonds and notes	**1,099,502**	527,852	282,030
Net Interest Income	**350,017**	386,162	367,811
Provision for credit losses	**37,854**	4,580	1,725
Net interest income after provision for credit losses	**312,163**	381,582	366,086
Noninterest Income			
Patronage income	**32,378**	26,771	23,484
Fees for services to Associations	**6,293**	4,485	3,475
Fees for loan-related services	**11,960**	12,586	17,846
Other income (loss), net	**133**	2,568	3,239
Total noninterest income	**50,764**	46,410	48,044
Noninterest Expense			
Salaries and employee benefits	**59,222**	60,187	56,864
Occupancy and equipment	**40,924**	34,871	31,826
Farm Credit System Insurance Corporation (FCSIC) premiums	**22,084**	22,414	15,488
Other components of net periodic postretirement benefit cost	**417**	309	268
Other operating expenses	**40,372**	40,325	55,093
Total noninterest expense	**163,019**	158,106	159,539
Net Income	**$ 199,908**	$ 269,886	$ 254,591
Other comprehensive income (loss)			
Change in postretirement benefit plans	**(220)**	2,919	118
Change in unrealized loss on investments	**38,076**	(576,540)	(109,872)
Change in cash flow derivative instruments	**(19,008)**	130,098	41,745
Total other comprehensive income (loss)	**18,848**	(443,523)	(68,009)
Comprehensive income (loss)	**$ 218,756**	$ (173,637)	$ 186,582

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

Statements of Changes In Shareholders' Equity

Farm Credit Bank of Texas

(dollars in thousands)	Preferred Stock	Capital Stock	Retained Earnings Allocated	Retained Earnings Unallocated	Accumulated Other Comprehensive Loss	Total Shareholder Equity
Balance at December 31, 2020	$ 750,000	$ 359,988	$ 59,765	$ 850,607	$ (28,827)	$ 1,991,533
Net income	—	—	—	254,591	—	254,591
Other comprehensive loss	—	—	—	—	(68,009)	(68,009)
Capital stock and allocated retained earnings issued	—	55,948	—	—	—	55,948
Capital stock and allocated retained earnings retired	—	(5,563)	—	—	—	(5,563)
Issuance cost on preferred stock	—	—	—	(17)	—	(17)
Preferred stock dividends	—	—	—	(46,400)	—	(46,400)
Patronage distributions						
Cash	—	—	—	(183,691)	—	(183,691)
Shareholders' equity	—	—	6,725	(6,725)	—	—
Balance at December 31, 2021	$ 750,000	$ 410,373	$ 66,490	$ 868,365	$ (96,836)	$ 1,998,392
Net income	—	—	—	269,886	—	269,886
Other comprehensive loss	—	—	—	—	(443,523)	(443,523)
Capital stock and allocated retained earnings issued	—	63,786	—	—	—	63,786
Capital stock and allocated retained earnings retired	—	(3,130)	—	—	—	(3,130)
Preferred stock dividends	—	—	—	(46,400)	—	(46,400)
Patronage distributions						
Cash	—	—	—	(215,648)	—	(215,648)
Shareholders' equity	—	—	7,553	(7,553)	—	—
Balance at December 31, 2022	$ 750,000	$ 471,029	$ 74,043	$ 868,650	$ (540,359)	$ 1,623,363
Adjustment in beginning balance due to change in accounting for credit losses	—	—	—	(8,368)	—	(8,368)
Balance at January 1, 2023	**750,000**	**471,029**	**74,043**	**860,282**	**(540,359)**	**1,614,995**
Net income	**—**	**—**	**—**	**199,908**	**—**	**199,908**
Other comprehensive gain	**—**	**—**	**—**	**—**	**18,848**	**18,848**
Capital stock and allocated retained earnings issued	**—**	**32,073**	**—**	**—**	**—**	**32,073**
Capital stock and allocated retained earnings retired	**—**	**(7,258)**	**—**	**—**	**—**	**(7,258)**
Preferred stock dividends	**—**	**—**	**—**	**(50,797)**	**—**	**(50,797)**
Patronage distributions						
Cash	**—**	**—**	**—**	**(121,075)**	**—**	**(121,075)**
Shareholders' equity	**—**	**—**	**27,746**	**(27,746)**	**—**	**—**
Balance at December 31, 2023	**$ 750,000**	**$ 495,844**	**$ 101,789**	**$ 860,572**	**$ (521,511)**	**$ 1,686,694**

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

Statements of Cash Flows

Farm Credit Bank of Texas

(dollars in thousands)	Year Ended December 31, 2023	2022	2021
Cash Flows From Operating Activities			
Net income	**$ 199,908**	$ 269,886	$ 254,591
Reconciliation of net income to net cash provided by operating activities			
Provision for credit losses	**37,854**	4,580	1,649
Depreciation and amortization on premises and equipment	**18,058**	14,008	12,949
Discount accretion on loans (premium amortization)	**(6,632)**	(6,083)	3,025
Amortization and accretion on debt instruments	**31,058**	45,966	17,453
(Discount accretion) premium amortization on investments	**(8,552)**	436	10,259
Gain on extinguishment of debt	**(1,986)**	—	—
Loss (gain) on sale of loans	**397**	(21)	(299)
Allocated equity patronage from System bank retired (distributed)	**25,438**	(2,561)	(2,757)
(Gain) loss on disposal of premises and equipment	**(63)**	85	56
Increase in accrued interest receivable	**(24,422)**	(54,703)	(2,778)
Decrease (increase) in other assets, net	**33,021**	(72,713)	(25,102)
Increase in accrued interest payable	**69,369**	72,626	4,456
(Decrease) increase in other liabilities, net	**(20,037)**	38,212	(5,402)
Net cash provided by operating activities	**353,411**	309,718	268,100
Cash Flows From Investing Activities			
Net (increase) decrease in federal funds sold and overnight investments	**(10,721)**	(107,455)	14,006
Investment securities			
Purchases	**(1,484,311)**	(2,378,184)	(3,595,360)
Proceeds from maturities, calls and prepayments	**1,575,462**	1,706,495	2,463,157
Increase in loans, net	**(1,611,243)**	(3,125,127)	(3,874,499)
Proceeds from sale of loans	**141,669**	533,734	4,868
Proceeds from sale of premises and equipment	**106**	105	137
Expenditures for premises and equipment	**(1,470)**	(735)	(19,358)
Investment in other earning assets	**(1,055)**	(5,657)	(4,104)
Net cash used in investing activities	**(1,391,563)**	(3,376,824)	(5,011,153)
Cash Flows From Financing Activities			
Bonds and notes issued	**30,625,500**	37,503,438	43,409,149
Bonds and notes retired	**(29,492,990)**	(34,368,090)	(38,509,603)
Decrease in cash collateral posted with a counterparty	**1,739**	48,117	50,384
(Decrease) increase in cash collateral posted by a counterparty	**(19,323)**	62,480	—
Issuance costs on preferred stock	**—**	—	(17)
Capital stock issued	**32,073**	63,786	55,948
Capital stock retired and allocated retained earnings distributed	**(7,258)**	(3,130)	(5,563)
Cash dividends on preferred stock	**(48,599)**	(46,400)	(46,400)
Cash patronage distributions paid	**(116,307)**	(208,594)	(182,161)
Net cash provided by financing activities	**974,835**	3,051,607	4,771,737
Net (decrease) increase in cash	**(63,317)**	(15,499)	28,684
Cash at beginning of year	**141,487**	156,986	128,302
Cash at End of Year	**$ 78,170**	$ 141,487	$ 156,986
Supplemental Schedule of Noncash Investing and Financing Activities			
Net decrease (increase) in unrealized losses on investment securities	**$ 38,076**	$ (576,540)	$ (109,872)
Preferred stock dividends payable	**13,798**	11,600	11,600
Patronage distributions cash payable	**50,839**	46,071	39,017
Patronage distribution allocated equities	**27,746**	7,553	6,724
Supplemental Disclosure of Cash Flow Information			
Interest paid	**$ 1,030,133**	$ 455,227	$ 277,574

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

Notes to Financial Statements

Farm Credit Bank of Texas

(dollars in thousands, except per share amounts and as otherwise noted)

Note 1 — Organization and Operations

A. Organization:

The Farm Credit Bank of Texas (FCBT or Bank) is one of the banks of the Farm Credit System (System), a nationwide system of cooperatively owned banks and associations established by acts of Congress. The System is subject to the provisions of the Farm Credit Act of 1971, as amended (Farm Credit Act). The System specializes in providing financing and related services to qualified borrowers for agricultural and rural purposes.

As of December 31, 2023, there were three Farm Credit Banks (FCBs), each of which has specific lending authority within its chartered territory, and one Agricultural Credit Bank (ACB) — collectively, the “System banks” — which has nationwide lending authority for lending to cooperatives. The ACB also has the lending authorities of an FCB within its chartered territories. The Bank is chartered to serve the states of Alabama, Louisiana, Mississippi, New Mexico and Texas.

Each FCB and the ACB serves one or more Federal Land Credit Associations (FLCAs) and/or Agricultural Credit Associations (ACAs). The Bank and its related Associations collectively are referred to as the Farm Credit Bank of Texas and affiliated associations (Texas District). The Texas District consists of one FLCA and 12 ACA parent associations, each containing two wholly-owned subsidiaries (an FLCA and a Production Credit Association [PCA]), certain Other Financing Institutions (OFIs) and preferred stockholders which jointly owned the Bank at December 31, 2023. The Bank's FLCA and ACAs collectively are referred to as Associations.

Effective December 1, 2023, two of the Bank's affiliated Associations, Ag New Mexico Farm Credit Services, ACA and Lone Star, ACA, merged and are doing business as AgTrust Farm Credit, ACA.

Each FCB and the ACB provides funding for its district associations and is responsible for supervising their activities. The FCBs and/or associations make loans to or for the benefit of eligible borrower-stockholders for qualified agricultural and rural purposes. District associations borrow the majority of their funds from their related bank. The System banks obtain a substantial majority of funds for their lending operations through the sale of consolidated Systemwide bonds and notes to the public, and also obtain a portion of their funds from internally generated earnings and from the issuance of common and preferred stock.

The Farm Credit Administration (FCA) is delegated authority by Congress to regulate the System banks and associations. The FCA examines the activities of System institutions to ensure their compliance with the Farm Credit Act, FCA regulations, and safe and sound banking practices.

The Farm Credit Act established the Farm Credit System Insurance Corporation (FCSIC) to administer the Farm Credit Insurance Fund (Insurance Fund). The Insurance Fund is required to be used to (1) ensure the timely payment of principal and interest on Systemwide debt obligations (insured debt), (2) ensure the retirement of protected borrower capital at par or stated value and (3) for other specified purposes. The Insurance Fund is also available for the discretionary uses, by FCSIC, of providing assistance to certain troubled System institutions and to cover the operating expenses of FCSIC. Each System bank has been required to pay premiums, which may be passed on to its associations, into the Insurance Fund based on its annual average adjusted outstanding insured debt until the monies in the Insurance Fund reach the “secure base amount,” which is defined in the Farm Credit Act as 2.0% of the aggregate insured obligations (adjusted to reflect the reduced risk on loans or investments guaranteed by federal or state governments) or such other percentage of the aggregate obligations as FCSIC in its sole discretion determines to be actuarially sound. When the amount in the Insurance Fund exceeds the secure base amount, FCSIC is required to reduce premiums, as necessary to maintain the Insurance Fund at the 2.0% level. As required by the Farm Credit Act, as amended, FCSIC may return excess funds above the secure base amount to the System banks.

B. Operations:

The Farm Credit Act sets forth the types of authorized lending activities, persons eligible to borrow and financial services which can be offered by the Bank.

The Bank lends primarily to Texas District Associations in the form of revolving lines of credit (direct notes) to fund the Associations’ loan portfolios. These direct notes are collateralized by a pledge of substantially all of each Association’s assets. The terms of the revolving direct notes are governed by a general financing agreement between the Bank and each Association. Each advance is structured so that the principal cash flow, repricing characteristics and underlying index (if any) of the advance match those of the assets being funded. By match-funding the Association loans, the interest rate risk is effectively transferred to the Bank.

Advances are also made to fund general operating expenses of the Associations. The FLCA borrows money from the Bank and, in turn, originates and services long-term real estate and agribusiness loans to their members. ACAs borrow from the Bank and in turn originate and service long-term mortgage loans through the FLCA subsidiary and short- and intermediate-term loans through the PCA subsidiary. The OFIs borrow from the Bank and in turn originate and service short- and intermediate-term loans to their members. An Association’s indebtedness to the Bank, under a general financing agreement between the Bank and the Association, represents demand borrowings by the Association to fund the majority, but not all, of its loan advances to Association member-borrowers.

In addition to providing loan funds to the Associations, the Bank also provides banking and support services to them, such as accounting, information systems, human resources and marketing. The fees charged by the Bank for these services are included in the Bank's noninterest income.

The Bank is also authorized to provide, either directly or in participation with other lenders, credit, credit commitments and related services to eligible borrowers. Eligible borrowers include farmers, ranchers, producers or harvesters of aquatic products, their cooperatives, rural residents and farm-related businesses. The Bank may also lend to qualifying financial institutions engaged in lending to eligible borrowers.

The Bank, in conjunction with other System banks, jointly owns service organizations which were created to provide a variety of services for the System. The Bank has ownership interests in the following service organizations:

- *Federal Farm Credit Banks Funding Corporation (Funding Corporation)* — provides for the issuance, marketing and processing of Systemwide debt securities using a network of investment dealers and dealer banks. The Funding Corporation also provides financial accounting and reporting services.
- *Farm Credit System Building Association* — leases premises and equipment to the FCA, as required by the Farm Credit Act.
- *Farm Credit System Association Captive Insurance Company* — reciprocal insurer that provides insurance services to its member organizations.

In addition, the Farm Credit Council acts as a full-service, federated trade association which represents the System before Congress, the executive branch and others, and provides support services to System institutions on a fee basis.

Note 2 — Summary of Significant Accounting Policies

The accounting and reporting policies of the Bank conform to generally accepted accounting principles in the United States of America (GAAP) and prevailing practices within the banking industry. The preparation of financial statements in conformity with GAAP requires the management of the Bank to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Significant estimates are discussed in these notes as applicable. These estimates and assumptions affect the reported amounts of assets and liabilities and disclosure of contingent liabilities at the date of the financial statements. Actual results could differ from these estimates. Material estimates that are particularly susceptible to significant change in the near term relate to the determination of the allowance for credit losses on loans and the determination of fair value of financial instruments.

The accompanying financial statements include the accounts of the Bank and reflect the investments in and allocated earnings of the service organizations in which the Bank has partial ownership interests.

The multiemployer structure of certain retirement and benefit plans of the Texas District results in the recording of these plans only in the combined financial statements of the Texas District.

A. Cash:

Cash, as included in the financial statements, represents cash on hand and on deposit at banks and the Federal Reserve.

B. Federal Funds Sold and Overnight Investments:

The Bank holds federal funds sold and other overnight funds primarily to maintain a liquidity reserve and manage short-term surplus funds. Securities purchased under agreements to resell and securities sold under agreements to repurchase are treated as collateralized financing transactions.

C. Investment Securities:

The Bank, as permitted under FCA regulations, holds eligible investments for purposes of maintaining a liquidity reserve, managing short-term surplus funds and managing interest rate risk in an amount not to exceed 35% of its total outstanding loans.

The Bank's investments are generally held to maturity unless needed for liquidity purposes and, accordingly, have been classified as available-for-sale at December 31, 2023, 2022 and 2021. These investments are reported at fair value, and unrealized holding gains and losses on investments are netted and reported as a separate component of shareholders' equity on the balance sheet (accumulated other comprehensive gain/loss). Changes in the fair value of these investments are reflected as direct charges or credits to other comprehensive income (loss) unless deemed to be impaired.

Beginning on January 1, 2023, impairment may result from credit deterioration of the issuer or collateral underlying the security. In performing an assessment of whether any decline in fair value is due to a credit loss, all relevant information is considered at the individual security level. For mortgage-backed and asset-backed securities, performance indicators considered related to the underlying assets include default rates, delinquency rates, percentage of nonperforming assets, debt-to-collateral ratios, third-party guarantees, current levels of subordination, vintage, geographic concentration, analyst reports and forecasts, credit ratings and other market data.

With respect to certain classes of debt securities, primarily U.S. Treasuries and government guaranteed agency securities, management considers the history of credit losses, current conditions and reasonable and supportable forecasts, which may indicate the expectation that nonpayment of the amortized cost basis is or continues to be zero, even if the U.S. government were to technically default. Therefore, for those securities, the Bank does not record expected credit losses.

Available-for-sale debt securities in unrealized loss positions are evaluated for impairment related to credit losses at least quarterly. For available-for-sale debt securities, a decline in fair value due to estimated credit loss results in recording an allowance for credit losses to the extent the fair value is less than the amortized cost basis. Declines in fair value that have not been recorded through an allowance for credit losses, such as declines due to changes in market interest rates, are recorded through other comprehensive income.

If the intention is to sell a debt security or it is more likely than not to be required to sell the security before recovery of its amortized cost basis, the debt security is written down to its fair value and the write-down is charged against the allowance for credit losses with any incremental impairment reported in earnings.

Prior to January 1, 2023, the Bank reviewed all investments that were in a loss position in order to determine whether the unrealized loss, which was considered an impairment, was temporary or other-than-temporary. Impairment was considered to be other-than-temporary if the present value of cash flows expected to be collected from the debt security was less than the amortized cost basis of the security (any such shortfall was referred to as a "credit loss"). If the Bank intended to sell an impaired debt security or was more likely than not to be required to sell the security before recovery of its amortized cost basis less any current-period credit loss, the impairment was other-than-temporary and was recognized in earnings at that time in an amount equal to the entire difference between fair value and amortized cost. If a credit loss existed, but the Bank did not intend to sell the impaired debt security and was not more likely than not to be required to sell before recovery, the impairment was other-than-temporary and was separated into (i) the estimated amount relating to credit loss, and (ii) the amount relating to all other factors. Only the estimated credit loss amount was recognized in earnings at that time, with the remainder of the loss amount recognized in other comprehensive income. In subsequent periods, if the present value of cash flows expected to be collected was less than the amortized cost basis, the Bank would record an additional other-than-temporary impairment and adjust the yield of the security prospectively. The amount of total other-than-temporary impairment for an available-for-sale security that previously was impaired was determined as the difference between its carrying amount prior to the determination of other-than-temporary impairment and its fair value.

Gains and losses on the sales of investments available-for-sale are determined using the specific identification method. Premiums and discounts are amortized or accreted into interest income over the term of the respective issues. The Bank does not hold investments for trading purposes.

All or a portion of the unrealized holding gain or loss of an available-for-sale security that is designated as a hedged item in a fair value hedge is recognized in earnings during the period of the hedge.

The Bank may also hold additional investments in accordance with other investment programs approved by the FCA. These programs allow the Bank to make investments that further the System's mission to serve rural America. These other investments are not included in the Bank's liquidity calculations and are not covered by the eligible investment limitations specified by the FCA regulations. Agricultural mortgage-backed securities (AMBS) issued by the Federal Agricultural Mortgage Corporation (Farmer Mac) are considered other investments in the available-for-sale portfolio and are excluded from the limitation and the Bank's liquidity calculations.

The Bank's holdings in investment securities are more fully described in Note 3, "Investment Securities."

D. Loans and Allowance for Credit Losses:

Long-term real estate mortgage loans can have maturities ranging from five to 40 years. Substantially all short- and intermediate-term loans for agricultural production or operating purposes have maturities of 10 years or less.

Loans are generally carried at their principal amount outstanding adjusted for charge-offs, deferred loan fees or costs and valuation adjustments relating to hedging activities. Loan origination fees are capitalized and the fee is amortized over the average life of the related loan as an adjustment to interest income. Loan prepayment fees are reported in interest income. Interest on loans is accrued and credited to interest income based on the daily principal amount outstanding. Funds which are held by the Bank on behalf of the borrowers, where legal right of setoff exists and which can be used to reduce outstanding loan balances at the Bank's discretion, are netted against loans on the balance sheets.

Nonaccrual Loans — Nonaccrual loans are loans for which there is reasonable doubt that all principal and interest will not be collected according to the original contractual terms and are generally considered substandard or doubtful, which is in accordance with the risk rating model, as described below. A loan is considered contractually past due when any principal repayment or interest payment required by the loan instrument is not received on or before the due date. A loan shall remain contractually past due until it is modified or until the entire amount past due, including principal, accrued interest, and penalty interest incurred as the result of past due status, is collected or otherwise discharged in full.

Loans are generally placed in nonaccrual status when principal or interest is delinquent for 90 days (unless adequately secured and in the process of collection), circumstances indicate that collection of principal and interest is in doubt or legal action, including foreclosure or other forms of collateral conveyance, has been initiated to collect the outstanding principal and interest. At the time a loan is placed in nonaccrual status, accrued interest that is considered uncollectible is either reversed (if accrued in the current year) or charged against the allowance for credit losses on loans (if accrued in the prior year). Loans are charged off at the time they are determined to be uncollectible.

When loans are in nonaccrual status, interest payments received in cash are generally recognized as interest income if the collectibility of the loan principal is fully expected and certain other criteria are met. Otherwise, payments received on nonaccrual loans are applied against the recorded investment in the loan asset. Nonaccrual loans are returned to accrual status if all contractual principal and interest is current, the borrower is fully expected to fulfill the contractual repayment terms and after remaining current as to principal and interest for a sustained period or having a recent repayment pattern demonstrating future repayment capacity to make on-time payments. If previously unrecognized interest income exists at the time the loan is transferred to accrual status, cash received at the time of or subsequent to the transfer should first be recorded as interest income until such time as the recorded balance equals the contractual indebtedness of the borrower.

Loan Modifications to Borrowers Experiencing Financial Difficulty — Loan modifications may be granted to borrowers experiencing financial difficulty. Modifications can be in the form of one or a combination of principal forgiveness, interest rate reduction, other-than-insignificant payment delay or a term extension. Covenant waivers and modifications of contingent acceleration clauses are not considered term extensions.

Collateral Dependent Loans — Collateral dependent loans are loans secured by collateral, including but not limited to agricultural real estate, crop inventory, equipment and livestock. Accounting guidance requires the Bank to measure the expected credit losses based on fair value of the collateral at the reporting date when the Bank determines that foreclosure is probable. Additionally, accounting guidance allows a fair value practical expedient as a measurement approach for loans when the repayment is expected to be provided substantially through the operation or sale of the collateral when the borrower is experiencing financial difficulties. Under the practical expedient measurement approach, the expected credit losses is based on the difference between the fair value of the collateral less estimated costs to sell and the amortized cost basis of the loan.

Risk Rating Model — The Bank uses a two-dimensional risk rating model based on an internally generated combined System risk-rating guidance that incorporates a 14-point risk rating scale to identify and track the probability of borrower default and a separate scale addressing loss given default over a period of time. Probability of default is management's assumption of the probability that a borrower will experience a default during the life of the loan. A default is considered to have occurred if the lender believes the borrower will not be able to pay its obligation in full or the borrower is past due more than 90 days. The loss given default is management's assumption as to the anticipated principal loss on a specific loan assuming default has occurred or is expected to occur within the next 12 months.

Each of the probability of default categories carries a distinct percentage of default probability. The 14-point probability of default rating scale provides for granularity of the probability of default, especially in the acceptable ratings. There are nine acceptable categories that range from a borrower of the highest quality to a borrower of minimally acceptable quality. The probability of default between 1 and 9 is very narrow and would reflect almost no default to a minimal default percentage. The probability of default grows more rapidly as a loan moves from a 9 to other assets especially mentioned and grows significantly as a loan moves to a substandard (viable) level. A substandard (nonviable) rating indicates that the probability of default is almost certain.

Allowance for Credit Losses — Beginning January 1, 2023, the allowance for credit losses (ACL) represents the estimated current expected credit losses over the remaining contractual life of financial assets measured at amortized cost and certain off-balance sheet credit exposures. The ACL takes into consideration relevant information about past events, current conditions and reasonable and supportable macroeconomic forecasts of future conditions. The contractual term excludes expected extensions, renewals and modifications unless the extension or renewal options are not unconditionally cancellable. The ACL comprises:

- the allowance for credit losses on loans (ACLL), which covers the loan portfolio and is presented separately on the balance sheet,
- the allowance for credit losses on unfunded commitments, which is presented on the balance sheet in other liabilities, and
- the allowance for credit losses on investment securities, which covers held-to-maturity and available-for-sale securities, is recognized within each investment securities classification on the Balance Sheet.

Determining the appropriateness of the allowance is complex and requires judgment by management about the effect of matters that are inherently uncertain. Subsequent evaluations of the loan portfolio, considering macroeconomic conditions, forecasts and other factors prevailing at the time, may result in significant changes in the ACL in those future periods.

Methodology for Allowance for Credit Losses on Loans — The ACLL represents management's estimate of credit losses over the remaining expected life of loans. Loans are evaluated on the amortized cost basis, including premiums, discounts and fair value hedge accounting adjustments. The expected life of a loan is determined based on the contractual term of the loan, anticipated prepayment rates, cancellation features and certain extension and call options. The ACLL is estimated using a probability of default (PD) and loss given default (LGD) model wherein impairment is calculated by multiplying the PD (probability the loan will default in a given timeframe) by the LGD (percentage of the loan expected to be collected at default.)

The Bank employs a disciplined process and methodology to establish its ACLL that has two basic components: first, an asset-specific component involving individual loans that do not share risk characteristics with other loans and the measurement of expected credit losses for such individual loans; and second, a pooled component for estimated expected credit losses for pools of loans that share similar risk characteristics.

Asset-specific loans are generally collateral dependent loans (including those loans for which foreclosure is probable) and nonaccrual loans. For an asset-specific loan, expected credit losses are measured as the difference between the amortized cost basis in the loan and the present value of expected future cash flows discounted at the loan's effective interest rate except that, for collateral-dependent loans, credit loss is measured as the difference between the amortized cost basis in the loan and the fair value of the underlying collateral. The fair value of the collateral is adjusted for the estimated cost to sell if repayment or satisfaction of a loan is dependent on the sale (rather than only on the operation) of the collateral. When an updated appraisal or collateral valuation is received, management reassesses the need for adjustments to the loan's expected credit loss measurements and, where appropriate, records an adjustment. If the calculated expected credit loss is determined to be permanent, fixed or non-recoverable, the credit loss portion of the loan will be charged off against the allowance for credit losses.

In estimating the pooled component of the ACLL, loans are evaluated collectively and segregated into loan pools considering the risk associated with the specific pool. Relevant risk characteristics include loan type and credit quality rating, or a combination of these classes. The ACLL is determined based on a quantitative calculation of the expected life-of-loan loss percentage for each loan pool by considering the probability of default, based on the migration of loans from performing to loss by credit quality rating and the loss given default, based on the aggregate net lifetime losses incurred per loan pool.

The ACLL also considers factors for each loan pool to adjust for differences between the historical period used to calculate historical default and loss given default rates and expected conditions over the remaining lives of the loans in the portfolio related to:

- lending policies and procedures;
- national, regional and local economic business conditions and developments that affect the collectability of the portfolio, including the condition of various markets;
- the nature of the loan portfolio, including the terms of the loans;
- the experience, ability and depth of the lending management and other relevant staff;
- the volume and severity of past due and adversely classified or graded loans and the volume of nonaccrual loans;
- the quality of the loan review and process;
- the value of underlying collateral for collateral-dependent loans;
- the existence and effect of any concentrations of credit and changes in the level of such concentrations; and
- the effect of external factors such as competition and legal and regulatory requirements on the level of estimated credit losses in the existing portfolio.

The Bank's macroeconomic forecast includes a weighted selection of a third-party vendor's economic scenarios over a reasonable and supportable forecast period of two years. The economic scenarios utilized in the estimates for allowances for credit losses on loans and unfunded commitments were based on the following: a baseline scenario, which represents a relatively stable economic environment; a downside scenario reflecting reflecting weak economic conditions relative to the baseline scenario; and an upside scenario that considers the potential for economic improvement relative to the baseline scenario. Subsequent to the forecast period, the Bank reverts to long-run historical loss experiences over a one year reversion period to inform the estimate of losses for the remaining contractual life of the loan portfolio.

The economic forecasts incorporate macroeconomic variables, including the U.S. unemployment rate, Dow Jones Total Stock Market Index and U.S. corporate bond spreads. The Bank also considers loan and borrower characteristics, such as internal risk ratings, industry, and the remaining term of the loan, adjusted for expected prepayments.

In addition to the quantitative calculation, the Bank considers the imprecision inherent in the process and methodology, emerging risk assessments and other subjective factors, which may lead to a management adjustment to the modeled ACLL results. Expected credit loss estimates also include consideration of expected cash recoveries on loans previously charged-off or expected recoveries on collateral dependent loans where recovery is expected through sale of the collateral. The economic forecasts are updated on a quarterly basis.

Prior to January 1, 2023, the allowance for loan losses on loans was maintained at a level considered adequate to provide for probable losses existing in and inherent in the loan portfolio. The allowance was based on a periodic evaluation of the loan portfolio in which numerous factors were considered, including economic conditions, collateral values, borrowers' financial conditions, loan portfolio composition and prior loan loss experience. The allowance for loan losses on loans encompassed various judgments, evaluations and appraisals with respect to the loans and their underlying collateral that, by their nature, contained elements of uncertainty and imprecision. Changes in the agricultural economy and their impact on borrower repayment capacity would cause these various judgments, evaluations and appraisals to change over time. Management considered a number of factors in determining and supporting the levels of the allowances for loan losses, which included, but were not limited to, the concentration of lending in agriculture, combined with uncertainties associated with farmland values, commodity prices, exports, government assistance programs, regional economic effects and weather-related influences.

Allowance for Credit Losses on Unfunded Commitments — The Bank evaluates the need for an allowance for credit losses on unfunded commitments and, if required, an amount is recognized and included in other liabilities on the Balance Sheet. The amount of expected losses is determined by calculating a commitment usage factor over the contractual period for exposures that are not unconditionally cancellable by the Bank and applying the loss factors used in the ACLL methodology to the results of the usage calculation. No allowance for credit losses is recorded for commitments that are unconditionally cancellable.

E. Accrued Interest Receivable:

The Bank elected to continue classifying accrued interest on loans and investment securities in accrued interest receivable and not as part of loans or investments on the Balance Sheet.

F. Other Property Owned:

Other property owned (OPO), consisting of real and personal property acquired through foreclosure or deed-in-lieu of foreclosure, would be recorded at fair value, based on appraisal, less estimated selling costs upon acquisition and included in other assets on the balance sheet. Any initial reduction in the carrying amount of a loan to the fair value of the collateral received would be charged to the allowance for credit losses on loans. On at least an annual basis, revised estimates to the fair value, established by appraisal, less cost to sell would be reported as adjustments to the carrying amount of the asset, provided that such adjusted value was not in excess of the carrying amount at acquisition. Income and expenses from operations and carrying value adjustments would be included in net losses (gains) on OPO in the statements of comprehensive income. The Bank did not hold any OPO at December 31, 2023, 2022 and 2021.

G. Premises and Equipment:

Premises and equipment are carried at cost less accumulated depreciation. Depreciation expense is calculated using the straight-line method over the estimated useful lives of three years for automobiles, and three to 10 years for furniture, equipment and certain leasehold improvements. Computer software and hardware are amortized over three to 10 years. Gains and losses on dispositions are reflected in current operating results. Maintenance and repairs are charged to operating expense, and improvements are capitalized and amortized over the remaining useful life of the asset.

H. Other Assets and Other Liabilities:

The Bank is a limited partner in certain Rural Business Investment Companies (RBICs) for various relationship and strategic reasons. These RBICs facilitate equity and debt investments in agriculture-related businesses that create growth and job opportunities in rural America. These investments are accounted for under the equity method as the Bank is considered to have significant influence.

The Bank is authorized under the Farm Credit Act to accept "advance conditional payments" (ACPs) from borrowers. To the extent the borrower's access to such ACPs is restricted and the legal right of setoff exists, the ACPs are netted against the borrower's related loan balance. Unrestricted advance conditional payments are included in other liabilities. ACPs are not insured, and interest is generally paid by the Bank on such balances. There were no significant balances of ACPs at December 31, 2023, 2022 and 2021.

Investment in another System bank represents non-marketable investments consisting of stock in another institution regulated by the FCA. This investment is carried at cost and evaluated for impairment based on the ultimate recoverability of the par value rather than by recognizing temporary declines in value.

Derivative financial instruments are included on the balance sheet at fair value, as either other assets or other liabilities.

I. Employee Benefit Plans:

Employees of the Bank participate in one of two Texas District-wide retirement plans (a defined benefit plan and a defined contribution plan) and are eligible to participate in the 401(k) plan of the Texas District. Within the 401(k) plan, a certain percentage of employee contributions are matched by the Bank. The 401(k) plan costs are expensed as incurred. Additionally, certain qualified individuals in the Bank may participate in a separate, nonqualified 401(k) plan.

The structure of the Texas District's defined benefit plan (DB Plan) is characterized as multiemployer, since neither the assets, liabilities nor cost of the DB Plan is segregated or separately accounted for by participating employers (Bank and Associations). No portion of any surplus assets is available to any participating employer. Participating employers are jointly and severally liable for the DB Plan obligations. Upon withdrawal or termination of their participation in the DB Plan, a participating employer must pay all associated costs of its withdrawal from the DB Plan, including its unfunded liability (the difference between replacement annuities and the withdrawing employer's share of allocated plan assets). As a result, participating employers of the DB Plan only recognize as cost the required contributions for the period and a liability for any unpaid contributions required for the period of their financial statements. DB Plan obligations, assets and the components of annual benefit expenses are recorded and reported upon combination at the Texas District level only. The Bank records current contributions to the DB Plan as an expense in the current year.

In addition to pension benefits, the Bank provides certain health care benefits to qualifying retired employees (other postretirement benefits). These benefits are not characterized as multiemployer and, consequently, the liability for these benefits is included in other liabilities. Bank employees hired after January 1, 2004, will be eligible for retiree medical benefits for themselves and their spouses but will be responsible for 100% of the related premiums.

The Bank records an accrual of the expected cost of providing postretirement benefits other than pensions (primarily health care benefits) to an employee and an employee's beneficiaries and covered dependents during the years that the employee renders service necessary to become eligible for these benefits.

J. Income Taxes:

The Bank is exempt from federal and certain other income taxes as provided in the Farm Credit Act.

K. Derivative Instruments and Hedging Activity:

In the normal course of business, the Bank enters into derivative financial instruments, including interest rate swaps and caps, which are principally used to manage interest rate risk on assets, liabilities and anticipated transactions. Derivatives are recorded on the balance sheet as assets and liabilities at fair value.

Changes in the fair value of derivatives are recorded in current period earnings or accumulated other comprehensive income (loss) depending on the use of the derivative and whether it qualifies for hedge accounting. For fair-value hedges, which hedge changes in the fair value of assets, liabilities or firm commitments, changes in the fair value of the derivative are recorded in earnings and will generally be offset by changes in the hedged item's fair value. For cash flow hedges, which hedge the exposure to variability in expected future cash flows, changes in the fair value of the derivative will generally be offset by an entry to accumulated other comprehensive income (loss) in the statement of shareholders' equity. The ineffective portion of all hedges is recorded in current period earnings. For derivatives not designated as a hedging instrument, the related change in fair value is recorded in current period earnings.

The Bank formally documents all relationships between hedging instruments and hedged items, as well as its risk-management objective and strategy for undertaking various hedge transactions. This process includes linking all derivatives that are designated as fair value or cash flow hedges to (1) specific assets or liabilities on the balance sheet or (2) firm commitments or forecasted transactions. The Bank also formally assesses (both at the hedge's inception and on an ongoing basis) whether the derivatives that are used in hedging transactions have been highly effective in offsetting changes in the fair value or cash flows of hedged items and whether those derivatives may be expected to remain highly effective in future periods. The Bank uses regression analysis (or other statistical analysis) to assess the effectiveness of its hedges. The Bank discontinues hedge accounting prospectively when the Bank determines that 1) a derivative is no longer effective in offsetting changes in the fair value or cash flows of a hedged item; 2) the derivative expires or is sold, terminated, or exercised; 3) it is no longer probable that the forecasted transaction will occur; 4) a hedged firm commitment no longer meets the definition of a firm commitment; or 5) management determines that designating the derivative as a hedging instrument is no longer appropriate. For cash flow hedges, when the Bank discontinues hedge accounting, any remaining accumulated other comprehensive income (loss) would be amortized into earnings over the remaining life of the original hedged item. For fair value hedges, when the Bank discontinues hedge accounting, changes in fair value of the derivative will be recorded in current period earnings. The Bank may use interest rate swaps whose critical terms match the corresponding hedged item, thereby qualifying for short-cut treatment, and are presumed to be highly effective in offsetting changes in the fair value. The Bank would discontinue hedge accounting prospectively if it were determined that a hedge had not been or is not expected to be effective as a hedge. In all situations in which hedge accounting is discontinued and the derivative remains outstanding, the Bank will carry the derivative at its fair value on the balance sheet, recognizing changes in fair value in current period earnings. See Note 17, "Derivative Instruments and Hedging Activity," for additional disclosures about derivative instruments.

L. Fair Value Measurements:

The Financial Accounting Standards Board (FASB) guidance defines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurements. It describes three levels of inputs that may be used to measure fair value:

Level 1 — Quoted prices in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date. Level 1 assets include assets held in trust funds, which relate to our supplemental retirement plan. The trust funds include investments that are actively traded and have quoted net asset values that are observable in the marketplace.

Level 2 — Observable inputs other than quoted prices included within Level 1 that are observable for the asset or liability either directly or indirectly. Level 2 inputs include the following: (a) quoted prices for similar assets or liabilities in active markets; (b) quoted prices for identical or similar assets or liabilities in markets that are not active so that they are traded less frequently than exchange-traded instruments, the prices are not current or principal market information is not released publicly; (c) inputs other than quoted prices that are observable such as interest rates and yield curves, prepayment speeds, credit risks and default rates; and (d) inputs derived principally from or corroborated by observable market data by correlation or other means. This category generally includes certain U.S. government and agency mortgage-backed debt securities, certificates of deposit, corporate debt securities, commercial paper and derivative contracts. The market value of collateral assets and liabilities is their face value, plus accrued interest, as these instruments are cash balances; therefore, fair value approximates face value.

Level 3 — Unobservable inputs are those that are supported by little or no market activity and that are significant to the determination of the fair value of the assets or liabilities. These unobservable inputs reflect the reporting entity's own assumptions about assumptions that market participants would use in pricing the asset or liability. Level 3 assets and liabilities include financial instruments whose value is determined using pricing models, discounted cash flow methodologies, or similar techniques, as well as instruments for which the determination of fair value requires significant management judgment or estimation. This category generally includes the Bank's Federal Agricultural Mortgage Corporation (Farmer Mac) guaranteed agricultural mortgage-backed securities (AMBS) and certain loans.

The fair value disclosures are presented in Note 16, "Fair Value Measurements."

M. Off-Balance-Sheet Credit Exposures:

Commitments to extend credit are agreements to lend to customers, generally having fixed expiration dates or other termination clauses that may require payment of a fee. Commercial letters of credit are conditional commitments issued to guarantee the performance of a customer to a third party. These letters of credit are issued to facilitate commerce and typically result in the commitment being funded when the underlying transaction is consummated between the customer and the third party. The credit risk associated with commitments to extend credit and commercial letters of credit is essentially the same as that involved with extending loans to customers and is subject to normal credit policies. Collateral may be obtained based on management's assessment of the customer's creditworthiness.

N. Recently Issued or Adopted Accounting Pronouncements:

The Bank adopted the Financial Accounting Standards Board (FASB) guidance entitled "Measurement of Credit Losses on Financial Instruments" and other subsequently issued accounting standards updates related to credit losses on January 1, 2023. This guidance replaced the current incurred loss impairment methodology with a single allowance framework that estimates the current expected credit losses (CECL) over the remaining contractual life for all financial assets carried at amortized cost and certain off-balance sheet credit exposures. This guidance was applied on a modified retrospective basis. This framework requires management to consider in its estimate of the allowance for credit losses relevant historical events, current conditions and reasonable and supportable forecasts that consider macroeconomic conditions. In addition, the guidance amended existing impairment guidance for held-to-maturity and available-for-sale investments to incorporate an allowance for credit losses related to these securities, which will allow for the reversal of credit impairments in the event that the credit of an issuer improves.

Also adopted effective January 1, 2023, was the updated guidance entitled "Financial Instruments – Credit Losses: Troubled Debt Restructurings and Vintage Disclosure." This guidance required the creditor to determine whether a modification results in a new loan or a continuation of an existing loan, among other disclosures specific to modifications with borrowers that are experiencing financial difficulties. The update eliminated the accounting guidance for troubled debt restructurings by creditors. The update also requires disclosure of current period gross write-offs by year of origination for financing receivables and net investments in leases on a prospective basis.

The following table presents the impact to the allowance for credit losses and retained earnings upon adoption of this guidance on January 1, 2023:

	December 31, 2022	CECL Adoption Impact	January 1, 2023
Assets:			
Allowance for credit losses on loans	$ 15,706	$ 4,863	$ 20,569
Liabilities:			
Allowance for credit losses on unfunded commitments	2,052	3,505	5,557
Retained earnings:			
Unallocated retained earnings	$ 868,650	$ (8,368)	$ 860,282

In December 2022, the FASB issued an update entitled "Reference Rate Reform - Deferral of the Sunset Date of Topic 848." In March 2020, the FASB issued guidance entitled "Facilitation of the Effects of Reference Rate Reform on Financial Reporting (Reference Rate Reform)," which provided optional expedients and exceptions for applying GAAP to contracts, hedging relationships and other transactions affected by reference rate reform to ease the potential burden related to reference rate reform (transition away from the London Inter-Bank Offered Rate (LIBOR)) with the optional amendments effective as of March 12, 2020 through December 31, 2022, the sunset date. At the time the update was issued, the expectation was that LIBOR would cease to be published after December 31, 2021.

In January 2021, the FASB issued an update to Reference Rate Reform whereby certain derivative instruments could be modified to change the rate used for margining, discounting, or contract price alignment. An entity could elect to apply the new amendments on a full retrospective basis as of any date from the beginning of an interim period that included or was subsequent to March 12, 2020, or on a prospective basis to new modifications from any date within an interim period that included or was subsequent to the date of the update, up to the date that financial statements were available to be issued. These amendments did not apply to contract modifications made or new hedging relationships entered into after December 31, 2022, and existing hedging relationships evaluated for effectiveness in periods after December 31, 2022.

Subsequent to the issuance of the January 2021 update, it was announced that the intended cessation date for various tenors of LIBOR would be June 30, 2023, thus necessitating the update to the sunset date. The amendments in the current update defer the sunset date from December 31, 2022, to December 31, 2024, after which entities will no longer be permitted to apply the relief.

In March 2022, the FASB issued an update entitled "Derivatives and Hedging: Fair Value Hedging – Portfolio Layer Method." Under current guidance, the last-of-layer method enables an entity to apply fair value hedging to a stated amount of a closed portfolio of prepayable financial assets (or one or more beneficial interests secured by a portfolio of prepayable financial instruments) without having to consider prepayment risk or credit risk when measuring those assets. This guidance will allow entities to apply the portfolio layer method to portfolios of all financial assets, including both prepayable and non-prepayable financial assets. This scope expansion is consistent with the FASB's efforts to simplify hedge accounting and allows entities to apply the same method to similar hedging strategies. For public business entities, the amendments in this update were effective for fiscal years beginning after December 15, 2022, and interim periods within those fiscal years. The adoption of this guidance did not impact the Bank's financial condition or results of operations as the Bank does not have a current derivative hedging strategy in which the last-of-layer method is used.

In November 2023, the FASB issued an update entitled "Segment Reporting: Improvements to Reportable Segment Disclosures." The ASU prescribes enhanced disclosure requirements for entities with reportable segments. These requirements include: 1) disclosure of significant segment expenses that are reportable to the Chief Operating Decision Maker (CODM); 2) requires the entity to report an amount for 'other segment items' by reportable segment and a description of its composition; 3) requires the entity to provide all annual disclosures about reportable segments in interim periods; 4) provides clarification of the segment profit and loss measures that are reported and how these are utilized by the CODM to allocate resources; 5) requires entities to disclose the name and title of the CODM; and 6) requires that an entity that has a single reportable segment provide all the disclosures required by the amendments in this update and all existing segment disclosures in Topic 280. The amendments in this update are effective for fiscal years beginning after December 15, 2023 and interim periods within fiscal years beginning after December 15, 2024. Historically, the Bank has had a single reportable segment and has not been subject to the reporting and disclosure requirements of Topic 280. The Bank is currently evaluating the impact of this update on its financial statements.

Note 3 — Investment Securities

The Bank's available-for-sale investments include a liquidity portfolio and a portfolio of other investments. The liquidity portfolio consists primarily of agency-guaranteed debt instruments, mortgage-backed securities (MBS), U.S. Treasury securities, asset-backed securities (ABS), corporate debt and certificates of deposit. The liquidity portfolio's MBS were federal agency-guaranteed collateralized MBS, including the Government National Mortgage Association (GNMA), Federal National Mortgage Association (FNMA) and Federal Home Loan Mortgage Corporation (FHLMC) securities. The Bank's other investments portfolio consists of Farmer Mac AMBS purchased from Associations in 2010, 2012 and 2014, as a part of the Bank's Capitalized Participation Pool (CPP) program. In accordance with this program, any positive impact to the net income of the Bank can be returned as patronage to the Association if declared by the Bank's board of directors. The declared patronage approximates the net earnings of the respective pool. The Farmer Mac securities are backed by loans originated by the Associations and previously held by the Associations under Farmer Mac long-term standby commitments to purchase agreements.

During the years ended December 31, 2023, 2022 and 2021, no investment securities were sold. Had any investments been sold, the Bank would use the specific identification method to determine the cost of securities sold.

A summary of the amortized cost and fair value of the available-for-sale investment securities in the liquidity portfolio and other investments portfolio are included in the following tables:

	December 31, 2023				
	Amortized Cost	**Gross Unrealized Gains**	**Gross Unrealized Losses**	**Fair Value**	**Weighted Average Yield**
Liquidity Portfolio:					
Agency-guaranteed debt	**$ 28,728**	**$ 7**	**$ (564)**	**$ 28,171**	**3.22 %**
Certificates of deposit	**250,000**	**245**	**—**	**250,245**	**5.94**
Corporate debt	**197,968**	**21**	**(2,957)**	**195,032**	**3.81**
Federal agency collateralized mortgage-backed securities:					
GNMA	**3,135,926**	**305**	**(410,919)**	**2,725,312**	**2.33**
FNMA and FHLMC	**2,465,791**	**1,113**	**(145,763)**	**2,321,141**	**3.86**
U.S. Treasury securities	**895,725**	**47**	**(7,853)**	**887,919**	**3.66**
Asset-backed securities	**195,178**	**215**	**(1,283)**	**194,110**	**4.79**
Total liquidity investments	**$ 7,169,316**	**$ 1,953**	**$ (569,339)**	**$ 6,601,930**	**3.26 %**
Other Investments:					
Agricultural mortgage-backed securities	**$ 9,441**	**$ —**	**$ (942)**	**$ 8,499**	**5.58 %**

	December 31, 2022				
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Weighted Average Yield
Liquidity Portfolio:					
Agency-guaranteed debt	$ 54,888	$ —	$ (1,587)	$ 53,301	2.79 %
Certificates of deposit	200,000	—	(991)	199,009	4.46
Corporate debt	240,914	135	(6,271)	234,778	2.83
Federal agency collateralized mortgage-backed securities:					
GNMA	3,070,832	736	(388,548)	2,683,020	2.04
FNMA and FHLMC	2,652,701	49	(183,541)	2,469,209	3.04
U.S. Treasury securities	841,444	2	(22,602)	818,844	1.91
Asset-backed securities	188,983	345	(2,807)	186,521	3.76
Total liquidity investments	$ 7,249,762	$ 1,267	$ (606,347)	$ 6,644,682	2.53 %
Other Investments:					
Agricultural mortgage-backed securities	$ 11,595	$ —	$ (1,325)	$ 10,270	4.81 %

	December 31, 2021				
	Amortized Cost	Gross Unrealized Gains	Gain Unrealized Losses	Fair Value	Weighted Average Yield
Liquidity Portfolio:					
Agency-guaranteed debt	$ 84,269	$ 1,032	$ (8)	$ 85,293	1.60%
Corporate debt	232,885	2,238	(543)	234,580	1.51
Federal agency collateralized mortgage-backed securities:					
GNMA	2,822,556	11,106	(40,180)	2,793,482	1.42
FNMA and FHLMC	2,601,773	15,018	(15,936)	2,600,855	1.03
U.S. Treasury securities	650,216	14	(2,666)	647,564	0.26
Asset-backed securities	183,788	786	(318)	184,256	0.81
Total liquidity investments	$ 6,575,487	$ 30,194	$ (59,651)	$6,546,030	1.14%
Other Investments:					
Agricultural mortgage-backed securities	$ 14,616	$ 8	$ (415)	$ 14,209	4.23 %

There were no investments in a held-to-maturity portfolio at December 31, 2023, 2022 or 2021.

A summary of contractual maturity, amortized cost, estimated fair value and weighted average yield of the available-for-sale liquidity portfolio at December 31, 2023:

	Due in One Year Or Less	Due After One Year Through Five Years	Due After Five Years Through 10 Years	Due After 10 Years	Total
Liquidity Portfolio:					
Agency-guaranteed debt	$ 4,231	$ 23,940	$ —	$ —	$ 28,171
Certificates of deposit	150,238	100,007	—	—	250,245
Corporate debt	98,790	96,242	—	—	195,032
Federal agency collateralized mortgage-backed securities					
GNMA	—	9,888	9,535	2,705,889	2,725,312
FNMA and FHLMC	3,298	257,209	873,691	1,186,943	2,321,141
U.S. Treasury securities	639,544	248,375	—	—	887,919
Asset-backed securities	—	136,382	18,606	39,122	194,110
Total fair value	$ 896,101	$ 872,043	$ 901,832	$ 3,931,954	$ 6,601,930
Total amortized cost	$ 904,734	$ 880,662	$ 911,808	$ 4,472,112	$ 7,169,316
Weighted average yield	3.57%	4.71%	5.52%	2.45%	3.26%

Collateralized mortgage obligations (CMOs) have stated contractual maturities in excess of 15 years at purchase. However, the security structure of the CMOs is designed to produce a relatively short-term life. At December 31, 2023, the CMO portfolio had a weighted average remaining life of 4.86 years.

Investments in the available-for-sale other investments portfolio at December 31, 2023:

	Due in One Year Or Less	Due After One Year Through Five Years	Total
Fair value of agricultural mortgage-backed securities	$ 487	$ 8,012	$ 8,499
Total amortized cost	500	8,941	9,441
Weighted average yield	3.89%	5.68%	5.58%

The following table shows the fair value and gross unrealized losses for investments in a loss position aggregated by investment category, and the length of time the securities have been in a continuous unrealized loss position. The continuous loss position is based on the date the impairment occurred.

	December 31, 2023					
	Less Than 12 Months		Greater Than 12 Months		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Agency-guaranteed debt	**$ 3,746**	**$ (4)**	**$ 20,228**	**$ (560)**	**$ 23,974**	**$ (564)**
Corporate debt	**27,998**	**(2)**	**142,014**	**(2,955)**	**170,012**	**(2,957)**
Federal agency collateralized mortgage-backed securities						
GNMA	**377,225**	**(5,626)**	**2,283,170**	**(405,293)**	**2,660,395**	**(410,919)**
FNMA and FHLMC	**259,857**	**(1,318)**	**1,772,964**	**(144,445)**	**2,032,821**	**(145,763)**
U.S. Treasury securities	**349,295**	**(277)**	**440,182**	**(7,576)**	**789,477**	**(7,853)**
Asset-backed securities	**19,887**	**(35)**	**70,708**	**(1,248)**	**90,595**	**(1,283)**
Total	**$ 1,038,008**	**$ (7,262)**	**$ 4,729,266**	**$ (562,077)**	**$ 5,767,274**	**$ (569,339)**

	December 31, 2022					
	Less Than 12 Months		Greater Than 12 Months		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Agency-guaranteed debt	$ 47,760	$ (1,567)	$ 5,541	$ (20)	$ 53,301	$ (1,587)
Certificates of deposit	199,009	(991)	—	—	199,009	(991)
Corporate debt	154,993	(2,946)	46,651	(3,325)	201,644	(6,271)
Federal agency collateralized mortgage-backed securities						
GNMA	1,149,659	(103,469)	1,407,300	(285,079)	2,556,959	(388,548)
FNMA and FHLMC	1,713,903	(63,213)	733,304	(120,328)	2,447,207	(183,541)
U.S. Treasury securities	455,102	(11,796)	338,933	(10,806)	794,035	(22,602)
Asset-backed securities	68,602	(381)	41,699	(2,426)	110,301	(2,807)
Total	$ 3,789,028	$ (184,363)	$ 2,573,428	$ (421,984)	$ 6,362,456	$ (606,347)

	December 31, 2021					
	Less Than 12 Months		Greater Than 12 Months		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Agency-guaranteed debt	$ —	$ —	$ 7,786	$ (8)	$ 7,786	$ (8)
Corporate debt	69,424	(543)	—	—	69,424	(543)
Federal agency collateralized mortgage-backed securities						
GNMA	1,704,937	(33,045)	212,637	(7,135)	1,917,574	(40,180)
FNMA and FHLMC	1,119,824	(13,912)	86,872	(2,024)	1,206,696	(15,936)
U.S. Treasury securities	597,468	(2,666)	—	—	597,468	(2,666)
Asset-backed securities	67,848	(297)	9,374	(21)	77,222	(318)
Total	$ 3,559,501	$ (50,463)	$ 316,669	$ (9,188)	$ 3,876,170	$ (59,651)

As discussed in Note 2, effective January 1, 2023, the Bank adopted the CECL guidance which amended prior impairment guidance for held-to-maturity and available-for-sale investments to incorporate an allowance. At December 31, 2023, U.S. Treasury, agency and all (or substantially all) mortgage-backed securities had a zero loss assumption. The Bank does not consider these unrealized losses to be credit-related, and therefore, an allowance for credit losses is not necessary. The Bank evaluates non-guaranteed investment securities with unrealized losses for impairment on a quarterly basis. As a result of the assessment as of December 31, 2023, the Bank concluded that it does not intend to sell any securities and it is not more likely than not that it would be required to sell any securities, prior to recovery of the amortized cost basis. If it is determined that a security is impaired, the Bank will evaluate whether credit impairment exists by comparing the present value of the expected cash flows to the security's amortized cost basis. Credit impairment is recorded as an ACL for debt securities. The Bank concluded that a credit impairment did not exist at December 31, 2023.

Prior to January 1, 2023, the Bank performed an evaluation quarterly on a security-by-security basis considering all available information. If the Bank intended to sell the security or it was more likely than not that it would be required to sell the security, the impairment loss equaled the full difference between amortized cost and fair value of the security. When the Bank did not intend to sell securities in an unrealized loss position, other-than-temporary impairment was considered using various factors, including the length of time and the extent to which the fair value was less than cost, adverse conditions specifically related to the industry, geographic area and the condition of the underlying collateral, payment structure of the security, ratings by rating agencies and volatility of the fair value changes. The Bank used estimated cash flows over the remaining lives of the underlying collateral to assess whether credit losses existed. In estimating cash flows, the Bank considered factors such as expectations of relevant market and economic data, including underlying loan level data for mortgage-backed and asset-backed securities and credit enhancements. There were no other-than-temporarily impaired (OTTI) securities at December 31, 2022 or 2021.

Note 4 — Loans and Allowance for Credit Losses on Loans

Loans comprised the following categories at December 31:

	2023	2022	2021
Direct notes receivable from District Associations and OFIs	**$ 21,023,006**	$ 19,551,823	$ 18,316,444
Participations purchased	**8,702,470**	8,712,399	7,358,114
Total loans	**$ 29,725,476**	$ 28,264,222	$ 25,674,558

A summary of the Bank's loan types by amortized cost at December 31 follows:

	2023	2022	2021
Direct notes receivable from District Associations	**$ 20,967,702**	$ 19,499,945	$ 18,277,377
Real estate mortgage	**1,172,829**	1,096,090	1,037,029
Production and intermediate-term	**1,150,891**	1,067,229	881,991
Agribusiness			
Loans to cooperatives	**442,926**	503,670	480,124
Processing and marketing	**3,183,583**	3,407,164	2,696,278
Farm-related business	**226,685**	261,843	223,272
Communications	**800,600**	785,563	648,619
Energy (rural utilities)	**1,349,317**	1,303,639	1,182,406
Water and waste disposal	**279,343**	187,044	137,415
Rural home	**2,848**	1,815	2,168
Mission-related	**2,082**	2,172	2,257
Lease receivables	**4,697**	7,885	9,305
International	**86,669**	88,285	57,250
Loans to other financing institutions	**55,304**	51,878	39,067
Total	**$ 29,725,476**	$ 28,264,222	$ 25,674,558

The Bank's capital markets loan portfolio predominantly includes participations, syndications and purchased whole loans, along with other financing structures within our lending authorities. The Bank also refers to the capital markets portfolio as participations purchased. In addition to purchasing loans from our District Associations, which may exceed their hold limits, the Bank seeks the purchase of participations and syndications originated outside of the Texas District's territory by other System institutions, commercial banks and other lenders. Our capital markets loan portfolio depends to a significant degree on our relationships with other Farm Credit institutions. These loans may be held as earning assets of the Bank or sub-participated to the Associations or to other System entities.

The Bank purchases or sells participation interests with other parties in order to diversify risk, manage loan volume and comply with FCA regulations.

The following table presents information on loan participations and their related principal balance, excluding syndications, at December 31, 2023:

	Other Farm Credit Institutions		Non–Farm Credit Institutions		Total	
	Participations Purchased	Participations Sold	Participations Purchased	Participations Sold	Participations Purchased	Participations Sold
Real estate mortgage	$ 1,310,278	$ 306,240	$ 52,556	$ —	$ 1,362,834	$ 306,240
Production and intermediate-term	2,983,679	1,990,161	42,422	—	3,026,101	1,990,161
Agribusiness	2,590,742	845,082	34,425	—	2,625,167	845,082
Communications	975,760	174,739	—	—	975,760	174,739
Energy (rural utilities)	1,457,741	108,374	—	—	1,457,741	108,374
Water and waste disposal	364,772	85,198	—	—	364,772	85,198
Rural home	5,544	—	—	—	5,544	—
International	157,852	71,104	—	—	157,852	71,104
Mission-related	2,082	—	—	—	2,082	—
Lease receivables	5,865	1,172	—	—	5,865	1,172
Direct note receivable from District Associations	—	4,350,000	—	—	—	4,350,000
Total	**$ 9,854,315**	**$ 7,932,070**	**$ 129,403**	**$ —**	**$ 9,983,718**	**$ 7,932,070**

A substantial portion of the Bank's loan portfolio consists of direct notes receivable from District Associations. As described in Note 1, "Organization and Operations," these notes are used by the Associations to fund their loan portfolios, and therefore the Bank's implicit concentration of credit risk in various agricultural commodities approximates that of the Texas District as a whole. Loan concentrations are considered to exist when there are amounts loaned to borrowers engaged in similar activities, which could cause them to be similarly impacted by economic or other conditions. A substantial portion of the Associations' lending activities is collateralized and the Associations' exposure to credit loss associated with lending activities is reduced accordingly. An estimate of the Bank's credit risk exposure is considered in the Bank's allowance for credit losses on loans.

At December 31, 2023, the Bank had sold a total of $4.35 billion of Association direct notes to another System bank. The sales included participations of 11 direct notes receivable from Associations. These sales provide diversification benefits among Farm Credit entities.

The Bank has purchased loan participations and Farmer Mac guaranteed AMBS from Associations in CPP transactions. As a condition of the transactions, the Bank redeemed common stock in the amount of 2.0% of the par value of the loans and AMBS purchased, and the Associations bought Bank stock equal to 8.0% of the purchased loans' par value and 1.6% of the Farmer Mac AMBS' par value. There were no CPP loan purchases for the year ended December 31, 2023. CPP loans held at December 31, 2023, totaled $90.6 million and were included in loans on the balance sheet. The balance of the Farmer Mac AMBS CPP was $8.5 million at December 31, 2023, and is included in investment securities on the balance sheet.

The Bank also purchased loans from Associations in Non-Capitalized Participation Pool (NCPP) transactions. As a condition of these transactions, the Bank redeems common stock in the amount of 2.0% of the par value of the loans purchased. During 2023, the Bank purchased $50.6 million in loan participations from a District Association in a NCPP transaction which resulted in net stock retirements of $1.0 million. NCPP loans held at December 31, 2023, totaled $198.7 million, and were included in loans on the balance sheet.

During the year ended December 31, 2023, the Bank sold 16 loans with an amortized cost of $153.2 million, resulting in losses of $11.5 million, of which $11.1 million was recorded as charge-offs within the allowance for credit losses.

Credit Quality

Credit risk arises from the potential inability of an obligor to meet its payment obligation and exists in our outstanding loans, letters of credit and unfunded loan commitments. The Bank manages credit risk associated with the retail lending activities through an analysis of the credit risk profile of an individual borrower using its own set of underwriting standards and lending policies, approved by its board of directors, which provides direction to its loan officers. The retail credit risk management process begins with an analysis of the borrower's credit history, repayment capacity, financial position and collateral, which includes an analysis of credit scores for smaller loans. Repayment capacity focuses on the borrower's ability to repay the loan based on cash flows from operations or other sources of income, including off-farm income. Real estate mortgage loans must be secured by first liens on the real estate (collateral). As required by FCA regulations, institutions that make loans on a secured basis must have collateral evaluation policies and procedures. Real estate mortgage loans may be made only in amounts up to 85% of the original appraised value of the property taken as security or up to 97% of the appraised value if guaranteed by a state, federal, or other governmental agency. The actual loan to appraised value when loans are made is generally lower than the statutory maximum percentage. Loans other than real estate mortgages may be made on a secured or unsecured basis.

One credit quality indicator utilized by the Bank is the Farm Credit Administration Uniform Loan Classification System that categorizes loans into five categories. The categories are defined as follows:

- *Acceptable* — assets are expected to be fully collectible and represent the highest quality;
- *Other assets especially mentioned (OAEM)* — assets are currently collectible but exhibit some potential weakness;
- *Substandard* — assets exhibit some serious weakness in repayment capacity, equity or collateral pledged on the loan;
- *Doubtful* — assets exhibit similar weaknesses to substandard assets; however, doubtful assets have additional weaknesses in existing factors, conditions and values that make collection in full highly questionable; and
- *Loss* — assets are considered uncollectible.

The following table presents the amortized cost of loans classified under the Uniform Loan Classification System as a percentage of the amortized cost of total loans:

	December 31, 2023
Acceptable	99.0 %
OAEM	0.5 %
Substandard/Doubtful	0.5 %
	100.0 %

The following table presents credit quality indicators by loan type and the related amortized cost loan balance for the loan participation portfolio as of December 31, 2023:

	Term Loans by Origination Year								
	2023	2022	2021	2020	2019	Prior	Revolving Loans	Revolving Loans Converted to Term Loans	Total
Real estate mortgage									
Acceptable	$ 85,199	$ 194,450	$ 205,627	$ 104,437	$ 120,002	$ 326,010	$ 121,963	$ 3,379	$ 1,161,067
OAEM	—	—	—	—	—	—	—	—	—
Substandard/Doubtful	—	—	—	—	752	521	10,489	—	11,762
Total	$ 85,199	$ 194,450	$ 205,627	$ 104,437	$ 120,754	$ 326,531	$ 132,452	$ 3,379	$ 1,172,829
Current period gross charge-offs	$ —	$ —	$ —	$ —	$ 28	$ —	$ —	$ —	$ 28
Production and intermediate-term									
Acceptable	$ 64,603	$ 85,470	$ 37,404	$ 15,857	$ 9,462	$ 82,343	$ 817,765	$ —	$ 1,112,904
OAEM	—	—	—	—	—	—	—	—	—
Substandard/Doubtful	5,494	7,443	—	—	20,250	—	4,800	—	37,987
Total	$ 70,097	$ 92,913	$ 37,404	$ 15,857	$ 29,712	$ 82,343	$ 822,565	$ —	$ 1,150,891
Current period gross charge-offs	$ —	$ —	$ —	$ —	$ 6,244	$ —	$ 3,003	$ —	$ 9,247
Agribusiness									
Acceptable	$ 501,149	$ 878,700	$ 564,452	$ 230,274	$ 201,163	$ 305,816	$ 1,008,328	$ 8,571	$ 3,698,453
OAEM	—	3,732	30,813	—	5,179	—	3,957	—	43,681
Substandard/Doubtful	12,166	21,517	18,683	15,747	—	7,653	35,294	—	111,060
Total	$ 513,315	$ 903,949	$ 613,948	$ 246,021	$ 206,342	$ 313,469	$ 1,047,579	$ 8,571	$ 3,853,194
Current period gross charge-offs	$ —	$ 5,938	$ —	$ —	$ —	$ 2,572	$ 2,612	$ —	$ 11,122
Communications									
Acceptable	$ 104,704	$ 167,822	$ 206,666	$ 140,576	$ 14,470	$ 76,363	$ 35,497	$ —	$ 746,098
OAEM	—	17,487	—	34,808	—	—	2,207	—	54,502
Substandard/Doubtful	—	—	—	—	—	—	—	—	—
Total	$ 104,704	$ 185,309	$ 206,666	$ 175,384	$ 14,470	$ 76,363	$ 37,704	$ —	$ 800,600
Current period gross charge-offs	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Energy and water/waste disposal									
Acceptable	$ 227,805	$ 355,707	$ 143,284	$ 50,370	$ 27,056	$ 541,464	$ 196,825	$ 37,629	$ 1,580,140
OAEM	—	13,745	12,647	6,301	—	10,851	1,000	—	44,544
Substandard/Doubtful	—	—	—	—	2,054	1,922	—	—	3,976
Total	$ 227,805	$ 369,452	$ 155,931	$ 56,671	$ 29,110	$ 554,237	$ 197,825	$ 37,629	$ 1,628,660
Current period gross charge-offs	$ —	$ —	$ —	$ —	$ 701	$ —	$ —	$ —	$ 701
Rural home									
Acceptable	$ —	$ 432	$ 641	$ 1,173	$ 226	$ 376	$ —	$ —	$ 2,848
OAEM	—	—	—	—	—	—	—	—	—
Substandard/Doubtful	—	—	—	—	—	—	—	—	—
Total	$ —	$ 432	$ 641	$ 1,173	$ 226	$ 376	$ —	$ —	$ 2,848
Current period gross charge-offs	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —

	Term Loans by Origination Year							Revolving Loans Converted to Term Loans	
	2023	2022	2021	2020	2019	Prior	Revolving Loans		Total
International									
Acceptable	$ 86,669	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ 86,669
OAEM	—	—	—	—	—	—	—	—	—
Substandard/Doubtful	—	—	—	—	—	—	—	—	—
Total	$ 86,669	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ 86,669
Current period gross charge-offs	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Mission-related									
Acceptable	$ —	$ —	$ —	$ —	$ —	$ 2,082	$ —	$ —	$ 2,082
OAEM	—	—	—	—	—	—	—	—	—
Substandard/Doubtful	—	—	—	—	—	—	—	—	—
Total	$ —	$ —	$ —	$ —	$ —	$ 2,082	$ —	$ —	$ 2,082
Current period gross charge-offs	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Lease receivables									
Acceptable	$ —	$ —	$ —	$ —	$ —	$ 4,697	$ —	$ —	$ 4,697
OAEM	—	—	—	—	—	—	—	—	—
Substandard/Doubtful	—	—	—	—	—	—	—	—	—
Total	$ —	$ —	$ —	$ —	$ —	$ 4,697	$ —	$ —	$ 4,697
Current period gross charge-offs	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Direct notes to District Associations:									
Acceptable	$ —	$ —	$ —	$ —	$ —	$ —	$ 20,967,702	$ —	$ 20,967,702
OAEM	—	—	—	—	—	—	—	—	—
Substandard/Doubtful	—	—	—	—	—	—	—	—	—
Total	$ —	$ —	$ —	$ —	$ —	$ —	$ 20,967,702	$ —	$ 20,967,702
Current period gross charge-offs	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Loans to other financing institutions									
Acceptable	$ —	$ —	$ —	$ —	$ —	$ —	$ 55,304	$ —	$ 55,304
OAEM	—	—	—	—	—	—	—	—	—
Substandard/Doubtful	—	—	—	—	—	—	—	—	—
Total	$ —	$ —	$ —	$ —	$ —	$ —	$ 55,304	$ —	$ 55,304
Current period gross charge-offs	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Total loans									
Acceptable	$ 1,070,129	$ 1,682,581	$ 1,158,074	$ 542,687	$ 372,379	$ 1,339,151	$ 23,203,384	$ 49,579	$ 29,417,964
OAEM	—	34,964	43,460	41,109	5,179	10,851	7,164	—	142,727
Substandard/Doubtful	17,660	28,960	18,683	15,747	23,056	10,096	50,583	—	164,785
Total	$ 1,087,789	$ 1,746,505	$ 1,220,217	$ 599,543	$ 400,614	$ 1,360,098	$ 23,261,131	$ 49,579	$ 29,725,476
Current period gross charge-offs	$ —	$ 5,938	$ —	$ —	$ 6,973	$ 2,572	$ 5,615	$ —	$ 21,098

The following table presents loans and related accrued interest classified under the Farm Credit Administration Uniform Loan Classification System as a percentage of total loans and related accrued interest receivable by loan type:

	December 31, 2022	December 31, 2021
Real estate mortgage:		
Acceptable	99.9 %	98.6 %
OAEM	0.1	1.4
Substandard/Doubtful	—	—
	100.0 %	100.0 %
Production and intermediate-term:		
Acceptable	99.2 %	91.8 %
OAEM	—	8.2
Substandard/Doubtful	0.8	—
	100.0 %	100.0 %
Agribusiness:		
Acceptable	96.3 %	96.9 %
OAEM	1.7	2.2
Substandard/Doubtful	2.0	0.9
	100.0 %	100.0 %
Energy & water/waste disposal:		
Acceptable	98.8 %	98.4 %
OAEM	0.8	—
Substandard/Doubtful	0.4	1.6
	100.0 %	100.0 %
Rural home:		
Acceptable	100.0 %	100.0 %
OAEM	—	—
Substandard/Doubtful	—	—
	100.0 %	100.0 %
Communications:		
Acceptable	100.0 %	100.0 %
OAEM	—	—
Substandard/Doubtful	—	—
	100.0 %	100.0 %
Direct notes to Associations:		
Acceptable	100.0 %	100.0 %
OAEM	—	—
Substandard/Doubtful	—	—
	100.0 %	100.0 %
Loans to other financing institutions:		
Acceptable	100.0 %	67.1 %
OAEM	—	32.9
Substandard/Doubtful	—	—
	100.0 %	100.0 %
Mission-related:		
Acceptable	100.0 %	100.0 %
OAEM	—	—
Substandard/Doubtful	—	—
	100.0 %	100.0 %
Lease receivables:		
Acceptable	100.0 %	100.0 %
OAEM	—	—
Substandard/Doubtful	—	—
	100.0 %	100.0 %
International:		
Acceptable	100.0 %	100.0 %
OAEM	—	—
Substandard/Doubtful	—	—
	100.0 %	100.0 %
Total loans:		
Acceptable	99.4 %	99.1 %
OAEM	0.3	0.7
Substandard/Doubtful	0.3	0.2
	100.0 %	100.0 %

Accrued interest receivable on loans of $120.1 million, $101.5 million and $59.3 million at December 31, 2023, 2022 and 2021, respectively, has been excluded from the amortized cost of loans and is reported separately in the Balance Sheet. During the twelve months ended December 31, 2023, the Bank reversed $791 thousand in accrued interest receivable against interest income.

The following table reflects nonperforming assets, which consists of nonaccrual loans, accruing loans 90 days or more past due and other property owned. The Bank's nonperforming assets consisted of participations purchased. No direct notes to Associations were nonperforming at December 31, 2023, 2022 and 2021.

	December 31,		
	2023	2022	2021
Nonaccrual loans			
Real estate mortgage	**$ 1,067**	$ —	$ —
Production and intermediate-term	**25,744**	—	—
Agribusiness	**12,237**	26,559	—
Energy and water/waste disposal	**3,977**	3,435	5,753
Total nonaccrual loans	**43,025**	29,994	5,753
Total accruing loans 90 days or more past due	**—**	—	—
Other property owned	**—**	—	—
Total nonperforming assets	**$ 43,025**	$ 29,994	$ 5,753
Nonaccrual loans as a percentage of total loans	**0.14 %**	0.11 %	0.02 %
Nonaccrual loans as a percentage of total loans and other property owned	**0.14**	0.11	0.02
Nonaccrual loans as a percentage of capital	**2.55**	1.85	0.29

The following table provides the amortized cost for nonaccrual loans with and without a related allowance for credit losses on loans, as well as interest income recognized on nonaccrual loans during the period.

	December 31, 2023			**Interest Income Recognized Year Ended December 31, 2023**
	Amortized Cost with Allowance	**Amortized Cost without Allowance**	**Total**	
Nonaccrual loans				
Real estate mortgage	**$ —**	**$ 1,067**	**$ 1,067**	**$ —**
Production and intermediate-term	**25,744**	**—**	**25,744**	**—**
Agribusiness	**12,237**	**—**	**12,237**	**31**
Energy and water/waste disposal	**3,977**	**—**	**3,977**	**—**
Total nonaccrual loans	**$ 41,958**	**$ 1,067**	**$ 43,025**	**$ 31**

At December 31, 2023, the Bank had specific reserves included in the allowance for credit losses of $16.7 million, associated with the nonaccrual loan balance of $42.0 million.

The following table provides an aging analysis of past due loans at amortized cost by portfolio segment:

December 31, 2023	**30-89 Days Past Due**	**90 Days or More Past Due**	**Total Past Due**	**Not Past Due or Less Than 30 Days Past Due**	**Total Loans**	**Recorded Investment Greater Than 90 Days Past Due and Accruing**
Real estate mortgage	**$ 468**	**$ —**	**$ 468**	**$ 1,172,361**	**$ 1,172,829**	**$ —**
Production and intermediate-term	**20,250**	**5,494**	**25,744**	**1,125,147**	**1,150,891**	**—**
Agribusiness	**—**	**12,237**	**12,237**	**3,840,957**	**3,853,194**	**—**
Energy & water/waste disposal	**—**	**—**	**—**	**1,628,660**	**1,628,660**	**—**
Rural home	**—**	**—**	**—**	**2,848**	**2,848**	**—**
Lease receivables	**—**	**—**	**—**	**4,697**	**4,697**	**—**
Communications	**—**	**—**	**—**	**800,600**	**800,600**	**—**
Direct notes to Associations	**—**	**—**	**—**	**20,967,702**	**20,967,702**	**—**
Loans to OFIs	**—**	**—**	**—**	**55,304**	**55,304**	**—**
International	**—**	**—**	**—**	**86,669**	**86,669**	**—**
Mission-related	**—**	**—**	**—**	**2,082**	**2,082**	**—**
Total	**$ 20,718**	**$ 17,731**	**$ 38,449**	**$ 29,687,027**	**$ 29,725,476**	**$ —**

Prior to the adoption of CECL, the aging analysis of past due loans reported included accrued interest as follows:

December 31, 2022	30-89 Days Past Due	90 Days or More Past Due	Total Past Due	Not Past Due or Less Than 30 Days Past Due	Total Loans	Recorded Investment Greater Than 90 Days Past Due and Accruing
Real estate mortgage	$ 164	$ —	$ 164	$ 1,107,641	$ 1,107,805	$ —
Production and intermediate-term	—	—	—	1,074,968	1,074,968	—
Agribusiness	5,393	1,384	6,777	4,192,808	4,199,585	—
Energy & water/waste disposal	—	2	2	1,498,411	1,498,413	—
Rural home	—	—	—	1,821	1,821	—
Lease receivables	—	—	—	7,929	7,929	—
Communications	—	—	—	787,968	787,968	—
Direct notes to Associations	—	—	—	19,543,825	19,543,825	—
Loans to OFIs	—	—	—	52,054	52,054	—
International	—	—	—	89,201	89,201	—
Mission-related	—	—	—	2,195	2,195	—
Total	$ 5,557	$ 1,386	$ 6,943	$ 28,358,821	$ 28,365,764	$ —

December 31, 2021	30-89 Days Past Due	90 Days or More Past Due	Total Past Due	Not Past Due or Less Than 30 Days Past Due	Total Loans	Recorded Investment Greater Than 90 Days Past Due and Accruing
Real estate mortgage	$ 1,248	$ —	$ 1,248	$ 1,042,232	$ 1,043,480	$ —
Production and intermediate-term	—	—	—	885,104	885,104	—
Agribusiness	—	—	—	3,411,397	3,411,397	—
Energy & water/waste disposal	—	1,998	1,998	1,322,817	1,324,815	—
Rural home	—	—	—	2,176	2,176	—
Lease receivables	—	—	—	9,342	9,342	—
Communications	—	—	—	648,865	648,865	—
Direct notes to Associations	—	—	—	18,309,914	18,309,914	—
Loans to OFIs	—	—	—	39,125	39,125	—
International	—	—	—	57,341	57,341	—
Mission-related	—	—	—	2,280	2,280	—
Total	1,248	1,998	3,246	$ 25,730,593	$ 25,733,839	—

A loan is considered collateral dependent when the borrower is experiencing financial difficulty and repayment is expected to be provided substantially through the operation or sale of the collateral. Collateral dependent loans are primarily production and intermediate-term, agribusiness, energy and water/waste disposal and real estate mortgage loans.

Allowance for Credit Losses on Loans and Reserves for Credit Losses on Unfunded Commitments

The credit risk rating methodology is a key component of the Bank's allowance for credit losses evaluation, and is generally incorporated into the Bank's loan underwriting standards and internal lending limits. In addition, borrower and commodity concentration lending and leasing limits have been established by the Bank to manage credit exposure. The regulatory limit to a single borrower or lessee is 15% of the Bank's lending and leasing limit base but the Bank's board of directors have generally established more restrictive lending limits.

Effective January 1, 2023, the Bank adopted the CECL accounting guidance as described in Note 2. A summary of changes in the allowance for credit losses by portfolio segment for the year ended December 31, 2023, are as follows:

	Real Estate Mortgage	Production and Intermediate -term	Agri-business	Comm-unications	Energy and Water/Waste Disposal	Rural Home	Inter-national	Mission-Related	Lease Receivables	Direct Notes to District Associations	Loans to OFIs	Total
Allowance for credit losses on loans:												
Balance at December 31, 2022	$ 447	$ 1,411	$ 11,283	$ 521	$ 1,951	$ —	$ 31	$ 59	$ 3	$ —	$ —	$ 15,706
Adjustment in beginning balance due to change in accounting for credit losses	724	(285)	3,700	202	518	1	21	(17)	(1)	—	—	4,863
Balance at January 1, 2023	1,171	1,126	14,983	723	2,469	1	52	42	2	—	—	20,569
Charge-offs	(28)	(9,247)	(11,121)	—	(701)	—	—	—	—	—	—	(21,097)
Recoveries	—	—	1	—	7	—	—	27	—	—	—	35
Provision for credit losses (loan loss reversal)	857	19,017	15,540	640	2,365	(2)	10	(63)	(2)	—	—	38,366
Balance at December 31, 2023	$ 2,000	$ 10,896	$ 19,403	$ 1,363	$ 4,140	$ 3	$ 62	$ 6	$ —	$ —	$ —	$ 37,873
Allowance for credit losses on unfunded commitments[1]:												
Balance at December 31, 2022	$ 83	$ 196	$ 1,430	$ 45	$ 287	$ —	$ —	$ 11	$ —	$ —	$ —	$ 2,052
Adjustment in beginning balance due to change in accounting for credit losses	232	107	2,580	77	484	—	—	25	—	—	—	3,505
Balance at January 1, 2023	315	303	4,010	122	771	—	—	36	—	—	—	5,557
(Loan loss reversal) provision for credit losses	(122)	(46)	(267)	6	(81)	—	—	(2)	—	—	—	(512)
Balance at December 31, 2023	$ 193	$ 257	$ 3,743	$ 128	$ 690	$ —	$ —	$ 34	$ —	$ —	$ —	$ 5,045

[1] Allowance for credit losses on letters of credit and unfunded commitments is recorded in other liabilities.

The allowance for credit losses on loans as of December 31, 2023, was $37.9 million, reflecting an increase of $22.2 million from December 31, 2022. Excluding the impact of the adoption of the CECL accounting guidance of $8.4 million as previously discussed, the increase was driven by an increase in specific reserves and related charge-offs on nonaccrual loans for select borrowers in the agribusiness, production and intermediate-term and energy sectors. In addition general reserves increased due to isolated credit deterioration and challenging economic conditions and forecasts along with a lower estimation of prepayments for the remaining life of the loan portfolio.

The economic scenarios utilized in the December 31, 2023, estimate for the allowance for credit losses were based on the following: a baseline scenario, which represents a relatively stable economic environment; a downside scenario reflecting an economic recession during 2024; and an upside scenario that considers the potential for economic improvement relative to the baseline scenario.

A summary of changes in the allowance for credit losses by portfolio segment for the years ended December 31, 2022 and 2021 are as follows:

	Real Estate Mortgage	Production and Intermediate -term	Agri-business	Comm-unications	Energy and Water/Waste Disposal	Rural Home	Inter-national	Mission-Related	Lease Receivables	Direct Notes to District Associations	Loans to OFIs	Total
Allowance for credit losses on loans[1]:												
Balance at December 31, 2021	$ 466	$ 1,316	$ 5,952	$ 409	$ 3,606	$ —	$ 27	$ 58	$ 35	$ —	$ —	$ 11,869
Charge-offs	—	—	—	—	(155)	—	—	—	—	—	—	(155)
Recoveries	25	—	2	—	—	—	—	8	—	—	—	35
Provision for credit losses (loan loss reversal)	13	57	5,973	125	(1,550)	—	1	(7)	(32)	—	—	4,580
Other[2]	(57)	38	(644)	(13)	50	—	3	—	—			(623)
Balance at December 31, 2022	$ 447	$ 1,411	$ 11,283	$ 521	$ 1,951	$ —	$ 31	$ 59	$ 3	$ —	$ —	$ 15,706

[1] For the periods prior to January 1, 2023, the allowance for credit losses on loans was based on probable and estimable losses inherent in the loan portfolio.

[2] Allowance for credit losses on letters of credit and unfunded commitments is recorded in other liabilities.

	Real Estate Mortgage	Production and Intermediate -term	Agri-business	Comm-unications	Energy and Water/Waste Disposal	Rural Home	Inter-national	Mission-Related	Lease Receivables	Direct Notes to District Associations	Loans to OFIs	Total
Allowance for credit losses on loans[1]:												
Balance at December 31, 2020	$ 314	$ 1,875	$ 6,196	$ 341	$ 748	$ —	$ —	$ 55	$ 79	$ —	$ —	$ 9,608
Charge-offs	(44)	—	—	—	—	—	—	—	—	—	—	(44)
Recoveries	40	—	—	—	35	—	—	—	—	—	—	75
Provision for credit losses (loan loss reversal)	160	(693)	(765)	82	2,941	—	41	3	(44)	—	—	1,725
Other[2]	(4)	134	521	(14)	(118)	—	(14)	—	—			505
Balance at December 31, 2021	$ 466	$ 1,316	$ 5,952	$ 409	$ 3,606	$ —	$ 27	$ 58	$ 35	$ —	$ —	$ 11,869

[1] For the periods prior to January 1, 2023, the allowance for credit losses on loans was based on probable and estimable losses inherent in the loan portfolio.

[2] Allowance for credit losses on letters of credit and unfunded commitments is recorded in other liabilities.

Loan Modifications to Borrowers Experiencing Financial Difficulties

Upon the adoption of the guidance, Financial Instruments – Credit Losses, Troubled Debt Restructurings and Vintage Disclosure, creditors are required to disclose specific modifications with borrowers that are experiencing financial difficulty.

The following table shows the amortized cost basis at the end of the reporting period for loan modifications granted to borrowers experiencing financial difficulty during 2023, disaggregated by loan type and type of modification granted:

	Year Ended December 31, 2023				
	Term Extension	Payment Deferral	Combination - Term Extension and Payment Deferral	Total	Percentage of Total by Loan Type
Agribusiness	$ 9,640	$ 15,759	$ 20,320	$ 45,719	1.19 %
Energy & water/waste disposal	2,903	—	—	2,903	0.18
Total	$ 12,543	$ 15,759	$ 20,320	$ 48,622	0.16 %

The following tables describe the financial effects of the modifications made to borrowers experiencing financial difficulty during the year ended December 31, 2023.

	Term Extension
	Financial Effect
Agribusiness	Added a weighted average 911 days to the life of the loans
Energy & water/waste disposal	Added a weighted average 214 days to the life of the loans

	Payment Deferral
	Financial Effect
Agribusiness	Added a weighted average 915 days to the life of the loans

	Combination - Term Extension and Payment Deferral
	Financial Effect
Agribusiness	Added a weighted average 169 days to the payment extension and added a weighted average 169 days to the life of the loans

Accrued interest receivable related to loans modified during the year ended December 31, 2023, totaled $840 thousand. Subsequent to these modifications, the loans have not experienced default and, as of December 31, 2023, are current in all required payments. The Bank has additional commitments to lend to these borrowers of $24.8 million as of December 31, 2023.

Credit Quality — Prior to CECL Adoption

Troubled Debt Restructurings

Prior to the adoption of updated FASB guidance on loan modifications on January 1, 2023, a restructuring of a loan constituted a troubled debt restructuring (TDRs), also known as formerly restructured if the creditor for economic or legal reasons related to the borrower's financial difficulties granted a concession to the borrower that it would not otherwise consider. Concessions varied by program and were borrower-specific and could have included interest rate reductions, term extensions, payment deferrals or the acceptance of additional collateral in lieu of payments. In limited circumstances, principal may have been forgiven. When a restructured loan constituted a troubled debt restructuring, these loans were included within our impaired loans under nonaccrual or accruing restructured loans.

The following table presents information regarding loans that received the TDR designation during the year ended December 31, 2022. The predominant form of concession granted for loans that received the TDR designation in 2022 was forgiveness of principal and interest. There were no new TDRs identified during the year ended December 31, 2021.

	Premodification Outstanding Recorded Investment**	Postmodification Outstanding Recorded Investment**
TDRs:		
Energy	$ 696	$ 540
Total	$ 696	$ 540

**The recorded investment is the face amount of the receivable increased or decreased by applicable accrued interest and unamortized premium, discount, finance charges or acquisition costs and may also reflect a previous direct write-down of the investment.

The following table provides information on outstanding loans restructured in TDRs at December 31, 2022, and December 31, 2021:

	Total Loans Modified as TDRs		TDRs in Nonaccrual Status	
	December 31,		December 31,	
	2022	2021	2022	2021
Energy	$ 540	$ —	$ 540	$ —
Mission-related	2,195	2,280	—	—
Total	$ 2,735	$ 2,280	$ 540	$ —

There were no payment defaults on loans that were restructured during the previous 12 months. A payment default is defined as a payment that is 30 days past due after the date the loan was restructured.

Additional impaired loan information at December 31, 2022, is as follows:

	Recorded Investment	Unpaid Principal Balance	Related Allowance	Average Impaired Loans	Interest Income Recognized
Impaired loans with a related allowance for credit losses:					
Processing and marketing	$ 26,540	$ 26,682	$ 3,977	$ 6,907	$ —
Energy & water/waste disposal	3,435	3,592	1,110	5,416	—
Mission-related	154	154	60	154	12
Total	$ 30,129	$ 30,428	$ 5,147	$ 12,477	$ 12
Impaired loans with no related allowance for credit losses:					
Production and intermediate-term	$ —	$ 91	$ —	$ —	$ —
Processing and marketing	19	1,352	—	2	—
Energy & water/waste disposal	—	2,098	—	—	—
Mission-related	2,041	2,041	—	2,048	124
Total	$ 2,060	$ 5,582	$ —	$ 2,050	$ 124
Total impaired loans:					
Production and intermediate-term	$ —	$ 91	$ —	$ —	$ —
Processing and marketing	26,559	28,034	3,977	6,909	—
Energy & water/waste disposal	3,435	5,690	1,110	5,416	—
Mission-related	2,195	2,195	60	2,202	136
Total	$ 32,189	$ 36,010	$ 5,147	$ 14,527	$ 136

Additional impaired loan information at December 31, 2021, is as follows:

	Recorded Investment	Unpaid Principal Balance	Related Allowance	Average Impaired Loans	Interest Income Recognized
Impaired loans with a related allowance for credit losses:					
Real estate mortgage	$ —	$ 44	$ —	$ 237	$ —
Energy & water/waste disposal	5,753	5,755	1,352	4,858	—
Mission-related	159	159	58	159	13
Total	$ 5,912	$ 5,958	$ 1,410	$ 5,254	$ 13
Impaired loans with no related allowance for credit losses:					
Real estate mortgage	$ —	$ —	$ —	$ 438	$ 19
Processing and marketing	—	1,192	—	—	—
Energy & water/waste disposal	—	2,098	—	—	—
Mission-related	2,121	2,121	—	2,130	303
Total	$ 2,121	$ 5,411	$ —	$ 2,568	$ 322
Total impaired loans:					
Real estate mortgage	$ —	$ 44	$ —	$ 675	$ 19
Processing and marketing	—	1,192	—	—	—
Energy & water/waste disposal	5,753	7,853	1,352	4,858	—
Mission-related	2,280	2,280	58	2,289	316
Total	$ 8,033	$ 11,369	$ 1,410	$ 7,822	$ 335

Interest income on nonaccrual and accruing restructured loans that would have been recognized under the original terms of the loans were as follows at December 31:

	2022	2021
Interest income which would have been recognized under the original loan terms	$ 1,384	$ 479
Less: interest income recognized	136	335
Foregone interest income	$ 1,248	$ 144

Note 5 — Leases

The Bank evaluates arrangements at inception to determine if they meet the criteria for a lease. Leases with an initial term of twelve months or less are not recorded on the balance sheet with lease expense recognized on a straight-line basis over the lease term. Operating leases are included in other assets for right-of-use (ROU) assets and other liabilities for lease liabilities on the balance sheet.

ROU assets represent the Bank's right to use an underlying asset for the lease term and lease liabilities represent the Bank's obligation to make lease payments arising from the lease. Operating ROU assets and liabilities are recognized based on the present value of the lease payments over the lease term. The Bank's lease terms may include options to extend or terminate the lease when it is reasonably certain that the Bank will exercise that option. Lease expense for lease payments is recognized on a straight-line basis over the lease term.

The Bank maintains a lease for its headquarters facility in Austin, Texas, which currently expires in December 2034. This lease is for approximately 111,500 square feet of office space ranging from $18 to $38 per square foot during the term of the lease. Lease expense for the headquarters facility includes certain operating expenses passed through from the landlord.

The Bank entered into a desk sharing agreement in Washington, D.C., as of January 1, 2024, with the National Council of Farmer Cooperatives for legislative affairs purposes. The lease will expire in December 2024.

The Bank currently holds leases for copiers and ice machines. The postage machines lease expired in September 2023 and was renewed with an expiration date of April 2027. A lease for copiers expired in March 2023 and was replaced with a new copier lease which expires in August 2026. The lease for the ice machines expired in October 2022 and is currently a month-to-month lease.

Amounts presented on the balance sheet are as follows:

	Balance Sheet Classification	As of December 31, **2023**	2022	2021
Operating leases	Operating lease right-of-use asset building	**$ 33,730**	$ 35,432	$ 37,009
	Operating lease right-of-use asset other	**157**	49	202
Total lease assets		**$ 33,887**	$ 35,481	$ 37,211
Operating leases	Operating lease right-of-use liabilities building	**$ 39,864**	$ 41,174	$ 42,278
	Operating lease right-of-use liabilities other	**157**	49	202
Total lease liabilities		**$ 40,021**	$ 41,223	$ 42,480

Lease expenses, which are included as a component of occupancy and equipment expense in the statement of comprehensive income totaled $5.3 million for each of the years ended December 31, 2023, 2022 and 2021.

Other information related to leases includes:

	Year Ended December 31,		
	2023	2022	2021
Cash paid for amounts included in the measurement of lease liabilities:			
Operating cash flows for operating leases	$ 2,874	$ 2,897	$ 2,785
Right-of-use assets obtained in exchange for new lease obligations:			
Operating leases	$ —	$ —	$ —

The weighted-average remaining lease term for the building, copier and ice machine leases is 11.05 years and the weighted-average discount rate is 2.42%. The discount rates were determined using the Bank's incremental borrowing rate for bonds for terms relative to the lease terms. The following are the undiscounted cash flows for the operating leases at December 31, 2023:

	Maturities of Lease Liabilities
2024	$ 3,125
2025	3,554
2026	3,603
2027	3,625
2028	3,694
Thereafter	23,769
Total undiscounted cash flows	41,370
Less interest expense	1,349
Lease liability	$ 40,021

The lease expense for leases with terms of 12 months or less was $21 thousand, $39 thousand and $38 thousand for the twelve months ended December 31, 2023, 2022 and 2021, respectively.

Note 6 — Premises and Equipment

Premises and equipment comprised the following at:

	December 31,		
	2023	2022	2021
Leasehold improvements	$ 3,044	$ 3,044	$ 3,044
Computer equipment and software	209,936	208,532	215,514
Furniture and equipment	3,028	3,105	3,566
	216,008	214,681	222,124
Accumulated depreciation	(97,885)	(79,927)	(73,906)
Total	$ 118,123	$ 134,754	$ 148,218

Note 7 — Asset/Liability Offsetting

Most derivative transactions with swap dealers are cleared through a Futures Commission Merchant (FCM). Cleared derivative contracts are required to be 100% collateralized and the Derivatives Clearing Organization (DCO) takes on the obligation of both sides of the transaction. The Bank's interest rate cap derivatives are under bilateral collateral and netting agreements that require the net settlement of covered contracts.

Notwithstanding collateral and netting provisions, our derivative assets and liabilities are not offset on the accompanying Balance Sheet. The amount of collateral received or pledged is calculated on a net basis by counterparty.

The following tables summarize overnight investments, derivative assets and liabilities and amounts of collateral exchanged pursuant to our agreements.

December 31, 2023	**Gross Amounts of Assets/Liabilities Presented on the Balance Sheet**	**Amounts Not Offset on the Balance Sheet**		**Net Amount**
		Cash Collateral Received/ (Pledged)	**Investment Securities Received/Pledged as Collateral**	
Assets:				
Interest rate swaps and other derivatives	**$ 45,486**	**$ 43,157**	**$ —**	**$ 2,329**
Federal funds sold and overnight investments	**312,399**	**—**	**—**	**312,399**
Liabilities:				
Interest rate swaps and other derivatives	**—**	**(41,010)**	**—**	**(41,010)**

December 31, 2022	Gross Amounts of Assets/Liabilities Presented on the Balance Sheet	Amounts Not Offset on the Balance Sheet		Net Amount
		Cash Collateral Received/ (Pledged)	Investment Securities Received/Pledged as Collateral	
Assets:				
Interest rate swaps and other derivatives	$ 64,692	$ 62,480	$ —	$ 2,212
Federal funds sold and overnight investments	301,678	—	—	301,678
Liabilities:				
Interest rate swaps and other derivatives	—	(42,749)	—	(42,749)

December 31, 2021	Gross Amounts of Assets/Liabilities Presented on the Balance Sheet	Amounts Not Offset on the Balance Sheet		Net Amount
		Cash Collateral Received/ (Pledged)	Investment Securities Received/Pledged as Collateral	
Assets:				
Interest rate swaps and other derivatives	$ 338	$ —	$ —	$ 338
Federal funds sold and overnight investments	194,223	—	—	194,223
Liabilities:				
Interest rate swaps and other derivatives	65,538	(90,866)	—	(25,328)

Note 8 — Other Property Owned

OPO, consisting of real and personal property acquired through foreclosure or deed in lieu of foreclosure, is recorded at fair value, based on appraisal, less estimated selling costs upon acquisition. There was no OPO at December 31, 2023, December 31, 2022, or December 31, 2021, and there were no sales of OPO during the last three years.

Note 9 — Other Assets and Other Liabilities

Other assets comprised the following at December 31:

	2023	2022	2021
Investment in another System bank	**$ 131,942**	$ 157,380	$ 154,819
Other accounts receivable	**78,794**	107,272	59,701
RBIC investments	**25,985**	24,930	19,273
Fair value of derivatives	**43,339**	44,961	18,051
Operating lease right-of-use asset	**33,887**	35,481	37,211
Other	**15,761**	16,264	14,216
Total	**$ 329,708**	$ 386,288	$ 303,271

Other liabilities comprised the following at December 31:

	2023	2022	2021
Payable to Associations for cash management services	**$ 43,673**	$ 36,747	$ 31,263
Accounts payable – participations	**—**	22	12,882
Accounts payable – other	**54,086**	69,344	58,349
Operating lease liabilities	**40,021**	41,223	42,480
Obligation for nonpension postretirement benefits	**9,919**	9,718	12,513
Mortgage life additional reserve	**4,653**	4,653	4,572
FCSIC premium payable	**22,084**	22,414	15,487
Other	**14,138**	15,515	11,924
Total	**$ 188,574**	$ 199,636	$ 189,470

Note 10 — Bonds and Notes

Systemwide Debt Securities

The System, unlike commercial banks and other depository institutions, obtains funds for its lending operations primarily from the sale of Systemwide debt securities issued by the banks through the Funding Corporation. Systemwide bonds and discount notes (Systemwide debt securities) are the joint and several liability of the System banks. Certain conditions must be met before the Bank can participate in the issuance of Systemwide debt securities. As one condition of participation, the Bank is required by the Farm Credit Act and FCA regulations to maintain specified eligible assets at least equal in value to the total amount of debt obligations outstanding for which it is primarily liable. This requirement does not provide holders of Systemwide debt securities with a security interest in any assets of the banks. In general, each bank determines its participation in each issue of Systemwide debt securities based on its funding and operating requirements, subject to the availability of eligible assets as described above and subject to Funding Corporation determinations and FCA approval. At December 31, 2023, the Bank had such specified eligible assets totaling $36.82 billion and obligations and accrued interest payable totaling $35.34 billion, resulting in excess eligible assets of $1.49 billion.

The System banks and the Funding Corporation have entered into the Market Access Agreement (MAA), which establishes criteria and procedures for the banks to provide certain information to the Funding Corporation and, under certain circumstances, for restricting or prohibiting an individual bank's participation in Systemwide debt issuances, thereby reducing other System banks' exposure to statutory joint and several liability. At December 31, 2023, the Bank was and currently remains in compliance with the conditions and requirements of the System banks' and the Funding Corporation's MAA.

Each issuance of Systemwide debt securities ranks equally, in accordance with the FCA regulations, with other unsecured Systemwide debt securities. Systemwide debt securities are not issued under an indenture, and no trustee is provided with respect to these securities. Systemwide debt securities are not subject to acceleration prior to maturity upon the occurrence of any default or similar event.

The Bank's participation in Systemwide debt securities at December 31, 2023, follows (dollars in thousands):

	Systemwide					
	Bonds		Discount Notes		Total	
Year of Maturity	Amount	Weighted Average Interest Rate	Amount	Weighted Average Interest Rate	Amount	Weighted Average Interest Rate
2024	**$ 9,119,845**	**3.95%**	**$ 2,065,499**	**5.27%**	**$ 11,185,344**	**4.19%**
2025	**8,603,275**	**4.12**	**—**	**—**	**8,603,275**	**4.12**
2026	**3,151,390**	**2.37**	**—**	**—**	**3,151,390**	**2.37**
2027	**2,595,304**	**2.29**	**—**	**—**	**2,595,304**	**2.29**
2028	**1,813,002**	**2.81**	**—**	**—**	**1,813,002**	**2.81**
Subsequent years	**7,785,009**	**3.15**	**—**	**—**	**7,785,009**	**3.15**
Total	**$ 33,067,825**	**3.46%**	**$ 2,065,499**	**5.27%**	**$ 35,133,324**	**3.57%**

In the preceding table, the weighted average interest rate reflects the effects of interest rate caps and interest rate swaps used to manage the interest rate risk on the bonds and notes issued by the Bank. The Bank's interest rate swap strategy is discussed more fully in Note 2, "Summary of Significant Accounting Policies," and Note 17, "Derivative Instruments and Hedging Activity."

Discount notes are issued with maturities ranging from one to 365 days. The average maturity of discount notes at December 31, 2023, was 82 days.

The Bank's Systemwide callable debt consisted of the following as of December 31, 2023 (dollars in thousands):

Year of Maturity	Amount	Range of Call Dates
2024	$ **1,884,518**	01/01/2024 - 06/27/2024
2025	**2,998,771**	01/01/2024 - 12/23/2025
2026	**1,938,145**	01/01/2024 - 12/28/2026
2027	**1,777,742**	01/01/2024 - 12/20/2027
2028	**1,233,021**	01/01/2024 - 12/27/2028
Subsequent years	**6,846,684**	01/01/2024 - 06/27/2042
Total	$ **16,678,881**	01/01/2024 - 06/27/2042

Callable debt may be called on the first call date and, generally, every day thereafter with seven days' notice. Expenses associated with the exercise of call options on debt issuances are included in interest expense.

As described in Note 1, "Organization and Operations," the Insurance Fund is available to insure the timely payment of principal and interest on Systemwide debt securities (insured debt) of System banks to the extent net assets are available in the Insurance Fund and not designated for specific use. All other liabilities in the financial statements are uninsured. At December 31, 2023, the assets of the Insurance Fund aggregated $7.46 billion; however, due to the other authorized uses of the Insurance Fund, there is no assurance that the amounts in the Insurance Fund will be sufficient to fund the timely payment of principal or interest on an insured debt obligation in the event of a default by any System bank having primary liability thereon.

FCSIC has an agreement with the Federal Financing Bank, a federal instrumentality subject to the supervision and direction of the U.S. Treasury, pursuant to which the Federal Financing Bank would advance funds to FCSIC under certain limited circumstances. Under its existing statutory authority, FCSIC may use these funds to provide assistance to the System banks in exigent market circumstances that threaten the System banks' ability to pay maturing debt obligations. The agreement provides for advances of up to $10 billion and will remain in full force and effect until terminated by either the Federal Financing Bank or FCSIC. The decision whether to seek funds from the Federal Financing Bank is at the discretion of FCSIC, and each funding obligation of the Federal Financing Bank is subject to various terms and conditions and, as a result, there can be no assurance that funding would be available if needed by the System.

While the Bank's primary source of liquidity is the ability to access the capital markets to issue Systemwide debt, the Bank also maintains other contingency funding sources including repurchase agreements with several commercial banks, a $75 million uncommitted federal funds line of credit and reciprocal emergency lending agreements with other System entities. These alternative funding sources are subject to various terms and conditions, and as a result, there can be no assurance that funding will be available if needed by the Bank. In addition, the Funding Corporation provides contingency financing mechanisms which include emergency and non-emergency purchases of federal funds from counterparties and direct issuance of Systemwide debt securities to institutional investors.

Note 11 — Shareholders' Equity

As more fully discussed in Note 2, effective January 1, 2023, the Bank adopted the CECL accounting guidance. The adoption of this guidance resulted in a cumulative effect transition adjustment at January 1, 2023, which resulted in a decrease in retained earnings of $8.4 million.

Descriptions of the Bank's equities, capitalization requirements, and regulatory capitalization requirements and restrictions are provided below.

A. Description of Bank Equities:

Class B Series 2 Noncumulative Subordinated Perpetual Preferred Stock (Class B-2 preferred stock) — On July 23, 2013, the Bank issued $300.0 million of Class B noncumulative subordinated perpetual preferred stock, Series 2, representing 3,000,000 shares at $100 per share par value, for net proceeds of $296.0 million. Dividends on the Class B-2 preferred stock, if declared by the board of directors at its sole discretion, are noncumulative and are payable quarterly in arrears on the fifteenth day of March, June, September and December. Prior to September 15, 2023, dividends were paid at an annual fixed rate of 6.75% of par value of $100 per share. Commencing on September 15, 2023, dividends are paid at a rate of 3-Month CME Term SOFR plus a "Tenor Spread Adjustment" of 0.26161%, plus 4.01%. The Class B-2 preferred stock is not mandatorily redeemable at any time, but may be redeemed in whole or in part at the option of the Bank on any dividend payment date on or after September 15, 2023. The Class B-2 preferred stock ranks, both as to dividends and upon liquidation, pari passu with respect to the existing Class B-3 and Class B-4 preferred stock, and senior to all other classes of the Bank's outstanding capital stock. Class B-2 preferred stock dividends are required by "dividend/patronage stopper" clauses to be declared and accrued before payment of stock investment and direct note patronages to Associations and OFIs. For regulatory purposes, the Class B-2 preferred stock is included in permanent capital, total capital and tier 1 capital within certain limitations. In 2023, 2022 and 2021, Class B-2 preferred stock dividends totaling $22.4 million, $20.2 million and $20.2 million, respectively, were declared and paid. At December 31, 2023, dividends payable on Class B-2 preferred stock totaled $7.2 million.

Class B Series 3 Noncumulative Subordinated Perpetual Preferred Stock (Class B-3 preferred stock) — On June 25, 2018, the Bank issued $100.0 million of Class B noncumulative subordinated perpetual preferred stock, Series 3 (Class B-3 preferred stock), representing 100,000 shares at $1,000 per share par value, for net proceeds of $98.7 million. Dividends on the Class B-3 preferred stock, if declared by the board of directors at its sole discretion, are noncumulative and are payable quarterly in arrears on the fifteenth day of March, June, September and December in each year, commencing September 15, 2018, at an annual fixed rate of 6.20% of par value of $1,000 per share up to, but excluding June 15, 2028, from and after which date will be paid at an annual rate of the 3-Month USD LIBOR plus 3.223% or the Alternative Rate determined at that time. The Class B-3 preferred stock is not mandatorily redeemable at any time, but may be redeemed in whole or in part at the option of the Bank on any dividend payment date on or after June 15, 2028. The Class B-3 preferred stock ranks pari passu with respect to the existing Class B-2 and Class B-4 preferred stock, and senior to all of the Bank's outstanding capital stock. Class B-3 preferred stock dividends are required by "dividend/patronage stopper" clauses to be declared and accrued before payment of stock investment and direct note patronages to Associations and OFIs. For regulatory purposes, the Class B-3 preferred stock is included in permanent capital, total capital and tier 1 capital within certain limitations. In 2023, 2022 and 2021, Class B-3 preferred stock dividends totaling $6.2 million were declared and paid in each respective year. At December 31, 2023, dividends payable on Class B-3 preferred stock totaled $1.6 million.

Class B Series 4 Noncumulative Subordinated Perpetual Preferred Stock (Class B-4 preferred stock) — On July 15, 2020, the bank issued $350.0 million of Class B noncumulative subordinated perpetual preferred stock, Series 4 (Class B-4 preferred stock), representing 350,000 shares at $1,000 per share par value, for net proceeds of $346.1 million. Dividends on the Class B-4, if declared by the board of directors at its sole discretion, are noncumulative and are payable quarterly in arrears on the fifteenth day of March, June, September and December in each year, commencing September 15, 2020, at an annual fixed rate of 5.70% of par value of $1,000 per share up to, but excluding, September 15, 2025, from and after which date will be paid at an annual rate of the 5-year Treasury rate as of the most recent five-year reset dividend determination date plus 5.415%. The Class B-4 is not mandatorily redeemable at any time, but may be redeemed in whole or part at the option of the Bank, with prior approval from the FCA, on any dividend payment date on or after September 15, 2025. The Class B-4 ranks pari passu with respect to the existing Class B-2 and Class B-3 preferred stock and senior to all of the Bank's other outstanding capital stock. Class B-4 preferred stock dividends are required by "dividend/patronage stopper" clauses to be declared and accrued before payment of stock investment and direct note patronages to Associations and OFIs. For regulatory purposes, the Class B-4 preferred stock is included in permanent capital, total capital and tier 1 capital within certain limitations. In 2023, 2022 and 2021, Class B-4 preferred stock dividends totaling $20.0 million were declared and paid in each respective year. At December 31, 2023, dividends payable on Class B-4 preferred stock totaled $5.0 million.

Class A Voting Common Stock — According to the Bank's bylaws, the minimum and maximum stock investments that the Bank may require of the ACAs and FLCA are 2% (or $1 thousand, whichever is greater) and 5%. The investments in the Bank are required to be in the form of Class A voting common stock (with a par value of $5 per share). The current investment required of the Associations is 2% of their average borrowings from the Bank. Under the CPP program, the stock investment that the Bank requires is 1.6% of each Farmer Mac AMBS pool and 8% of each loan pool. Under the NCPP program, the Bank redeems stock in the amount of 2.0% of the par value of the loans purchased. No Class A voting common stock may be retired except at the sole discretion of the Bank's board of directors, and provided that after such retirement, the Bank shall meet minimum capital adequacy standards as may from time to time be promulgated by the FCA or such higher level as the board may from time to time establish in the Bank's Capital Plan. There were 98.9 million shares, 94.0 million shares and 81.9 million shares of Class A voting common stock issued and outstanding at December 31, 2023, 2022 and 2021, respectively.

Class A Nonvoting Common Stock — The Bank requires OFIs to make cash purchases of Class A nonvoting common stock (with a par value of $5 per share) in the Bank based on a minimum stock investment of 2% (or $1 thousand, whichever is greater) and on a maximum of 5%. The current investment required of the OFIs is 2% of their average borrowings from the Bank. No Class A nonvoting common stock may be retired except at the sole discretion of the Bank's board of directors, and provided that after such retirement, the Bank shall meet minimum capital adequacy standards as may from time to time be promulgated by the FCA or such higher level as the board may from time to time establish in the Bank's Capital Plan. The Bank has a first lien on these equities for the repayment of any indebtedness to the Bank. There were 220 thousand shares, 174 thousand shares and 150 thousand shares of Class A nonvoting common stock issued and outstanding at December 31, 2023, 2022 and 2021, respectively.

Allocated retained earnings of $101.8 million, $74.0 million and $66.5 million at December 31, 2023, 2022 and 2021, respectively, consisted of allocated retained earnings for the payment of patronage on direct loans to the affiliated Associations and OFIs beginning with 2023, and for the payment of patronage on loans participated with another System bank for all three years presented.

At December 31, the Bank's equities included the following:

	2023	2022	2021
Class A voting common stock – Associations	**$ 494,744**	$ 470,160	$ 409,621
Class A nonvoting common stock – other financing institutions	**1,100**	869	752
Total common stock	**495,844**	471,029	410,373
Preferred stock	**750,000**	750,000	750,000
Allocated retained earnings – Associations and OFIs	**19,886**	—	—
Allocated retained earnings – other entities	**81,903**	74,043	66,490
Total allocated retained earnings	**101,789**	74,043	66,490
Total capital stock and allocated retained earnings	**$ 1,347,633**	$ 1,295,072	$1,226,863

Patronage may be paid to the holders of Class A voting common stock, Class A nonvoting common stock and allocated retained earnings of the Bank, as the board of directors may determine by resolution, subject to the capitalization requirements defined by the FCA. During 2023, $121.1 million in cash patronage was declared to Associations, OFIs and other entities, compared to $215.6 million in 2022 and $183.7 million in 2021. Cash patronage in 2023 consisted of direct loan patronage of $46.4 million, patronage on certain participations of $51.1 million, patronage on Association and OFI investment in the Bank of $17.1 million, and capitalized and noncapitalized participation pool patronage of $6.4 million. The Bank paid allocated retained earnings in 2023 of direct loan patronage of $19.9 million and patronage on certain participations of $7.9 million.

B. Regulatory Capitalization Requirements and Restrictions:

The Farm Credit Administration (FCA) sets minimum regulatory capital requirements, including capital conservation buffers, for banks and associations. These requirements are split into minimum requirements for risk-adjusted ratios and non-risk-adjusted ratios. The risk-adjusted ratios include common equity tier 1, tier 1 capital and total capital and permanent capital risk-based ratios. The non-risk-adjusted ratios include a tier 1 leverage ratio and an unallocated retained earnings (URE) and URE equivalents (UREE) leverage ratio that are applicable to both the banks and associations.

The Farm Credit Act has defined permanent capital to include all capital except stock and other equities that may be retired upon the repayment of the holder's loan or otherwise at the option of the holder, or is otherwise not at risk. Risk-adjusted assets have been defined by regulations as the balance sheet assets and off-balance sheet commitments adjusted by various percentages ranging from 0 to 1,250%, depending on the level of risk inherent in the various types of assets.

The ratios are based on a three-month average daily balance in accordance with FCA regulations and are calculated as follows:

- Common equity tier 1 ratio is statutory minimum purchased borrower stock, other required borrower stock held for a minimum of 7 years, allocated equities held for a minimum of 7 years or not subject to revolvement, unallocated retained earnings, paid-in capital, less certain regulatory required deductions including the amount of allocated investments in other System institutions, and the amount of purchased investments in other System institutions under the corresponding deduction approach, divided by average risk-adjusted assets.
- Tier 1 capital ratio is common equity tier 1 plus noncumulative perpetual preferred stock, divided by average risk-adjusted assets.
- Total capital is tier 1 capital plus other required borrower stock held for a minimum of 5 years, allocated equities held for a minimum of 5 years, subordinated debt and limited-life preferred stock greater than 5 years to maturity at issuance subject to certain limitations, allowance for credit losses on loans and allowance for credit losses on unfunded commitments under certain limitations less certain investments in other System institutions under the corresponding deduction approach, divided by average risk-adjusted assets.
- Permanent capital ratio (PCR) is all at-risk borrower stock, any allocated excess stock, unallocated retained earnings, paid-in capital, subordinated debt and preferred stock subject to certain limitations, less certain allocated and purchased investments in other System institutions, divided by PCR risk-adjusted assets.
- Tier 1 leverage ratio is tier 1 capital, including regulatory deductions, divided by average assets less regulatory deductions subject to tier 1 capital.
- UREE leverage ratio is unallocated retained earnings, paid-in capital, allocated surplus not subject to revolvement less certain regulatory required deductions including the amount of allocated investments in other System institutions divided by average assets less regulatory deductions subject to tier 1 capital.

If the capital ratios fall below the minimum regulatory requirements, capital distributions (equity redemptions, dividends and patronage) and discretionary bonus payments to senior officers are restricted or prohibited without prior FCA approval.

The following table reflects the Bank's capital ratios at December 31:

	2023	2022	2021	Total Regulatory Requirements Including Capital Conservation Buffers
Permanent capital ratio	**13.16 %**	13.43 %	15.10 %	7.00 %
Common equity tier 1 ratio	**8.50**	8.66	9.55	7.00
Tier 1 capital ratio	**13.12**	13.42	15.09	8.50
Total capital ratio	**13.41**	13.50	15.17	10.50
Tier 1 leverage ratio	**5.79**	5.94	6.37	5.00
UREE leverage ratio	**2.26**	2.50	2.73	1.50

The components of the Bank's risk-adjusted capital, based on 90-day average balances, were as follows at December 31, 2023:

	Common Equity Tier 1 Ratio	Tier 1 Capital Ratio	Total Capital Ratio	Permanent Capital Ratio
Numerator:				
Unallocated retained earnings	$ 970,464	$ 970,464	$ 970,464	970,464
Adjustments for patronage or dividend accrued receivables or payables	(4,899)	(4,899)	(4,899)	(4,899)
Common Cooperative Equities:				
Purchased other required stock ≥ 7 years	434,244	434,244	434,244	434,244
Allocated stock ≥ 7 years	36,042	36,042	36,042	36,042
Allocated equities:				
Allocated equities held ≥ 7 years	74,952	74,952	74,952	74,952
Noncumulative perpetual preferred stock	—	750,000	750,000	750,000
Allowance for credit losses on loans and allowance for credit losses on unfunded commitments subject to certain limitations	—	—	46,530	—
Regulatory Adjustments and Deductions:				
Amount of allocated investments in other System institutions	(132,178)	(132,178)	(132,178)	(132,178)
Other regulatory required deductions	(217)	(217)	(217)	(217)
Total	$ 1,378,408	$ 2,128,408	$ 2,174,938	$ 2,128,408
Denominator:				
Risk-adjusted assets excluding allowance	$ 16,217,012	$ 16,217,012	$ 16,217,012	$ 16,217,012
Regulatory Adjustments and Deductions:				
Allowance for credit losses on loans	—	—	—	(41,288)
Total	$ 16,217,012	$ 16,217,012	$ 16,217,012	$ 16,175,724

The components of the Bank's non-risk-adjusted capital, based on 90-day average balances, were as follows at December 31, 2023:

	Tier 1 Leverage Ratio	UREE Leverage Ratio
Numerator:		
Unallocated retained earnings	$ 970,464	$ 970,464
Adjustments for patronage or dividend accrued receivables or payables	(4,899)	(4,899)
Common Cooperative Equities:		
Purchased other required stock ≥ 7 years	434,244	—
Allocated stock ≥ 7 years	36,042	—
Allocated equities:		
Allocated equities held ≥ 7 years	74,952	—
Noncumulative perpetual preferred stock	750,000	—
Regulatory Adjustments and Deductions:		
Amount of allocated investments in other System institutions	(132,178)	(132,178)
Other regulatory required deductions	(217)	(217)
Total	$ 2,128,408	$ 833,170
Denominator:		
Total Assets	$ 36,932,792	$ 36,932,792
Regulatory Adjustments and Deductions:		
Regulatory deductions included in tier 1 capital	(144,343)	(144,343)
Total	$ 36,788,449	$ 36,788,449

The components of the Bank's risk-adjusted capital, based on 90-day average balances, were as follows at December 31, 2022:

	Common Equity Tier 1 Ratio	Tier 1 Capital Ratio	Total Capital Ratio	Permanent Ratio
Numerator:				
Unallocated retained earnings	$ 1,051,848	$ 1,051,848	$ 1,051,848	$ 1,051,848
Adjustments for patronage or dividend accrued receivables or payables	(5,165)	(5,165)	(5,165)	(5,165)
Common Cooperative Equities:				
Purchased other required stock ≥ 7 years	374,887	374,887	374,887	374,887
Allocated stock ≥ 7 years	36,042	36,042	36,042	36,042
Allocated equities:				
Allocated equities held ≥ 7 years	66,961	66,961	66,961	66,961
Noncumulative perpetual preferred stock	—	750,000	750,000	750,000
Allowance for credit losses on loans and allowance for credit losses on unfunded commitments subject to certain limitations	—	—	13,110	—
Regulatory Adjustments and Deductions:				
Amount of allocated investments in other System institutions	(157,616)	(157,616)	(157,616)	(157,616)
Other regulatory required deductions	(217)	(217)	(217)	(217)
Total	$ 1,366,740	$ 2,116,740	$ 2,129,850	$ 2,116,740
Denominator:				
Risk-adjusted assets excluding allowance	$ 15,778,318	$ 15,778,318	$ 15,778,318	$ 15,778,318
Regulatory Adjustments and Deductions:				
Allowance for credit losses on loans	—	—	—	(11,310)
Total	$ 15,778,318	$ 15,778,318	$ 15,778,318	$ 15,767,008

The components of the Bank's non-risk-adjusted capital, based on 90-day average balances, were as follows at December 31, 2022:

	Tier 1 Leverage Ratio	UREE Leverage Ratio
Numerator:		
Unallocated retained earnings	$ 1,051,848	$ 1,051,848
Adjustments for patronage or dividend accrued receivables or payables	(5,165)	(5,165)
Common Cooperative Equities:		
Purchased other required stock ≥ 7 years	374,887	—
Allocated stock ≥ 7 years	36,042	—
Allocated equities:		
Allocated equities held ≥ 7 years	66,961	—
Noncumulative perpetual preferred stock	750,000	—
Regulatory Adjustments and Deductions:		
Amount of allocated investments in other System institutions	(157,616)	(157,616)
Other regulatory required deductions	(217)	(217)
Total	$ 2,116,740	$ 888,850
Denominator:		
Total Assets	$ 35,781,758	$ 35,781,758
Regulatory Adjustments and Deductions:		
Regulatory deductions included in tier 1 capital	(168,168)	(168,168)
Total	$ 35,613,590	$ 35,613,590

C. Accumulated Other Comprehensive Loss:

Following is a summary of the components of accumulated other comprehensive loss and the changes occurring during the year ended December 31, 2023:

	Total	Unrealized Loss on Investments	Postretirement Benefit Plans	Unrealized (Loss) Gain on Cash Flow Derivative Instruments
Balance, January 1, 2023	**$ (540,359)**	**$ (606,405)**	**$ 2,146**	**$ 63,900**
Change in net unrealized gains (losses) on available-for-sale (AFS) securities:				
Net change in unrealized losses on AFS securities	**38,076**	**38,076**		
Change in postretirement benefit plans:				
Actuarial gains	**7**		**7**	
Amounts amortized into net periodic expense:				
Amortization of prior service credits	**(227)**		**(227)**	
Net change in postretirement benefit plans	**(220)**		**(220)**	
Change in cash flow derivative instruments:				
Net unrealized losses on cash flow derivative instruments	**(17,967)**			**(17,967)**
Reclassification of gains recognized in interest expense	**(1,041)**			**(1,041)**
Net change in cash flow derivative instruments	**(19,008)**			**(19,008)**
Total other comprehensive income (loss)	**18,848**	**38,076**	**(220)**	**(19,008)**
Balance, December 31, 2023	**$ (521,511)**	**$ (568,329)**	**$ 1,926**	**$ 44,892**

Following is a summary of the components of accumulated other comprehensive loss and the changes occurring during the year ended December 31, 2022:

	Total	Unrealized Gain (Loss) on Investments	Postretirement Benefit Plans	Unrealized Loss on Cash Flow Derivative Instruments
Balance, January 1, 2022	$ (96,836)	$ (29,865)	$ (773)	$ (66,198)
Change in net unrealized gains (losses) on available-for-sale (AFS) securities:				
Net change in unrealized losses on AFS securities	(576,540)	(576,540)		
Change in postretirement benefit plans:				
Actuarial gains	2,998		2,998	
Amounts amortized into net periodic expense:				
Amortization of prior service credits	(79)		(79)	
Net change in postretirement benefit plans	2,919		2,919	
Change in cash flow derivative instruments:				
Net unrealized gains on cash flow derivative instruments	206			206
Reclassification of losses recognized in interest expense	129,892			129,892
Net change in cash flow derivative instruments	130,098			130,098
Total other comprehensive (loss) income	(443,523)	(576,540)	2,919	130,098
Balance, December 31, 2022	$ (540,359)	$ (606,405)	$ 2,146	$ 63,900

Following is a summary of the components of accumulated other comprehensive loss and the changes occurring during the year ended December 31, 2021:

	Total	Unrealized Gain on Investments	Postretirement Benefit Plans	Unrealized Loss on Cash Flow Derivative Instruments
Balance, January 1, 2021	$ (28,827)	$ 80,007	$ (891)	$ (107,943)
Change in net unrealized gains (losses) on available-for-sale (AFS) securities:				
Net change in unrealized gains on AFS securities	(109,872)	(109,872)		
Change in postretirement benefit plans:				
Actuarial losses	195		195	
Amounts amortized into net periodic expense:				
Amortization of prior service credits	(77)		(77)	
Net change in postretirement benefit plans	118		118	
Change in cash flow derivative instruments:				
Net unrealized gains on cash flow derivatives instruments	41,498			41,498
Reclassification of losses recognized in interest expense	247			247
Net change in cash flow derivative instruments	41,745			41,745
Total other comprehensive (loss) income	(68,009)	(109,872)	118	41,745
Balance, December 31, 2021	$ (96,836)	$ (29,865)	$ (773)	$ (66,198)

The following table summarizes amounts reclassified out of accumulated other comprehensive (loss) income to current earnings:

Description	Amount Reclassified From Accumulated Other Comprehensive Loss			Location of Gain (Loss) Recognized in Statements of Comprehensive Income
	2023	2022	2021	
Amortization of net credits on postretirement benefit plan	**$ 227**	$ 79	$ 77	Salaries and employee benefits
Reclassification of cash flow hedges	**(1,242)**	—	—	Other income, net
Amortization of cash flow hedges	**201**	(129,892)	(247)	Interest expense
	$ (814)	$ (129,813)	$ (170)	

Note 12 — Employee Benefit Plans

Employees of the Bank participate in either the Texas District's defined benefit retirement plan (DB Plan) or in a nonelective defined contribution feature (DC Plan) within the Farm Credit Benefits Alliance 401(k) plan. In addition, all benefits-eligible employees are qualified to participate in the Farm Credit Benefits Alliance 401(k) plan.

The structure of the Texas District's DB Plan is characterized as multiemployer, since neither the assets, liabilities nor cost of any plan is segregated or separately accounted for by participating employers (Bank and Associations). No portion of any surplus assets is available to any participating employer. As a result, participating employers of the DB Plan only recognize as cost the required contributions for the period and a liability for any unpaid contributions required for the period of their financial statements. DB Plan obligations, assets and the components of annual benefit expenses are recorded and reported upon Texas District combination only. The Bank records current contributions to the DB Plan as an expense in the current year.

The DB Plan is noncontributory, and benefits are based on salary and years of service. As of January 1, 1996, the Bank and Associations froze participation in the DB Plan and offered defined contribution retirement plans to all employees hired subsequent to the freeze. The legal name of the DB Plan is Farm Credit Bank of Texas Pension Plan. It's employer identification number is 74-1110170. The DB Plan is not subject to any contractual expiration dates. The DB Plan's funding policy is to fund additional benefits that are expected to be earned by employees during the current year, the service cost plus 20% of the accumulated benefit obligation (ABO) shortfall based on a targeted funding status of ABO of 80%. The DB Plan sponsor is the board of directors of the Bank. The "projected unit credit" actuarial method is used for both financial reporting and funding purposes. Texas District employers have the option of providing enhanced retirement benefits, under certain conditions, within the DB Plan, to facilitate reorganization and/or restructuring. Actuarial information regarding the DB Plan accumulated benefit obligation and DB Plan asset is calculated for the Texas District as a whole and is presented in the Texas District's unaudited 2023 Annual Report. The actuarial present value of vested and non-vested accumulated benefit obligation exceeded the net assets of the DB Plan as of December 31, 2023.

The risks of participating in multiemployer plans are different from single-employer plans in the following aspects:

a. Assets contributed to the multiemployer plan by one employer may be used to provide benefits to employees of other participating employers.

b. If a participating employer stops contributing to the plan, the unfunded obligations of the plan may be borne by the remaining participating employers.

c. If the participating employer chooses to stop participating in the multiemployer plan, it may be required to pay the plan an amount based on the underfunded status of the plan, referred to as a withdrawal liability.

The following table includes additional information regarding the funded status of the DB Plan for projected benefit obligation in excess of DB Plan assets, the Bank's contributions, and the percent of the Bank's contributions to total plan contributions for the years ended December 31, 2023, 2022 and 2021:

		2023		2022		2021
Projected benefit obligation	$	**256,687**	$	260,042	$	348,701
Fair value of plan assets		**188,081**		184,418		245,976
Funded status of plan		**73.3 %**		70.9 %		70.5 %
Bank's contribution	$	**866**	$	1,427	$	2,327
Percent of Bank's contribution to total contributions		**13.3 %**		13.7 %		15.3 %

The funded status presented above is based on the percent of DB Plan assets to projected benefit obligation. DB plan funding is based on the percent of DB Plan assets to the accumulated benefit obligation, which was 74.1%, 71.8% and 72.0% at December 31, 2023, 2022 and 2021, respectively.

Generally, DB Plan trustees use historical return information to establish a best-estimate range for each asset class in which the DB Plan is invested. DB Plan trustees select the most appropriate rate for the DB Plan from the best-estimate range, taking into consideration the duration of the benefit liabilities and DB Plan sponsor investment policies.

Participants in the non-elective pension feature of the DC Plan direct the placement of their employers' contributions (5% of eligible compensation during 2023) made on their behalf into various investment alternatives.

The Texas District also participates in the Farm Credit Benefits Alliance 401(k) plan (the 401(k) Plan), which offers a pre-tax and after-tax Roth compensation deferral feature. Employers match 100% of employee contributions for the first 3% of eligible compensation and then match 50% of employee contributions on the next 2% of eligible compensation, for a maximum employer contribution of 4% of eligible compensation.

Certain executive or highly compensated employees in the Bank are eligible to participate in a separate nonqualified supplemental 401(k) plan, named the Farm Credit Benefits Alliance Nonqualified Supplemental 401(k) Plan (Supplemental 401(k) Plan). The Supplemental 401(k) Plan allows Texas District employers to elect to participate in any or all of the following benefits:

- *Restored Employer Contributions* — to allow "make-up" contributions for eligible employees whose benefits to the qualified 401(k) Plan were limited by the Internal Revenue Code during the year;
- *Elective Deferrals* — to allow eligible employees to make pre-tax deferrals of compensation above and beyond any deferrals into the qualified 401(k) Plan; and/or
- *Discretionary Contributions* — to allow participating employers to make a discretionary contribution to an eligible employee's account in the plan, and to designate a vesting schedule.

Contributions of $485 thousand, $94 thousand and $315 thousand were made to the Supplemental 401(k) Plan for the years ended December 31, 2023, 2022 and 2021. There were no distributions from the Supplemental 401(k) Plan in 2023, 2022 and 2021. The fair value of accumulated benefits and funded balance in the Supplemental 401(k) Plan totaled $1.7 million at December 31, 2023.

The following table presents the Bank's retirement benefit expenses for the years ended:

		2023		2022		2021
Texas District DB Plan	$	**866**	$	1,427	$	2,327
DC Plan		**2,092**		2,071		1,934
401(k) Plan		**1,539**		1,530		1,487
Supplemental 401(k) Plan		**485**		94		315
Total	$	**4,982**	$	5,122	$	6,063

The Bank provides certain health care benefits to qualifying retired employees (other postretirement benefits). These benefits are not characterized as multiemployer and, consequently, the liability for these benefits is included in other liabilities on the balance sheet. Bank employees hired on or after January 1, 2004, may be eligible for retiree medical benefits for themselves and their spouses at their expense and will be responsible for 100% of the related premiums.

The following tables reflect the benefit obligation, cost, funded status and actuarial assumptions for the Bank's other postretirement benefits, and additional information for accumulated benefits in excess of plan assets for the years ended December 31, 2023, 2022 and 2021:

	Other Postretirement Benefits					
		2023		2022		2021
Change in projected benefit obligation						
Projected benefit obligation, beginning of year	$	**9,718**	$	12,513	$	12,532
Service cost		**104**		194		195
Interest cost		**494**		388		345
Plan participants' contributions		**91**		94		76
Actuarial (gain) loss		**(8)**		(2,998)		(195)
Benefits paid		**(480)**		(473)		(440)
Projected benefit obligation, end of year	$	**9,919**	$	9,718	$	12,513
Change in plan assets						
Plan assets at fair value, beginning of year		**—**		—		—
Actual return on plan assets		**—**		—		—
Company contributions		**389**		379		364
Plan participants' contributions		**91**		94		76
Benefits paid		**(480)**		(473)		(440)
Plan assets at fair value, end of year		**—**		—		—
Unfunded status at end of year	$	**(9,919)**	$	(9,718)	$	(12,513)

	Other Postretirement Benefits		
	2023	2022	2021
Amounts recognized on the balance sheet consist of:			
Other postretirement liabilities	**$ (9,919)**	$ (9,718)	$ (12,513)
Accumulated other comprehensive (gain) loss	**(1,926)**	(2,146)	773
Amounts recognized in accumulated other comprehensive loss:			
Net actuarial (gain) loss	**$ (1,848)**	$ (1,990)	$ 1,006
Prior service credit	**(78)**	(156)	(233)
Total accumulated other comprehensive (gain) loss	**$ (1,926)**	$ (2,146)	$ 773
Net periodic benefit cost			
Service cost	**$ 104**	$ 194	$ 195
Interest cost	**494**	388	345
Amortization of:			
Prior service cost credit	**(77)**	(79)	(77)
Net actuarial gain	**(150)**	—	—
Total periodic benefit cost	**$ 371**	$ 503	$ 463
Other changes to plan assets and projected benefit obligations recognized in other comprehensive (income) loss:			
Net actuarial (gain) loss	**$ (7)**	$ (2,998)	$ (195)
Amortization of:			
Prior service costs	**77**	79	77
Net actuarial gain	**150**	—	—
Net change	**$ 220**	$ (2,919)	$ (118)
Additional details regarding plans with accumulated (post-retirement) benefit obligations in excess of plan assets:			
Accumulated (post-retirement) benefit obligation	**$ 9,919**	$ 9,718	$ 12,513
Fair value of plan assets	**—**	—	—

	Other Postretirement Benefits		
	2023	2022	2021
Weighted-average assumptions used to determine benefit obligation at year end			
Measurement date	**12/31/2023**	12/31/2022	12/31/2021
Discount rate	**5.50 %**	5.20 %	3.15 %
Health care cost trend rate assumed for next year (pre/post-65)	**7.50%/8.40%**	7.20%/7.70%	6.80%/6.00%
Ultimate health care cost trend rate	**4.50 %**	4.50 %	4.50 %
Year that the rate reaches the ultimate trend rate	**2033**	2030	2030
Weighted-average assumptions used to determine net periodic cost for the year			
Measurement date	**12/31/2022**	12/31/2021	12/31/2020
Discount rate	**5.20 %**	3.15 %	2.80 %
Health care cost trend rate assumed for next year (pre/post-65)	**7.20%/7.70%**	6.80%/6.00%	6.60%/6.20%
Ultimate health care cost trend rate	**4.50 %**	4.50 %	4.50 %
Year that the rate reaches the ultimate trend rate	**2030**	2030	2029

Expected Future Cash Flow Information

Expected Benefit Payments	
Fiscal 2024	**$ 442**
Fiscal 2025	**477**
Fiscal 2026	**521**
Fiscal 2027	**553**
Fiscal 2028	**600**
Fiscal 2029 - 2031	**3,336**
Expected Contributions	
Fiscal 2024	**$ 442**

The Bank's plan for other postretirement benefits does not have plan assets.

Note 13 — Related Party Transactions

As discussed in Note 1, "Organization and Operations," the Bank lends funds to the Texas District Associations to fund their loan portfolios. Interest income recognized on direct notes receivable from Texas District Associations was $615.7 million, $455.2 million and $361.4 million for 2023, 2022 and 2021, respectively. Further disclosure regarding these related party transactions is found in Note 4, "Loans and Reserves for Credit Losses," and Note 11, "Shareholders' Equity."

In addition to providing loan funds to Texas District Associations, the Bank also provides banking and support services to them, such as accounting, information systems, marketing and other services. Income derived by the Bank from these activities was $6.3 million, $4.5 million and $3.5 million for 2023, 2022 and 2021, respectively, and was included in the Bank's noninterest income.

The Bank had no transactions with nor loans to directors or senior officers, their immediate family members, or any organizations with which such senior officers or directors are affiliated, during 2023, 2022 and 2021.

Note 14 — Commitments and Contingencies

The Bank has various outstanding commitments and contingent liabilities as discussed elsewhere in these notes.

The Bank is primarily liable for its portion of Systemwide debt obligations. Additionally, the Bank is jointly and severally liable for the consolidated Systemwide bonds and notes of other System banks. The total Bank and consolidated Systemwide debt obligations of the System at December 31, 2023, were approximately $415.53 billion.

In the normal course of business, the Bank incurs a certain amount of claims, litigation, and other legal and administrative proceedings, all of which are considered incidental to the normal conduct of business. The Bank believes it has meritorious defenses to the claims currently asserted against it, and, with respect to such legal proceedings, intends to defend itself vigorously, litigating or settling cases according to management's judgment as to what is in the best interest of the Bank and its shareholders.

On at least a quarterly basis, the Bank assesses its liabilities and contingencies in connection with outstanding legal proceedings utilizing the latest information available. For those matters where it is probable that the Bank would incur a loss and the amount of the loss could be reasonably estimated, the Bank would record a liability in its financial statements. These liabilities would be increased or decreased to reflect any relevant developments on a quarterly basis. For other matters, where a loss is not probable or the amount of the loss is not estimable, the Bank does not record a liability.

Currently, other actions are pending against the Bank in which claims for monetary damages are asserted. Upon the basis of current information, management and legal counsel are of the opinion that any resulting losses are not probable, and that the ultimate liability, if any, resulting from a lawsuit and other pending actions will not be material in relation to the financial position, results of operations or cash flows of the Bank.

Note 15 — Financial Instruments With Off-Balance Sheet Risk

The Bank may participate in financial instruments with off-balance sheet risk to satisfy the financing needs of its borrowers and to manage its exposure to interest rate risk. These financial instruments include commitments to extend credit and commercial letters of credit. The instruments involve, to varying degrees, elements of credit risk in excess of the amount recognized in the financial statements. Commitments to extend credit are agreements to lend to a borrower as long as there is not a violation of any condition established in the contract. Commercial letters of credit are agreements to pay a beneficiary under conditions specified in the letter of credit. Commitments and letters of credit generally have fixed expiration dates or other termination clauses and may require payment of a fee. At December 31, 2023, the Bank had $4.22 billion of commitments to extend credit and $108.5 million of letters of credit outstanding.

Since many of these commitments are expected to expire without being drawn upon, the total commitments do not necessarily represent future cash requirements. However, these credit-related financial instruments have off-balance sheet credit risk because their amounts are not reflected on the balance sheet until funded or drawn upon.

The Bank provides letters of credit, which are irrevocable agreements to guarantee payments of specified financial obligations. As a guarantor, the Bank recognizes a liability for the fair value of the obligation undertaken in issuing the guarantee. The Bank's liability for the fair value of these obligations is determined by applying a risk-adjusted spread percentage to these obligations. As of December 31, 2023, the maximum potential amount of future payments that the Bank may be required to make under the Bank's outstanding letters of credit was $108.5 million, with a fair value of $1.8 million, which is included in other liabilities on the balance sheet. These outstanding letters of credit have expiration dates ranging from 2024 to 2044.

The credit risk involved in issuing commitments and letters of credit is essentially the same as that involved in extending loans to customers, and the same credit policies are applied by management. In the event of funding, the credit risk amounts are equal to the contract amounts, assuming that counterparties fail completely to meet their obligations and the collateral or other security is of no value. The amount of collateral obtained, if deemed necessary upon extension of credit, is based on management's credit evaluation of the counterparty.

Note 16 — Fair Value Measurements

Authoritative accounting guidance defines fair value as the exchange price that would be received for an asset or paid to transfer a liability in an orderly transaction between market participants in the principal or most advantageous market for the asset or liability. See Note 2, "Summary of Significant Accounting Policies," for additional information and "Valuation Techniques" at the end of this note.

Assets and liabilities measured at fair value on a recurring basis at December 31, 2023, for each of the fair value hierarchy values are summarized below:

	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Federal funds and other overnight funds	$ 312,399	$ —	$ 312,399	$ —
Available-for-sale investments				
Certificates of deposit	250,245	—	150,238	100,007
Corporate debt	195,032	—	195,032	—
U.S. Treasury securities	887,919	—	887,919	—
Agency-guaranteed debt	28,171	—	28,171	—
Mortgage-backed securities	5,046,453	—	5,046,453	—
Asset-backed securities	194,110	—	194,110	—
Agricultural mortgaged-backed securities	8,499	—	—	8,499
Derivative assets	2,329	—	2,329	—
Assets held in nonqualified benefit trusts	1,652	1,652	—	—
Total assets	$ 6,926,809	$ 1,652	$ 6,816,651	$ 108,506
Liabilities:				
Derivative liabilities	$ (41,010)	$ —	$ (41,010)	$ —
Letters of credit	1,830	—	—	1,830
Total liabilities	$ (39,180)	$ —	$ (41,010)	$ 1,830

At December 31, 2023, the Bank had a derivative asset position of $45.5 million and received $43.2 million in cash collateral against this position which resulted in a net derivative asset of $2.3 million. At December 31, 2023, the Bank had no derivative liability position and posted $41.0 million of initial margin in cash collateral which resulted in a net contra-liability of $41.0 million.

The table below represents a reconciliation of all Level 3 assets and liabilities measured at fair value on a recurring basis for the year ended December 31, 2023:

	Assets				Liabilities	
	Certificate of Deposit	Asset-Backed Securities	Mortgage-Backed Securities	Agricultural Mortgage-Backed Securities	Letters of Credit	Total
Balance at January 1, 2023	$ —	$ —	$ —	$ 10,270	$ 2,223	$ 8,047
Net gains (losses) included in other comprehensive income	7	(38)	424	383	—	776
Purchases, issuances and settlements	100,000	15,300	178,595	(2,154)	(393)	292,134
Transfers out of Level 3		(15,262)	(179,019)	—	—	(194,281)
Balance at December 31, 2023	$ 100,007	$ —	$ —	$ 8,499	$ 1,830	$ 106,676
The amount of gains/losses for the period included in other comprehensive income attributing to the change in unrealized gains or losses relating to assets or liabilities still held at December 31, 2023	$ 7	$ (38)	$ 424	$ 383	$ —	$ 776

There were transfers of assets or liabilities into or out of Level 3 from other levels during the year ended December 31, 2023. Certificates of deposits were included in Level 3 due to their valuation being based on Level 3 criteria (broker quotes). Agricultural mortgage-backed securities (AMBS) were included in Level 3 due to limited activity or less transparency around inputs to their valuation. The liability for letters of credit was included in Level 3 because the valuation, based on fees charged for similar agreements, may not closely correlate to a fair value for instruments not regularly traded in the secondary market.

Assets and liabilities measured at fair value on a nonrecurring basis at December 31, 2023, for each of the fair value hierarchy values are summarized below:

	Total	Quoted Price in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Loans	$ 25,269	$ —	$ —	$ 25,269
Total assets	$ 25,269	$ —	$ —	$ 25,269

Assets and liabilities measured at fair value on a recurring basis at December 31, 2022, for each of the fair value hierarchy values are summarized below:

	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Federal funds and other overnight funds	$ 301,678	$ —	$ 301,678	$ —
Available-for-sale investments:				
Certificates of deposit	199,009	—	199,009	—
Corporate debt	234,778	—	234,778	—
U.S. Treasury securities	818,844	—	818,844	—
Agency-guaranteed debt	53,301	—	53,301	—
Mortgage-backed securities	5,152,229	—	5,152,229	—
Asset-backed securities	186,521	—	186,521	—
Agricultural mortgaged-backed securities	10,270	—	—	10,270
Derivative assets	2,212	—	2,212	—
Assets held in nonqualified benefit trusts	1,183	1,183	—	—
Total assets	$ 6,960,025	$ 1,183	$ 6,948,572	$ 10,270
Liabilities:				
Derivative liabilities	$ (42,749)	$ —	$ (42,749)	$ —
Letters of credit	2,223	—	—	2,223
Total liabilities	$ (40,526)	$ —	$ (42,749)	$ 2,223

At December 31, 2022, there was no posted variation margin on derivatives. At December 31, 2022, the Bank had a derivative asset position of $64.7 million and received $62.5 million in cash collateral against this position which resulted in a net derivative asset of $2.2 million. At December 31, 2022, the Bank posted $42.7 million of initial margin in cash collateral with no related liability exposure.

The table below represents a reconciliation of all Level 3 assets and liabilities measured at fair value on a recurring basis for the year ended December 31, 2022:

	Assets		Liabilities	
	Mortgage-Backed Securities	Agricultural Mortgage-Backed Securities	Letters of Credit	Total
Balance at January 1, 2022	$ 58,959	$ 14,209	$ 3,306	$ 69,862
Net losses included in other comprehensive losses	(1,910)	(918)	—	(2,828)
Purchases, issuances and settlements	133,821	(3,021)	(1,083)	131,883
Transfers out of Level 3 into Level 2	(190,870)	—	—	(190,870)
Balance at December 31, 2022	$ —	$ 10,270	$ 2,223	$ 8,047
The amount of gains/losses for the period included in other comprehensive income attributing to the change in unrealized gains or losses relating to assets or liabilities still held at December 31, 2022	$ (1,910)	$ (918)	$ —	$ (2,828)

There were transfers of assets or liabilities into or out of Level 3 from other levels during the year ended December 31, 2022. Transfers of MBS from Level 3 into Level 2 were the result of market pricing becoming subsequently available. AMBS were included in Level 3 due to limited activity or less transparency around inputs to their valuation. MBS were included in Level 3 since their valuation was based on Level 3 criteria (broker quotes). The liability for letters of credit was included in Level 3 because their valuation, based on fees currently charged for similar agreements, may not closely correlate to a fair value for instruments that are not regularly traded in the secondary market.

Assets and liabilities measured at fair value on a nonrecurring basis at December 31, 2022, for each of the fair value hierarchy values are summarized below:

	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Loans	$ 24,981	$ —	$ —	$ 24,981
Total assets	$ 24,981	$ —	$ —	$ 24,981

Assets and liabilities measured at fair value on a recurring basis at December 31, 2021, for each of the fair value hierarchy values are summarized below:

	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Federal funds and other overnight funds	$ 194,223	$ —	$ 194,223	$ —
Available-for-sale investments:				
Corporate debt	234,580	—	234,580	—
U.S. Treasury securities	647,564	—	647,564	—
Agency-guaranteed debt	85,293	—	85,293	—
Mortgage-backed securities	5,394,337	—	5,335,378	58,959
Asset-backed securities	184,256	—	184,256	—
Agricultural mortgaged-backed securities	14,209	—	—	14,209
Derivative assets	338	—	338	—
Assets held in nonqualified benefit trusts	1,300	1,300	—	—
Total assets	$ 6,756,100	$ 1,300	$ 6,681,632	$ 73,168
Liabilities:				
Derivative liabilities	$ (7,614)	$ —	$ (7,614)	$ —
Letters of credit	3,306	—	—	3,306
Total liabilities	$ (4,308)	$ —	$ (7,614)	$ 3,306

The derivatives within the liabilities section relate to cash flow swaps which are cleared through a futures clearing merchant (FCM) or a central counterparty (CCP), with a fair value of $65.5 million, offset by variation margin of $73.1 million.

The table below represents a reconciliation of all Level 3 assets and liabilities measured at fair value on a recurring basis for the year ended December 31, 2021:

	Assets			Liabilities	
	Asset-Backed Securities	Mortgage-Backed Securities	Agricultural Mortgage-Backed Securities	Letters of Credit	Total
Balance at January 1, 2021	$ —	$ 75,914	$ 23,464	$ 2,513	$ 96,865
Net losses included in other comprehensive losses	(15)	(1,849)	(167)	—	(2,031)
Purchases, issuances and settlements	11,975	496,805	(9,088)	793	498,899
Transfers out of Level 3 into Level 2	(11,960)	(511,911)	—	—	(523,871)
Balance at December 31, 2021	$ —	$ 58,959	$ 14,209	$ 3,306	$ 69,862
The amount of gains/losses for the period included in other comprehensive income attributing to the change in unrealized gains or losses relating to assets or liabilities still held at December 31, 2021	$ (15)	$ (1,849)	$ (167)	$ —	$ (2,031)

There were transfers of assets or liabilities into or out of Level 3 from other levels during the year ended December 31, 2021. Transfers of asset-backed securities and MBS from Level 3 to Level 2 were the result of marketing pricing becoming subsequently available. AMBS were included in Level 3 due to limited activity or less transparency around inputs to their valuation. MBS were included in Level 3 since their valuation was based on Level 3 criteria (broker quotes). The liability for letters of credit was included in Level 3 because their valuation, based on fees currently charged for similar agreements, may not closely correlate to a fair value for instruments that are not regularly traded in the secondary market.

Assets and liabilities measured at fair value on a nonrecurring basis at December 31, 2021, for each of the fair value hierarchy values are summarized below:

	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Loans	$ 4,437	$ —	$ —	$ 4,437
Total assets	$ 4,437	$ —	$ —	$ 4,437

Financial assets and financial liabilities measured at carrying amounts and not measured at fair value on the balance sheet for each of the fair value hierarchy values are summarized as follows:

	December 31, 2023				
	Total Carrying Amount	**Quoted Prices in Active Markets for Identical Assets (Level 1)**	**Significant Other Observable Inputs (Level 2)**	**Significant Unobservable Inputs (Level 3)**	**Total Fair Value**
Assets:					
Cash	**$ 78,170**	**$ 78,170**	**$ —**	**$ —**	**$ 78,170**
Net loans	**29,687,603**	**—**	**—**	**28,077,479**	**28,077,479**
Total assets	**$ 29,765,773**	**$ 78,170**	**$ —**	**$ 28,077,479**	**$ 28,155,649**
Liabilities:					
Systemwide debt securities	**$ 35,133,324**	**$ —**	**$ —**	**$ 33,848,708**	**$ 33,848,708**
Total liabilities	**$ 35,133,324**	**$ —**	**$ —**	**$ 33,848,708**	**$ 33,848,708**

	December 31, 2022									
	Total Carrying Amount		Quoted Prices in Active Markets for Identical Assets (Level 1)		Significant Other Observable Inputs (Level 2)		Significant Unobservable Inputs (Level 3)		Total Fair Value	
Assets:										
Cash	$	141,487	$	141,487	$	—	$	—	$	141,487
Net loans		28,248,516		—		—		26,378,160		26,378,160
Total assets	$	28,390,003	$	141,487	$	—	$	26,378,160	$	26,519,647
Liabilities:										
Systemwide debt securities	$	33,971,742	$	—	$	—	$	31,873,887	$	31,873,887
Total liabilities	$	33,971,742	$	—	$	—	$	31,873,887	$	31,873,887

	December 31, 2021									
	Total Carrying Amount		Quoted Prices in Active Markets for Identical Assets (Level 1)		Significant Other Observable Inputs (Level 2)		Significant Unobservable Inputs (Level 3)		Total Fair Value	
Assets:										
Cash	$	156,986	$	156,986	$	—	$	—	$	156,986
Net loans		25,662,689		—		—		25,637,608		25,637,608
Total assets	$	25,819,675	$	156,986	$	—	$	25,637,608	$	25,794,594
Liabilities:										
Systemwide debt securities	$	30,790,428	$	—	$	—	$	30,780,330	$	30,780,330
Total liabilities	$	30,790,428	$	—	$	—	$	30,780,330	$	30,780,330

VALUATION TECHNIQUES

As more fully discussed in Note 2, "Summary of Significant Accounting Policies," authoritative accounting guidance establishes a fair value hierarchy, which requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. Fair values of financial instruments represent the estimated amount to be received to sell an asset or paid to transfer or extinguish a liability in active markets among willing participants at the reporting date. Due to the uncertainty of expected cash flows resulting from financial instruments, the use of different assumptions and valuation methodologies could significantly affect the estimated fair value amounts. Accordingly, certain of the estimated fair values may not be indicative of the amounts for which the financial instruments could be exchanged in a current or future market transaction. The following represent a brief summary of the valuation techniques used by the Bank for assets and liabilities:

Investment Securities

Where quoted prices are available in an active market, available-for-sale securities would be classified as Level 1. If quoted prices are not available in an active market, the fair value of securities is estimated using quoted prices for similar securities received from pricing services or discounted cash flows. Generally, these securities would be classified as Level 2. This would include U.S. Treasury, U.S. agency and certain mortgage-backed securities. Where there is limited activity or less transparency around inputs to the valuation, the securities are classified as Level 3. Level 3 assets at December 31, 2023, included the Bank's Certificates of Deposits and the Farmer Mac AMBS portfolio.

To estimate the fair value of the majority of the investments held, including certain non-agency securities, the Bank obtains prices from third-party pricing services.

Assets Held in Nonqualified Benefits Trusts

Assets held in trust funds related to supplemental retirement plans are classified within Level 1. The trust funds include investments that are actively traded and have quoted net asset values that are observable in the marketplace.

Derivatives

Derivative positions are valued using internally developed models that use as their basis quoted prices and would be classified within Level 1 of the valuation hierarchy. However, few classes of derivative contracts are listed on an exchange; thus, the majority of the derivative positions are valued using internally developed models that use as their basis readily observable market parameters and are classified within Level 2 of the valuation hierarchy. Such derivatives include interest rate caps and interest rate swaps.

The models used to determine the fair value of derivative assets and liabilities use an income approach based on observable market inputs, including SOFR and Overnight Index Swap curves and volatility assumptions about future interest rate movements.

Cash Collateral Posted with/by Counterparties

Derivative contracts are supported by bilateral collateral agreements with counterparties requiring us/them to post collateral in the event certain dollar thresholds of credit exposure are reached or in the case of cleared derivatives, the posting of initial and variation margin. The market value of collateral posted or received is the face value plus accrued interest that approximates fair value.

Letters of Credit

The fair value of letters of credit approximates the fees currently charged for similar agreements or the estimated cost to terminate or otherwise settle similar obligations.

Loans

Fair value is estimated by discounting the expected future cash flows using the Bank's and/or the Associations' current interest rates at which similar loans would be made to borrowers with similar credit risk. The discount rates are based on the Bank's and/or the Associations' current loan origination rates as well as management's estimates of credit risk. Management has no basis to determine whether the fair values presented would be indicative of the value negotiated in an actual sale and could be less.

For purposes of estimating fair value of accruing loans, the loan portfolio is segregated into pools of loans with homogeneous characteristics. Expected future cash flows, primarily based on contractual terms, and interest rates reflecting appropriate credit risk are separately determined for each individual pool.

The fair value of loans in nonaccrual status that are current as to principal and interest is estimated as described above, with appropriately higher interest rates which reflect the uncertainty of continued cash flows. For collateral-dependent loans, it is assumed that collection will result only from the disposition of the underlying collateral.

Loans Evaluated for Impairment

For certain loans individually evaluated for impairment under accounting impairment guidance, the fair value is based upon the underlying collateral since the loans are collateral-dependent loans for which real estate is the collateral. The fair value measurement process uses independent appraisals and other market-based information, but in many cases it also requires significant input based on management's knowledge of and judgment about current market conditions, specific issues relating to the collateral and other matters. As a result, a majority of these loans have fair value measurements that fall within Level 3 of the fair value hierarchy. When the value of the real estate, less estimated costs to sell, is less than the principal balance of the loan, a specific reserve is established.

Bonds and Notes

Systemwide debt securities are not all traded in the secondary market and those that are traded may not have readily available quoted market prices. Therefore, the fair value of the instruments is estimated by calculating the discounted value of the expected future cash flows. The discount rates used are based on the sum of quoted market yields for the Treasury yield curve and an estimated yield-spread relationship between System debt instruments and Treasury securities. We estimate an appropriate yield-spread taking into consideration selling group member (banks and securities dealers) yield indications, observed new government-sponsored enterprise debt security pricing and pricing levels in the related U.S. dollar interest rate swap market.

Uncertainty of Fair Value Measurements

For recurring fair value measurements categorized within Level 3 of the fair value hierarchy, the significant unobservable inputs used in the fair value measurement of the mortgage-backed securities are prepayment rates, probability of default and loss given default in the event of default inclusive of some uncertainty at the reporting date.

Quoted market prices may not be available for the instruments presented below. Accordingly, fair values are based on internal models that consider judgments regarding anticipated cash flows, future expected loss experience, current economic conditions, risk characteristics of various financial instruments and other factors. Significant increases (decreases) in any of those inputs in isolation would have resulted in a significantly lower (higher) fair value measurement. Generally, a change in the assumption used for the probability of default would have been accompanied by a directionally similar change in the assumption used for the loss given default and a directionally opposite change in the assumption used for prepayment rates. These estimates involve uncertainties and matters of judgment, and therefore cannot be determined with precision. Changes in assumptions could significantly affect the estimates.

Information About Recurring and Nonrecurring Level 3 Fair Value Measurements

	Fair Value at December 31,		
	2023	2022	2021
Certificates of deposit	**$ 100,007**	$ —	$ —
Other investments	**8,499**	10,270	14,209
Mortgage-backed securities	**—**	—	58,959

	Valuation Technique(s)	Unobservable Input	Range of Inputs / Weighted Average at December 31, **2023**	2022	2021
Certificates of Deposits	Broker quotes	—	—	—	—
Other investments	Discounted cash flow	Prepayment rates	**3.0%-32.13%/ 8.10%**	3.0%-32.13%/ 9.56%	1.4%-44.5% / 10.35%
Mortgage-backed securities	Vendor priced	—	—	—	—

In regard to nonperforming loans and other property owned (OPO), it is not practicable to provide specific information on inputs as each collateral property is unique. System institutions utilize appraisals to value these loans and OPO and consider unobservable inputs such as income and expense, comparable sales, replacement cost and comparability adjustments.

Information About Recurring and Nonrecurring Level 2 Fair Value Measurements

	Valuation Technique(s)	Input
Federal funds sold	Carrying value	Par/principal
Available-for-sale investment securities	Quoted prices Discounted cash flow	Price for similar security Constant prepayment rate Appropriate interest rate yield curve
Interest rate caps	Discounted cash flow	Appropriate interest rate yield curve Annualized volatility
Interest rate swaps	Discounted cash flow	Benchmark yield curve Counterparty credit risk Volatility

Information About Other Financial Instrument Fair Value Measurements

	Valuation Technique(s)	Input
Cash	Carrying value	Actual balance
Loans	Discounted cash flow	Prepayment forecasts Appropriate interest rate yield curve Probability of default Loss given default
Systemwide debt securities	Discounted cash flow	Benchmark yield curve Derived yield spread Own credit risk

Note 17 — Derivative Instruments and Hedging Activity

The Bank maintains an overall interest rate risk management strategy that incorporates the use of derivative products to minimize significant unplanned fluctuations in earnings that are caused by interest rate volatility. The Bank's goal is to manage interest rate sensitivity by modifying the repricing or maturity characteristics of certain balance sheet liabilities so that movements in interest rates do not adversely affect the net interest margin. The Bank considers the strategic use of derivatives to be a prudent method of managing interest rate sensitivity, as it prevents earnings from being exposed to undue risk posed by changes in interest rates.

The Bank may enter into derivative transactions to lower funding costs, diversify sources of funding, alter interest rate exposures arising from mismatches between assets and liabilities, or better manage liquidity. Interest rate swaps allow the Bank to raise borrowings in the government-sponsored entities market and modify the repricing characteristics of that debt to better match those of the earning assets. Under interest rate swap arrangements, the Bank agrees with other parties to exchange, at specified intervals, payment streams calculated on a specified notional principal amount, with at least one stream based on a specified floating-rate index. The Bank may purchase interest rate options, such as caps and floors, in order to reduce the impact of rising interest rates on its floating-rate debt.

At December 31, 2023, the Bank held interest rate caps with a notional amount of $115.0 million and a net fair value asset of $217 thousand, and pay-fixed interest rate swaps with a notional amount of $1.40 billion and net fair value asset of $45.3 million. At December 31, 2023, there was $2.3 million of excess variation margin on the pay-fixed interest rate swaps. The primary types of derivative instruments used and the amount of activity (notional amount of derivatives) during the year ended December 31, 2023, is summarized in the following table:

	Pay-Fixed Swaps	Interest Rate Caps	Total
Balance at January 1, 2023	$1,425,000	$ 115,000	$1,540,000
Additions	500,000	—	500,000
Maturities/Amortizations	(525,000)	—	(525,000)
Balance at December 31, 2023	**$1,400,000**	**$ 115,000**	**$1,515,000**

By using derivative instruments, the Bank exposes itself to credit and market risk. If a counterparty fails to fulfill its performance obligations under a derivative contract, the Bank's credit risk will equal the fair value gain of the derivative. Generally, when the fair value of a derivative contract is positive, this indicates that the counterparty owes the Bank, thus creating a repayment risk for the Bank. When the fair value of the derivative contract is negative, the Bank owes the counterparty and, therefore, assumes no repayment risk.

To minimize the risk of credit losses from derivatives, all interest rate swap derivative contracts have been moved to clearing and are cleared through a Futures Commission Merchant. Cleared derivative contracts are required to be 100% collateralized and the Derivatives Clearing Organization (DCO) takes on the obligation of both sides of the transaction. Interest rate cap derivatives are supported by bilateral collateral agreements with counterparties requiring the posting of collateral in the event certain dollar thresholds of exposure of one party to the other are reached; thresholds may vary depending on the counterparty's credit rating from a major rating agency. The Bank also monitors the credit standing of, and levels of exposure to, individual counterparties. Interest rate caps are under master agreements that contain netting provisions. These provisions allow the Bank to require the net settlement of covered contracts with the same counterparty in the event of default by the counterparty on one or more contracts. At December 31, 2023, the Bank had posted $41.0 million of cash as collateral as initial margin as compared to $42.7 million and $17.7 million at December 31, 2022 and December 31, 2021, respectively. At December 31, 2023, the Bank had a derivative asset value of $45.5 million and received $43.2 million in cash collateral against that position from a counterparty. At December 31, 2022, the Bank had a derivative asset value of $64.7 million and received $62.5 million in cash collateral against that position. No counterparty had been required to post collateral in 2021.

The credit exposure represents the exposure to credit loss on derivative instruments, which is estimated by calculating the cost, on a present value basis, to replace all outstanding derivative contracts in a gain position.

Derivative — Counterparty Exposure

The table below presents the credit ratings of counterparties to whom the Bank had credit exposure at December 31, 2023:

	Remaining Years to Maturity					
	Less than One to Five Years	More than Five Years	Total Gains (Losses)*	Exposure	Collateral (Posted) Received **	Exposure Net of Collateral
Moody's Credit Rating						
Aa1	$ 195	$ —	$ 195	$ 195	$ —	$ 195
Aa2	20	—	20	20	—	20
Aa3	23,045	26,453	49,498	49,498	2,147	47,351
A3	2	—	2	2	—	2
Total	**$ 23,262**	**$ 26,453**	**$ 49,715**	**$ 49,715**	**$ 2,147**	**$ 47,568**

*Represents gain or loss positions on derivative instruments with individual counterparties. Net gains or losses represent the exposure to credit losses estimated by calculating the cost, on a present value basis, to replace all outstanding derivative contracts within a maturity category. Within each maturity category, contracts in a loss position are netted against contracts in a gain position with the same counterparty.

**Represents the netting of cash collateral posted of and received by counterparties under enforceable agreements. At December 31, 2023, the Bank had posted $41.0 million of initial margin in cash as collateral and received variation margin in cash collateral of $43.2 million.

The Bank's derivative activities are monitored by its Asset-Liability Management Committee (ALCO) as part of the ALCO's Bank asset/liability and treasury functions. The ALCO is responsible for approving hedging strategies that are developed through its analysis of data derived from financial simulation models and other internal and industry sources. The resulting hedging strategies are then incorporated into the Bank's overall interest rate risk management strategies.

Fair Value Hedges

For derivative instruments that are designated and qualify as a fair value hedge, the gain or loss on the derivative as well as the offsetting loss or gain on the hedged item (principally, debt securities) attributable to the hedge risk are recognized in current earnings. The Bank includes the gain or loss on the hedged items in the same line item (interest expense) as the offsetting loss or gain on the related receive-fixed interest rate swaps. Recorded in the Bank's balance sheet are cumulative basis adjustments for fair value hedges for Systemwide debt securities (bonds and notes). At December 31, 2023, December 31, 2022 and December 31, 2021, the Bank did not have any fair value hedged items.

Cash Flow Hedges

For derivative instruments that are designated and qualify as cash flow hedges, the effective portion of the gain or loss on the derivative is reported as a component of other comprehensive income and reclassified into earnings in the same period or periods during which the hedged transaction affects earnings. Gains and losses on the derivative representing either hedge ineffectiveness or hedge components excluded from the assessment of effectiveness are recognized in current earnings.

Fair Values of Cash Flow Derivative Instruments

All cash flow swaps hedges clear through a futures commission merchant (FCM), with a clearinghouse or central counterparty (CCP). At December 31, 2023, the notional amount of cleared cash flow hedges was $1.40 billion with associated initial margin of $41.0 million. At December 31, 2023, the Bank received cash collateral from the counterparty of $43.2 million. At December 31, 2022, and December 31, 2021, the notional amount of cleared cash flow hedges was $1.43 billion and $825.0 million, respectively, with associated posted initial margin of $42.7 million and $17.7 million, respectively.

The Bank's derivative instruments at December 31, 2023, 2022 and 2021, which are designated and qualify as cash flow hedges, met the standards for accounting treatment. Thus, the effective portion of the gain or loss on the derivative was reported as a component of other comprehensive income (OCI). In the next 12 months, we expect to reclassify to earnings losses of $223 thousand recorded in accumulated other comprehensive loss (AOCL) as of December 31, 2023. These amounts will offset the cash flows associated with the hedged forecasted transactions. For cash flow hedges with any ineffectiveness, the ineffectiveness is recognized as interest expense into current period earnings. For the twelve months ended December 31, 2023, ineffectiveness for cash flow hedges totaled $3 thousand. There was no ineffectiveness for cash flow hedges recorded during the twelve months ended December 31, 2022 or 2021.

The following table represents the fair values of cash flow derivative instruments with excess variation margin for cleared activity as of December 31, 2023 and 2022, and inclusive of posted variation margin for cleared activity as of December 31, 2021:

	Balance Sheet Location	Fair Value 2023	Fair Value 2022	Fair Value 2021	Balance Sheet Location	Fair Value 2023	Fair Value 2022	Fair Value 2021
Interest rate caps	Other assets	**$ 217**	$ 878	$ 338	Other liabilities	**$ —**	$ —	$ —
Pay-fixed swaps	Other assets	**2,112**	1,334	—	Other liabilities	**—**	—	7,614
		$ 2,329	$ 2,212	$ 338		**$ —**	$ —	$ 7,614

The following table sets forth the effect of derivative (loss) gain recognized in accumulated other comprehensive loss for the years ended December 31, 2023, 2022 and 2021:

	Gain (Loss) Recognized in AOCI on Derivatives at December 31,		
	2023	2022	2021
Interest rate caps	**$ (661)**	$ 540	$ 102
Pay-fixed swaps	**(17,306)**	129,352	41,396
	$ (17,967)	$ 129,892	$ 41,498

	Amount of Loss Reclassified From AOCI Into Income at December 31,		
	2023	2022	2021
Interest expense	**$ (201)**	$ (206)	$ (247)
Other income, net	**1,242**	—	—
	$ 1,041	$ (206)	$ (247)

The table below provides information about derivative financial instruments and other financial instruments that are sensitive to changes in interest rates, including debt obligations and interest rate swaps. The debt information below presents the principal cash flows and related weighted average interest rates by expected maturity dates. The derivative information below represents the notional amounts and weighted average interest rates by expected maturity dates.

December 31, 2023 *(dollars in thousands)*	Maturities of 2023 Derivative Products and Other Financial Instruments							
	2024	**2025**	**2026**	**2027**	**2028**	**Subsequent Years**	**Total**	**Fair Value**
Total Systemwide debt obligations:								
Fixed rate	$ 5,850,582	$ 3,528,958	$ 3,101,405	$ 2,595,304	$ 1,813,002	$ 7,785,009	$ 24,674,260	$ 25,139,301
Weighted average interest rate	3.03%	2.08%	2.32%	2.29%	2.81%	3.15%	2.75%	
Variable rate	$ 5,334,762	$ 5,074,317	$ 49,985	$ —	$ —	$ —	$ 10,459,064	$ 8,709,407
Weighted average interest rate	5.48%	5.55%	5.67%	—%	—%	—%	5.51%	
Total Systemwide debt obligations:	$11,185,344	$ 8,603,275	$ 3,151,390	$2,595,304	$ 1,813,002	$ 7,785,009	$35,133,324	$ 33,848,708
Weighted average interest rate	4.19%	4.12%	2.37%	2.29%	2.81%	3.15%	3.57%	
Derivative instruments:								
Interest rate caps								
Notional value	$ 20,000	$ 20,000	$ —	$ 75,000	$ —	$ —	$ 115,000	$ 217
Weighted average receive rate	—%	—%	—%	—%	—%	—%	—%	
Weighted average pay rate	—%	—%	—%	—%	—%	—%	—%	
Pay-fixed swaps								
Notional value	$ —	$ —	$ 25,000	$ 125,000	$ 700,000	$ 550,000	$ 1,400,000	$ 2,112
Weighted average receive rate	—%	—%	5.58%	5.37%	5.36%	5.32%	5.35%	
Weighted average pay rate	—%	—%	3.24%	2.86%	3.02%	2.79%	2.92%	

Note 18 — Selected Quarterly Financial Information (unaudited)

Quarterly results of operations are shown below for the years ended December 31:

	2023				
	First	**Second**	**Third**	**Fourth**	**Total**
Net interest income	**$ 86,448**	**$ 85,351**	**$ 89,549**	**$ 88,669**	**$ 350,017**
Provision for credit losses	**22,377**	**9,749**	**629**	**5,099**	**37,854**
Noninterest expense (income), net	**29,692**	**31,602**	**33,185**	**17,776**	**112,255**
Net income	**$ 34,379**	**$ 44,000**	**$ 55,735**	**$ 65,794**	**$ 199,908**

	2022				
	First	Second	Third	Fourth	Total
Net interest income	$ 97,036	$ 96,299	$ 97,672	$ 95,155	$ 386,162
Provision for credit losses (loan loss reversal)	(865)	905	1,270	3,270	4,580
Noninterest expense (income), net	30,317	32,159	30,074	19,146	111,696
Net income	$ 67,584	$ 63,235	$ 66,328	$ 72,739	$ 269,886

	2021				
	First	Second	Third	Fourth	Total
Net interest income	$ 94,065	$ 90,176	$ 87,426	$ 96,144	$ 367,811
Provision for credit losses (loan loss reversal)	1,247	1,394	419	(1,335)	1,725
Noninterest expense (income), net	26,842	26,359	28,615	29,679	111,495
Net income	$ 65,976	$ 62,423	$ 58,392	$ 67,800	$ 254,591

Note 19 — Combined Districtwide Financial Statements

The accompanying financial statements exclude financial information of the Bank's affiliated Associations. The Bank and its Associations are collectively referred to as the "Texas District." The Bank separately publishes certain unaudited combined financial information of the Texas District, including a condensed statement of condition and statement of income, which can be found on the Bank's website at *www.farmcreditbank.com.*

Note 20 — Subsequent Events

The Bank has evaluated subsequent events through February 29, 2024, which is the date the financial statements were issued. There are no significant subsequent events requiring disclosure as of February 29, 2024.

Disclosure Information and Index (unaudited)

DISCLOSURES REQUIRED BY FARM CREDIT ADMINISTRATION REGULATIONS

DESCRIPTION OF BUSINESS

A description of territory served, persons eligible to borrow, types of lending activities engaged in, financial services offered and related Farm Credit organizations required to be disclosed in this section are incorporated herein by reference to Note 1, "Organization and Operations," to the accompanying financial statements.

The description of significant developments that had or could have a material impact on results of operations or interest rates to borrowers, acquisitions or dispositions of material assets, material changes in the manner of conducting business, seasonal characteristics and concentrations of assets, if any, required to be disclosed in this section are incorporated herein by reference to "Management's Discussion and Analysis" of the Bank included in this annual report to shareholders.

Board of Directors and Bank Senior Officers

The Bank is governed by a seven-member board of directors. Five directors are farmers or ranchers, who are elected by the customers of the 13 Associations that own the Bank. Two directors, who are not stockholders of any of the Associations, are appointed by the elected board members. The board of directors is responsible for directing the operations of the Bank. The Bank's senior officers report to the Bank's chief executive officer, and are collectively accountable to the board of directors and work with the board of directors to set the Bank's direction, goals and strategies.

The following represents certain information regarding the board of directors and senior officers of the Bank as of December 31, 2023, including business experience during the past five years:

DIRECTORS

James F. "Jimmy" Dodson, 70, chair of the board of directors, is from Robstown, Texas. He grows cotton, corn and milo on three family farm operations. Mr. Dodson serves on the Bank's audit and compensation committees and is chair of the Tenth District Farm Credit Council. He is one of the board's designated financial experts on the Bank's audit committee. He is president of Dodson Farms Inc. and Dodson Ag Inc., and is a partner in Dodson Family Farms. He is manager of Weber Station LLC, which is the managing partner of Weber Greene Ltd., both of which are family farm real estate management firms. He is a member of the Federal Farm Credit Banks Funding Corporation board of directors. He is also a past chair of the national Farm Credit Council board of directors and a former director of FCC Services. He also serves on the boards of Gulf Coast Cooperative, an agricultural retail cooperative, and the Texas Agricultural Cooperative Council, an industry trade association. He is past chair of the National Cotton Council of America, the American Cotton Producers and the Cotton foundation, and formerly served as a director of Cotton Incorporated. He is past chair of the Texas AgFinance, FCS board of directors and a former member of the Texas District's Stockholders Advisory Committee. Mr. Dodson became a director of the Bank in 2003, and his term expires at the end of 2026.

Linda C. Floerke, 62, vice chair of the board of directors, is from near Lampasas, Texas. She serves on the Bank's audit and compensation committees and is also vice chair of the Tenth District Farm Credit Council. Ms. Floerke is co-owner of Buena Vista Ranch FLP, which is a hay and cattle operation. She is also co-owner and manager of Agro-Tech Services Inc., an agricultural consultation business. She co-owns and manages rental property in Uvalde and Real counties and is a co-owner of Casa Floerke LLC, a rental property business. Ms. Floerke is also a lay leader for the Lampasas Methodist Church and serves on the Texas A&M AgriLife Extension Leadership Advisory Board for Lampasas County, which provides oversight of agricultural extension services. She is a member of the Texas Agricultural Cooperative Council board of directors, an industry trade association. She previously served as a trustee of the Lampasas Independent School District. Ms. Floerke was a director of Lone Star Ag Credit, formerly Texas Land Bank, from 2012 through the end of 2016. She became a director in 2017, and her term expires at the end of 2025.

Dr. Larry L. Boleman, 78, is from College Station, Texas. He is owner and manager of Boleman Cattle Company, consisting of raising registered and composite breeding cow-calf herds and the daily management of pasture and hay fields in Brazos and Burnet counties. Dr. Boleman is vice chair of the Bank's audit committee and a member of the Bank's compensation committee. He also is a member of the Tenth District Farm Credit Council. Dr. Boleman is a retired Texas A&M University associate executive vice president, associate vice chancellor, animal science professor and Extension beef cattle specialist. He serves on the Texas 4-H Youth Development Foundation board of trustees, is past president of the Texas Purebred Cattle Alliance, and is a former member of the Independent Cattlemen's Association and Texas Beef Council boards. Dr. Boleman previously served on the Capital Farm Credit board of directors and as governance committee chair. He became a director in 2021, and his term expires at the end of 2026.

Dennis Anthony, 70, is from Friona, Texas. He owns and operates Anthony Farm & Cattle, which produces stocker cattle, milo, wheat and corn in Parmer and Deaf Smith counties. Mr. Anthony serves on the Bank's audit and compensation committees and is a member of the Tenth District Farm Credit Council. He also serves on the boards of the Parmer County Hospital District and Parmer Medical Center. Prior to his election to the Bank's board, he was board chair of AgTexas Farm Credit Services and former chair of the Texas District's Stockholders Advisory Committee. He became a director in 2023, and his term expires at the end of 2025.

John L. "Jack" Dailey, 68, is from Extension, Louisiana. He is an owner and operator of Boeuf Prairie Farm, which produces cotton, corn, soybeans and beef cattle, and is a partner and serves as vice president of Franklin Farmers Alliance LLC, a farmer-owned agricultural retail store. Mr. Dailey is chair of the Bank's compensation committee and serves on the Bank's audit committee. He also is a member of the Tenth District Farm Credit Council. Effective January 1, 2024, Mr. Dailey became a board member of the national Farm Credit Council. He chairs the Louisiana Boll Weevil Eradication Commission and the Princess

Theatre Foundation Board, and is treasurer of the Franklin Parish Farm Bureau, an agricultural trade organization. He also serves on the executive committee of the Louisiana Cotton and Grain Association, a trade organization, and the water management task force of the Louisiana Department of Natural Resources. Prior to joining the Bank board, he was vice chair of the Louisiana Land Bank board of directors. Mr. Dailey became a director in 2019, and his term expires at the end of 2024.

M. Philip Guthrie, 78, is one of two appointed members on the board. He is chair of the Bank's audit committee and serves on the Bank's compensation committee. He is also a member of the Tenth District Farm Credit Council. He is one of the board's designated financial experts on the Bank's audit committee. Mr. Guthrie is the chief executive officer of Denham Partners LLC, a Dallas-based private investment firm. Early in his career, he was chief financial officer of Southwest Airlines, and later served as chief financial officer of Braniff International during that airline's reorganization. Mr. Guthrie also was the managing director of Mason Best Co., a Dallas-based investment firm that managed operations in over $2 billion in equity investments in a broad spectrum of industries, for 10 years, and has served as chair, director or chief executive officer of numerous private and public financial service companies, both in banking and insurance. He is also currently the board chair of Africa Specialty Risks, a reinsurance firm based in London, Bermuda and Mauritius, and an advisor to several large private equity firms focusing on the financial services industry worldwide. He serves as general partner of Ke'e Associates, a private investment company. A Certified Public Accountant and a Chartered Global Management Accountant, Mr. Guthrie is audit committee-qualified under the guidelines of the Securities and Exchange Commission, the New York Stock Exchange and Nasdaq. He is a stockholder of his family-managed 125-year-old livestock and crop operation in northern Louisiana. Mr. Guthrie became a director in 2015, and his term expires at the end of 2026.

Dorothy Nichols, 72, is one of two appointed members on the board. She is vice chair of the Bank's compensation committee and serves on the Bank's audit committee. Ms. Nichols is one of the board's designated financial experts on the Bank's audit committee. She is also a member of the Tenth District Farm Credit Council. Ms. Nichols had a 23-year career with the Farm Credit System Insurance Corporation (FCSIC), the government insurer for Farm Credit System debt obligations. She joined the FCSIC in 1995 as its first in-house general counsel, and from 2006 to 2018 served as its chief operating officer. Previously, she was the first chief operating officer of the Farm Credit Administration (FCA), the independent federal agency that regulates and examines Farm Credit institutions and related entities. Prior to that position, Ms. Nichols was associate general counsel at the Federal Deposit Insurance Corporation. She began her government career in 1982 as a trial attorney with the Federal Home Loan Bank Board and the Federal Savings and Loan Insurance Corporation. She holds a bachelor's degree in history from the University of Maryland and a doctorate in law from George Washington University. Ms. Nichols became a director in 2019, and her term expires at the end of 2024.

Committees

The board of directors has established an audit committee and a compensation committee. All members of the board serve on both the audit committee and the compensation committee. As the need arises, a member of the board of directors will also participate in the functions of the Bank's credit review committee. The responsibilities of each board committee are set forth in its respective approved charter.

The disclosure of director and senior officer information included in this disclosure information and index was reviewed by the compensation committee prior to the annual report's issuance (including the disclosure information and index).

Compensation of Directors

Directors of the Bank are compensated in cash for service on the Bank's board. The board of directors has adopted a compensation philosophy under which it will evaluate Bank director compensation based on competitive market factors, aligning with the methodology utilized for the Bank's employee compensation program. An annual compensation amount is considered as a retainer for all services performed by the director in an official capacity during the year and is approved by the board annually. In addition, directors may receive additional compensation in the amount approved by the board for certain leadership positions to which the director has been elected or assigned. The annual retainer fee is to be paid in equal monthly installments, including any additional compensation. Compensation for 2023 was paid at the rate of $130,000 per year, payable at $10,833 per month. Additional compensation was paid for leadership positions on the board and committees as follows: the chair of the board of directors in the amount of $65,000 and vice chair of the board of directors in the amount of $15,000, audit committee chair in the amount of $15,000 and compensation committee chair in the amount of $15,000. No director received non-cash compensation exceeding $5,000 in 2023. Total cash compensation paid to all directors as a group during 2023 was $1.02 million.

Information for each director for the year ended December 31, 2023 is provided below:

Board Member	Days Served at Board Meetings*	Days Served on Other Official Assignments**	Total Compensation Paid***
James F. Dodson	22.75	35.00	$ 195,000
Linda C. Floerke	22.00	34.50	145,000
Dennis Anthony	22.75	34.25	130,000
Dr. Larry L. Boleman	22.75	27.25	130,000
John L. Dailey	22.75	34.25	145,000
M. Philip Guthrie	22.25	26.75	145,000
Dorothy Nichols	22.75	29.25	130,000
			$ 1,020,000

*Includes travel time, but does not include time required to prepare for board meetings. Also includes attendance via teleconference.

**Includes audit committee meetings, compensation committee meetings, credit review committee meetings, special assignments, training and travel time.

***Reflects regular compensation and additional compensation for year presented.

Directors incur costs for reasonable travel, subsistence and other related expenses while conducting Bank business, including being reimbursed for such expenses. The aggregate amount of expenses incurred and reimbursed to directors in 2023, 2022 and 2021 totaled $146,507, $147,480 and $91,594, respectively. A copy of the Bank's travel policy is available to shareholders upon request.

BANK SENIOR OFFICERS

Name and Title	Time in Position	Experience – Past Five Years	Other Business Interests – Past Five Years
Amie Pala, Chief Executive Officer	3 years	Senior Vice President, Chief Financial Officer, FCBT	She is chair of the Bank's executive committee and serves on the Federal Farm Credit Banks Funding Corporation board of directors and audit committee. She is vice chair of the Farm Credit System Presidents Planning committee and a member of its business practices and finance committees. She serves on the AgFirst/FCBT Plan Fiduciary Committee and as the chair of the Texas District Defined Benefits Administration committee. She is president of the Tenth District Farm Credit Council.
Isaac Bennett, Executive Vice President, Chief Credit Officer	2.5 years	Vice President and Unit Manager Capital Markets, FCBT	He is a member of the Bank's executive committee and a former member of the MANRRS (Minorities in Agriculture, Natural Resources and Related Sciences) Advisory Board. He also serves on the board of the University of Tennessee Foundation.
Brandon Blaut, Executive Vice President, Chief Operating Officer	0.25 years	Executive Vice President, Chief Financial Officer, January 2021 through October 2023, Vice President of Finance and Loan Operations, May 2019 through December 2020, FCBT	He is a member of the Bank's executive committee.
Scott Erlichman, Executive Vice President, Chief Information Officer	2.5 years	Chief Technology Officer, Hancock Whitney Bank	He is a member of the Bank's executive committee.
Brian O'Keane, Executive Vice President, Chief Financial Officer	0.25 years	Global Chief Financial Officer, Marex Capital Markets	He is a member of the Bank's executive committee and is a member of the Farm Credit System Disclosure Committee.
Thomas Ringler, Executive Vice President, Enterprise Risk Officer	1 year	Vice President, FarmView relationship management and internal controls compliance, FCBT	His certifications include a Certified Public Accountant and a Certified Information Systems Auditor. He is a member of the Bank's executive committee. He serves as a member of Farm Credit System workgroups, including the Fraud Response Workgroup, the Internal Controls over Financial Reporting Workgroup, and the Reputation Risk Workgroup.
Nisha Rocap, Executive Vice President, Chief Audit Executive	6 years	Risk Assurance Director, PricewaterhouseCoopers	Her certifications include a Certified Public Accountant, a Certified Information Systems Auditor and a Certified Internal Auditor. She serves as a member of the Bank's executive committee, is a member of the Audit and Risk Advisory Group for the Farm Credit Council Services Director Leadership Conference, and also serves on the Farm Credit Captive Insurance board.
Nanci Tucker, Executive Vice President, Chief Administrative Officer and General Counsel	3 years	Senior Vice President, General Counsel, FCBT	She is a member of the Bank's executive committee and the Bank's Corporate Secretary. She is secretary of the Tenth District Farm Credit Council.

Compensation Discussion and Analysis – Senior Officers

Overview

The board of directors of the Farm Credit Bank of Texas, through its compensation committee, has pursued a compensation philosophy for the Bank that promotes leadership in the adoption and administration of a comprehensive compensation program.

A description of the Bank's compensation plans is as follows.

Base Pay

Market-based salaries along with the other incentive and benefits described below are critical to attracting and retaining needed talent in a highly competitive job market.

Defined Benefit Pension Plan

The Defined Benefit Pension Plan (Pension Plan) is a final average pay plan which was closed to new participants in 1996, and later fully closed to all participants, including rehires who had formerly participated in the plan. The Pension Plan benefits are based on the average monthly eligible compensation over the 60 consecutive months that produce the highest average after 1996 (FAC60). The Pension Plan's benefit formula for a Normal Retirement Pension is the sum of (a) 1.65% of FAC60 times "Years of Benefit Service" and (b) 0.50% of (i) FAC60 in excess of Social Security covered compensation times (ii) "Years of Benefit Service" (not to exceed 35).

The Pension Plan's benefit formula for the Normal Retirement Pension assumes that the employee's retirement age is 65, that the employee is married on the date the annuity begins, that the spouse is exactly two years younger than the employee and that the benefit is payable in the form of a 50% joint and survivor annuity. If any of those assumptions are incorrect, the benefit is recalculated to be the actuarial equivalent benefit. The Pension Plan benefit is offset by the pension benefits any employee may have from another Farm Credit System institution.

The Pension Plan was amended in 2013 to allow those retiring after September 1, 2013, to elect a lump-sum distribution option. The Pension Plan was also amended to allow participating employers to exclude from pension compensation new long-term incentive plans which began after January 1, 2014.

In 2014, the Pension Plan was amended to allow terminated employees with a vested benefit to also elect a lump-sum distribution beginning January 1, 2015.

In 2020, the Pension Plan was amended to allow in-service distributions. The earliest age at which the distribution can be taken (age 59½) was made available to defined benefit plans with legislative changes made in late December 2019.

401(k) Plan – Elective

Farm Credit Benefits Alliance (FCBA) 401(k) Plan is open to all Bank employees and includes up to a 4% employer match on employee deferrals up to Internal Revenue Service (IRS) directed limits. Employees become fully vested in the plan upon participation. The plan allows for self-directed investment choices by participants.

401(k) Plan – Non-Elective Defined Contribution Plan

FCBA 401(k) Plan's Defined Contribution component is open to employees not participating in the Defined Benefit Pension Plan. Employees become fully vested in the plan upon participation and receive a 5% employer contribution each pay period up to IRS-directed limits to the participant's account which is invested in the self-directed investment choices available.

Nonqualified Supplemental 401(k) Plan

This plan is open to all employees who meet the minimum salary requirements set by the IRS. It has three features: elective deferral of employee compensation; discretionary employer contributions; and restored employer contributions that make an employee "whole" when 401(k) IRS limitations are met. Deferred money is invested with similar investment fund choices as the qualified 401(k) Plan at the participant's direction.

Success Sharing Plan

The purpose of the Farm Credit Bank of Texas Success Sharing Plan (SSP) is to advance the mission of the Bank by recognizing employees with variable pay through a discretionary bonus. The SSP (also categorized as a bonus or profit-sharing plan) rewards employees as the overall organization experiences success and performs within the realities of the current market environment and in accordance with business planning goals and objectives. Additionally, it is expected to help to attract, motivate and retain Bank staff.

The SSP provides an annual award that is paid after the Bank's operational results and strategic objectives are reported and assessed by the compensation committee of the board. The compensation committee has the final authority to determine if a success sharing award is to be paid and what percentage of the award target will be funded. The CEO does not participate in this plan; otherwise, all employees are eligible to participate in the SSP for that year. This program applies the concept of differential factors for all eligible Bank participants, and is tiered into four groups according to employee job grades and their accountability level inside the entire organization. Each employee group has its own Success Sharing Award Factor for this plan. This factor is multiplied by the employee's base salary paid for the calendar year as of December 31 to arrive at the Success Sharing Plan award target for the year.

When a promotion or salary adjustment occurs during the year that elevates an employee's job grade into a higher employee group in the plan, the plan's award calculation may be prorated and paid at the separate employee group percentages for the periods the employee was in each of the employee groups. Additionally, when a salary adjustment occurs, the plan's award calculation may be prorated and paid at the separate employee salaries for the periods the employee was at each salary.

FCBT Retention Plan

This is a nonqualified plan for certain Bank employees that provides dollar incentives to remain employed for specific time periods to accomplish important Bank initiatives or to aid in leadership succession. It is paid according to the agreement arranged for each participant. The CEO approves participants, plan provisions and participant agreements.

Long-Term Incentive Program

This plan provides for annual cash bonus and deferred incentive bonus payments with eligibility for the chief executive officer and executive committee members. The annual long-term incentive amount reflects long-term incentives earned in the applicable year with payment to occur based on an estimate of the total incentive over a three-year period.

Spot Awards Program

This Bank program allows for discretionary awards to be paid to employees throughout the year in recognition of outstanding performance events or service provided to the Bank's customers. Senior officers do not participate in this program.

Bank-Owned Vehicle and Vehicle Allowance Programs

Use of Bank-owned vehicles is provided to three groups within the Bank: the executive group, which is comprised of the Bank's executive committee; the senior management group, which includes members defined by the CEO exclusive of the executive committee; and the other group consisting of employees who have been identified by executive committee members as requiring a vehicle for job performance. Any current employee who was in possession of a Bank-provided vehicle when vehicle eligibility guidelines were set was grandfathered for their remaining uninterrupted employment term at the Bank. Employees assigned use of a Bank-owned vehicle are required to maintain written records of their business and personal use. This data is used to annually impute to the employee's taxable wages the personal use value of the vehicle following the IRS lease value rule.

A vehicle allowance program is provided as an alternative to the bank-owned vehicle program. For employees eligible and receiving this allowance, the employee would receive a monthly determined amount of which the annual amount is included in the employee's taxable wages.

Educational and Training Program

This program was established in recognition that ongoing enrichment of employees' skills, knowledge and expertise is essential not only for the success of the Bank and the retention of key employees, but for the realization of employees' personal growth and achievement.

This program is directed to employees at all levels and includes formal orientation of new hires, a continuing education and degree program, and a licensing and certification program. The degree program reimbursement is open to full-time employees who have been with the Bank at least one year. This program covers tuition, lab fees, books and registration fees if the employee receives a grade of C or better in undergraduate courses and B or better in graduate-level courses and expenses are in excess of those reimbursable by a scholarship or other sources.

Tuition reimbursement, capped at $5,250, will not normally exceed the cost per semester hour charged at state-supported universities. Expenses incurred above the state-supported university baseline are the responsibility of the employee. Certain positions in the Bank must be staffed by employees who hold professional licenses and/or certifications. In these instances, the membership and license fees, training and educational expenses for obtaining and maintaining professional status, licenses and certifications are reimbursable.

Compensation, Risk and Performance

One of the critical strategic goals of the Bank is to provide market-driven financial products and support services to add value to our Association customers. The Bank succeeds at this through robust customer communications and relationships to stay aware of their business needs. Our staff provides technical, credit and operational support, and offers leadership in talent acquisition, retention and development. Our ability to succeed in these areas is dependent upon having a knowledgeable and experienced customer-service-focused workforce that is responsive, but also proactive in meeting our district's business challenges and recognizing and taking advantage of opportunities, including promoting the Bank's mission as a government-sponsored enterprise.

While external factors impact compensation programs, internal measures are in place to make certain there is alignment with the Bank's performance. Market-driven base salaries are combined with a bonus program that is at risk each year. The compensation committee of the board annually determines the structure and the award for the Success Sharing Plan, a short-term bonus plan. This gives them the agility to modify or discontinue the plan in response to changing circumstances. The Bank is not locked into an incentive program for any extended period of time.

The SSP in regard to the total compensation mix is not overly significant or significantly larger than the market practice. Multiple performance measures are considered, which include financial and operational metrics. Although awards are based on a single year's performance, because the Bank's customers are its cooperative Associations, performance in the time period measured is less uncertain than in businesses with larger and lesser-known customer bases. The board and compensation committee review the Bank's financial and operational performance at each meeting, so SSP decisions are reviewed by the same centralized group who hear those reports all year. Additionally, the compensation committee has external resources to support its oversight and uses that independent compensation consultant to review the SSP with its annual executive compensation update.

In making its decision on the SSP award at year end, the compensation committee analyzes the Bank's performance against the business plan for the year. The business plan is approved by the full composition of the board at the beginning of the year and is monitored all year as the CEO and senior team members deliver management and other reporting on Bank performance and respond to director questions. Financial metrics include net income, the Associations' direct note volume, allowance for credit losses on loans, nonaccrual loans, capital market and investment income, total asset growth, credit quality, permanent capital ratio, and at year end, the Association patronage. Operational accomplishments considered vary but typically include staff outreach to Associations, participation and leadership in System workgroups and initiatives, debt issuances, credit and technology products and services delivered, talent acquisition and talent management support, and continued progress in diversity, equity and inclusion efforts.

Chief Executive Officer (CEO) Compensation Table and Policy for Bank

An employment agreement with an effective date of January 1, 2021, was executed in late 2020 between the Bank and the CEO. The term of the agreement covered a three-year period with a base salary for the CEO of $943,000. The compensation committee approved a salary of $1,050,000 effective January 1, 2023, and a salary of $1,000,000 effective January 1, 2022. A new employment agreement with an effective date of January 1, 2024, was executed in late 2023 between the Bank and the CEO. The term of the agreement covers a multi-year period with a base salary for the CEO of $1,208,000. An annual bonus and a long-term incentive award are payable at the sole discretion of the compensation committee. Base salary is adjusted at the beginning of each calendar year. The employment relationship between the Bank and CEO remains at will, meaning the Bank could terminate the CEO's employment at any time, and the CEO could choose to leave at any time subject to notice and severance provisions.

As previously mentioned, the CEO bonus is discretionary and subject to the approval of the Bank's compensation committee. The compensation committee reviews the same Bank financial performance and operational metrics that the committee evaluates for purposes of the SSP. Additionally, for both the CEO and senior officer group, the compensation committee reviews peer market data with its third-party consultant before making CEO base, bonus pay and long-term incentive decisions. The compensation committee also reviews seven dimensions of CEO performance and has discussions about goals set for the current year and successes in meeting those goals. The seven dimensions of CEO performance are: strategy and vision; leadership; innovation/technology; operating metrics; risk management; people management; and external relationships.

The following table summarizes the compensation paid to the CEO of the Bank during 2023, 2022 and 2021.

		Summary Compensation Table for the Bank's CEO						
Name of Chief Executive Officer	Year	Salary (a)	Bonus (b)	Long-Term Incentives (c)	Change in Pension Value (d)	Deferred/Perquisites (e)	Other (f)	Total
Amie Pala	2023	$ 1,050,000	$ 1,050,000	$ 538,905	$ —	$ 220,000	$ —	$ 2,858,905
Amie Pala	2022	1,000,000	1,000,000	258,808	—	123,642	—	2,382,450
Amie Pala	2021	943,027	1,085,000	125,608	—	48,389	—	2,202,024

(a) Gross salary for year presented.

(b) Bonus compensation is presented in the year earned. For 2023, 2022 and 2021, bonus compensation was paid in January of the following year based on the performance of the Bank for the previous year.

(c) Cash payment of long-term incentives.

(d) No values to disclose.

(e) Deferred/Perquisites for 2023, 2022 and 2021 included contributions to a 401(k) plan and defined contribution plans, supplemental 401(k) discretionary contributions and employer match, automobile benefits, and premiums paid for life insurance.

(f) No values to disclose.

Compensation of Senior Officers of the Bank

The following table summarizes the compensation paid to the aggregate number of senior officers, plus two highly compensated individuals that were not senior officers of the Bank, during 2023. Amounts reflected in the table are presented in the year the compensation is earned.

		Summary Compensation Table for Other Officers					
Aggregate Number in Group (excludes CEO)	Year	Salary (a)	Bonus (b)	Change in Pension Value (c)	Deferred/Perquisites (d)	Other (e)	Total
8 Officers	2023	$ 3,008,362	$ 567,177	$ 232,005	$ 444,946	$ 706,013	$ 4,958,503
8 Officers	2022	2,792,717	1,179,963	(735,740)	331,113	500,000	4,068,053
7 Officers	2021	2,080,431	1,109,067	(70,043)	94,922	303,778	3,518,155

(a) Gross salary for year presented.

(b) Bonuses paid within the first 31 days of the subsequent calendar year.

(c) Disclosure of the change in pension value represents the change in the actuarial present value of the accumulated benefit under the defined benefit pension plan, the Farm Credit Bank of Texas Pension Plan, from the pension measurement date used for financial statement reporting purposes with respect to the audited financial statements for the prior completed fiscal year to the pension measurement date used for financial statement reporting purposes with respect to the audited financial statements for the covered fiscal year. For 2023, the increase in pension values was primarily due to a decline in the discount rate. For 2022 and 2021, the decreases in pension value were primarily due to an increase in the discount rate.

(d) Deferred/Perquisites include contributions to 401(k) and defined contribution plans, supplemental 401(k) discretionary contributions and employer match, automobile benefits and premiums paid for life insurance.

(e) Other includes long-term incentive cash payments, retention and discretionary bonuses paid.

Disclosure of the compensation paid during 2023 to any senior officer or officer included in the table is available and will be disclosed to shareholders of the Bank upon written request.

Neither the CEO nor any other senior officer received non-cash compensation exceeding $5,000 in 2023.

Senior officers, including the CEO, incur costs for reasonable travel, subsistence and other related expenses while conducting Bank business, including being reimbursed for such expenses. A copy of the Bank's travel policy is available to shareholders upon request.

Pension Benefits Table for Senior Officer of the Bank

The following table presents the total annual benefit provided from the Defined Benefit Pension Plan applicable to one senior officer for the year ended December 31, 2023. Neither the CEO nor any other senior officers were eligible for the Defined Benefit Pension Plan.

Name	Plan Name	Number of Years Credited Service	Present Value of Accumulated Benefit	Payments During 2023
Senior Officer	Farm Credit Bank of Texas Pension Plan	38.150	$ 3,052,277	$ —

Description of Property

On September 30, 2003, the Bank entered into a lease for approximately 102,500 square feet of office space to house its headquarters facility located at 4801 Plaza on the Lake Drive, Austin, Texas. The lease was effective September 30, 2003, and its term was from September 1, 2003, to August 31, 2013. On November 16, 2010, the Bank entered into a lease amendment which extended the term of the lease to August 31, 2024. In addition, the lease amendment included expansion of the leased space to approximately 111,500 square feet of office space and an "early out" option to terminate the lease in 2020. On August 6, 2019, the Bank entered into a lease amendment which extended the term of the lease to December 31, 2034. The Bank entered into a desk sharing agreement in Washington, D.C., as of January 1, 2024, with the National Council of Farmer Cooperatives for legislative affairs purposes. The lease will expire on December 31, 2024.

Legal Proceedings

There were no matters that came to the attention of the board of directors or management regarding the involvement of current directors or senior officers in specified legal proceedings which are required to be disclosed.

Description of Capital Structure

The Bank is authorized to issue and retire certain classes of capital stock and retained earnings in the management of its capital structure. Details of the capital structure are described in Note 11, "Shareholders' Equity," to the accompanying financial statements.

Description of Liabilities

The Bank's debt outstanding is described in Note 10, "Bonds and Notes," to the accompanying financial statements. The Bank's contingent liabilities are described in Note 14, "Commitments and Contingencies," to the accompanying financial statements. See also Note 12, "Employee Benefit Plans," with regard to obligations related to employee retirement plans.

Selected Financial Data

The selected financial data for the five years ended December 31, 2023, required to be disclosed, is incorporated herein by reference to the "Five-Year Summary of Selected Financial Data" included in this annual report to stockholders.

Management's Discussion and Analysis of Financial Condition and Results of Operations

"Management's Discussion and Analysis," which precedes the financial statements in this annual report, is incorporated herein by reference.

Transactions With Senior Officers and Directors

The policies on loans to and transactions with the Bank's officers and directors, required to be disclosed in this section, are incorporated herein by reference to Note 13, "Related Party Transactions," to the accompanying financial statements.

Related Party Transactions

As discussed in Note 1, "Organization and Operations," the Bank lends funds to the Associations to fund their loan portfolios. Interest income recognized on direct notes receivable from Associations was $615.7 million, $455.2 million and $361.4 million for 2023, 2022 and 2021, respectively. Further disclosure regarding these related party transactions is found in Note 4, "Loans and Reserves for Credit Losses," and Note 11, "Shareholders' Equity."

In addition to providing loan funds to Associations, the Bank also provides banking and support services to them, such as accounting, information systems, marketing and other services. Income derived by the Bank from these activities was $6.3 million, $4.5 million and $3.5 million for 2023, 2022 and 2021, respectively, and was included in the Bank's noninterest income.

The Bank had no transactions with nor loans to directors or senior officers, their immediate family members, or any organizations with which such senior officers or directors are affiliated, during 2023, 2022 and 2021.

Relationship With Public Accountants

There were no changes in independent qualified public accountants since the prior annual report to shareholders, and there were no material disagreements with our independent qualified public accountants on any matter of accounting principles or financial statement disclosure during the period.

Fees for professional services paid by the Bank during 2023 to PricewaterhouseCoopers LLP, the Bank's independent qualified public accountants, were as follows.

- Audit services of $1,599,568 and of $797,895 related to the integrated audit for the Bank for 2023 and 2022 respectively. Engagement letter for audit services for 2023 for the integrated audit for the Bank reflects an estimated fee of $1,133,000 plus reasonable out-of-pocket expenses.
- No audit-related services were provided during 2023.
- Non-audit services of $900, associated with a disclosure tool.
- No tax services were provided during 2023.

The non-audit service for the Bank listed above required pre-approval of the Bank's audit committee, which was obtained.

Information regarding the fees for services rendered by the qualified public accountants for the Associations is disclosed in the individual Associations' annual reports.

Relationships With Unincorporated Business Entities (UBEs)

The Bank and one of our Associations are among the forming limited partners for a $154.5 million Rural Business Investment Company (RBIC), Advantage Capital Agribusiness Partners, LP (ACAP), established on October 3, 2014. Additionally, the Bank is among the forming limited partners for a $31.3 million RBIC, Innova Ag Innovation Fund IV, LP (Innova), established on December 12, 2016. The Bank and Farm Credit System partners are among the forming limited partners for a $113.5 million third RBIC investment, Midwest Growth Partners II Fund (Midwest), established on November 14, 2018. The Bank and one of its Associations entered into an RBIC fourth investment on September 30, 2019. The Bank committed to invest $10.0 million alongside Farm Credit System partners in Pharos Capital Partners

IV Fund. The RBICs will facilitate private equity investments in agriculture-related businesses that will create growth and job opportunities in rural America. Each limited partner has a commitment to contribute up to $20.0 million, $5.0 million, $5.0 million and $10.0 million to ACAP, Innova, Midwest and Pharos, respectively, over a 10-year period and, as of December 31, 2023, FCBT has invested $26.0 million in the RBICs, included in other assets on the balance sheet.

Information regarding UBEs for the Associations is disclosed in the individual Association annual reports.

Financial Statements

The financial statements, together with the report thereon of PricewaterhouseCoopers LLP dated February 29, 2024, and the report of management in this annual report to shareholders, are incorporated herein by reference.

The Farm Credit Bank of Texas' and its affiliated Associations' annual and quarterly reports are available free of charge, upon request. These reports can be obtained by writing to Farm Credit Bank of Texas, Corporate Communications, P.O. Box 202590, Austin, Texas 78720 or by calling (512) 483-9260. Copies of the Bank's quarterly and annual stockholder reports can be requested by sending an email to *fcb@farmcreditbank.com*. The Bank's quarterly report is available approximately 40 days after the end of each fiscal quarter. The Bank's annual report will be posted on the Bank's website (*www.farmcreditbank.com*) within 75 calendar days of the end of the Bank's fiscal year. This posting coincides with an electronic version of the report being provided to its regulator, the Farm Credit Administration. Within 90 calendar days of the end of the Bank's fiscal year, a copy of the Bank's annual report will be provided to its stockholders.

Borrower Information Regulations

Farm Credit Administration (FCA) regulations require that borrower information be held in strict confidence by Farm Credit institutions, their directors, officers and employees. These regulations provide Farm Credit institutions clear guidelines for protecting their borrowers' nonpublic personal information.

On November 10, 1999, the FCA board adopted a policy that requires Farm Credit institutions to formally inform new borrowers at loan closing of the FCA regulations on releasing borrower information and to address this information in the annual report to shareholders. The implementation of these measures ensures that new and existing borrowers are aware of the privacy protections afforded them through FCA regulations and Farm Credit System institution efforts.

Credit and Services to Young, Beginning and Small (YBS) Farmers and Ranchers, and Producers or Harvesters of Aquatic Products

In line with its mission, the Associations have policies and programs for making credit available to young, beginning and small farmers and ranchers.

The definitions for YBS, as prescribed by FCA regulations, are provided below.

Young Farmer or Rancher — A farmer, rancher or producer or harvester of aquatic products who was age 35 or younger as of the date the loan was originally made.

Beginning Farmer or Rancher — A farmer, rancher or producer or harvester of aquatic products who had 10 years or less of experience at farming, ranching or producing or harvesting aquatic products as of the date the loan was originally made.

Small Farmer or Rancher — A farmer, rancher or producer or harvester of aquatic products who normally generated less than $250,000 in annual gross sales of agricultural or aquatic products at the date the loan was originally made.

For the purposes of YBS, the term "loan" means an extension of, or a commitment to extend, credit authorized under the Farm Credit Act, whether it results from direct negotiations between a lender and a borrower or is purchased from, or discounted for, another lender, including participation interests. A farmer/rancher may be included in multiple categories as they are included in each category in which the definition is met.

The Bank's and Associations' efforts to respond to the credit and related needs of YBS borrowers are evidenced by the following table:

	At December 31, 2023	
	Number of Loans	Volume
(dollars in thousands)		
Total loans and commitments	84,402	$ 46,302,522
Loans and commitments to young farmers and ranchers	15,564	$ 3,851,512
Percent of loans and commitments to young farmers and ranchers	18.44 %	8.32 %
Loans and commitments to beginning farmers and ranchers	47,393	$ 13,618,777
Percent of loans and commitments to beginning farmers and ranchers	56.15 %	29.41 %

The following table summarizes information regarding new loans to young and beginning farmers and ranchers:

	For the year ended December 31, 2023	
	Number of Loans	Volume
(dollars in thousands)		
Total new loans and commitments	12,225	$ 9,812,890
New loans and commitments to young farmers and ranchers	2,330	$ 808,886
Percent of new loans and commitments to young farmers and ranchers	19.06 %	8.24 %
New loans and commitments to beginning farmers and ranchers	5,909	$ 2,084,376
Percent of new loans and commitments to beginning farmers and ranchers	48.34 %	21.24 %

The following table summarizes information regarding loans to small farmers and ranchers:

	At December 31, 2023				
	Loan Size				
	$50 Thousand or Less	$50 to $100 Thousand	$100 to $250 Thousand	More Than $250 Thousand	Total
(dollars in thousands)					
Total number of loans and commitments	9,404	15,050	27,592	32,356	84,402
Number of loans and commitments to small farmers and ranchers	7,288	12,133	22,120	19,115	60,656
Percent of loans and commitments to small farmers and ranchers	77.50%	80.62%	80.17%	59.08%	71.87%
Total loans and commitments volume	$ 212,927	$ 835,267	$ 3,539,161	$ 41,715,167	$ 46,302,522
Total loans and commitments to small farmers and ranchers volume	$ 166,370	$ 674,970	$ 2,829,839	$ 12,255,044	$ 15,926,223
Percent of loans and commitments volume to small farmers and ranchers	78.13%	80.81%	79.96%	29.38%	34.40%

The following table summarizes information regarding new loans made to small farmers and ranchers:

	For the year ended December 31, 2023				
	Loan Size				
	$50 Thousand or Less	$50 to $100 Thousand	$100 to $250 Thousand	More Than $250 Thousand	Total
(dollars in thousands)					
Total new number of loans and commitments	1,816	1,833	3,314	5,262	12,225
Number of new loans and commitments to small farmers and ranchers	1,479	1,418	2,406	2,201	7,504
Percent of new loans and commitments to small farmers and ranchers	81.44%	77.36%	72.60%	41.83%	61.38%
Total new loans and commitments volume	$ 55,530	$ 142,686	$ 573,000	$ 9,041,674	$ 9,812,890
Total new loans and commitments to small farmers and ranchers volume	$ 44,850	$ 109,998	$ 408,985	$ 2,027,235	$ 2,591,068
Percent of new loans and commitments volume to small farmers and ranchers	80.77%	77.09%	71.38%	22.42%	26.40%

Additional Regulatory Information — Farm Credit Bank of Texas

(unaudited)

Overview

The following disclosures contain regulatory disclosures as required under Farm Credit Administration (FCA) Regulation 628.63 for risk-adjusted ratios: common equity tier 1, tier 1 capital and total capital. Refer to Note 11 of the accompanying financial statements for information regarding the statutorily required permanent capital ratio. As required, these disclosures are made available for at least three years and can be accessed at Farm Credit Bank of Texas' website at *www.farmcreditbank.com*.

Disclosure Map

The following table summarizes the annual disclosure requirements and indicates where each matter is disclosed in this annual report.

Disclosure Requirement	Description	2023 Annual Report Reference
Scope of Application	Corporate entity and structure	Page 15, Page 46, Page 94
	Restrictions on transfers of funds or capital	Page 100
Capital Structure	Terms and conditions of capital instruments	Note 11 – Pages 71 to 77; Pages 100 to 102
	Regulatory capital components	Pages 72-76, Page 103
Capital Adequacy	Capital adequacy assessment	Page 29, Page 103
	Risk-weighted assets	Page 103
	Regulatory capital ratios	Page 14, Page 29; Note 11 – Page 73
Capital Buffers	Quantitative disclosures	Page 103
Credit Risk	Credit risk management and policies	Page 21 to 22, Page 104
	Summary of exposures	Page 106
	Geographic distribution	Page 106
	Industry distribution	Page 106
	Contractual maturity	Page 106
	Nonperforming loans and allowance for credit losses	Note 4 – Pages 57 to 67; Pages 104 to 105
Counterparty Credit Risk-Related Exposures	General description	Pages 106 to 107
	Counterparty exposures	Note 15 – Page 80; Note 17 – Pages 86 to 89
Credit Risk Mitigation	General description	Pages 107 to 108
	Exposures with reduced capital requirements	Page 107
Securitization	General description	Note 3 – Pages 53 to 56; Page 107
	Securitization exposures	Note 3 – Pages 53 to 56
		Note 16 – Pages 80 to 86; Page 108
Equities	General description	Page 108
Interest Rate Risk for Non-Trading Activities	General description	Pages 25 to 27; Page 108
	Interest rate sensitivity	Page 26

Scope of Application

The Farm Credit Bank of Texas (FCBT or Bank) is one of the banks of the Farm Credit System (System), a nationwide system of cooperatively owned banks and associations established by acts of Congress. The System is subject to the provisions of the Farm Credit Act of 1971, as amended (Farm Credit Act). The accounting and reporting policies of the Bank conform to generally accepted accounting principles in the United States of America (GAAP) and prevailing practices within the banking industry.

The Bank and its related Associations collectively are referred to as the Farm Credit Bank of Texas and affiliated Associations (collectively, the Texas District). The Texas District's one FLCA (Federal Land Credit Association), 12 ACA (Agricultural Credit Associations) parent associations, each containing two wholly-owned subsidiaries (an FLCA and a Production Credit Association [PCA]), certain Other Financing Institutions (OFIs) and preferred stockholders jointly owned the Bank at December 31, 2023. The FLCA and ACAs collectively are referred to as Associations. The Bank is the primary funding source for the Associations. FCBT has no subsidiaries; therefore, the financial statements are only those of the Bank and are not consolidated with any other entity. In conjunction with other System entities, the Bank jointly owns certain service organizations: the Federal Farm Credit Banks Funding Corporation (Funding Corporation), the Farm Credit System Building Association (FCSBA), and the Farm Credit System Association Captive Insurance Company. Certain of the Bank's investments in other System institutions, including the investment in the Funding Corporation and FCSBA, are deducted from capital as only the institution who issued the equities may count the amount as capital. The Bank's unincorporated business entities (UBEs), including its investment in Rural Business Investment Companies (RBICs), and its investment in the Farm Credit System Association Captive Insurance Company are included in risk-weighted assets and are not deducted from any capital component in accordance with FCA regulations. The Bank has no consolidated subsidiaries; therefore, there are no consolidated entities for which the total capital requirement is deducted; there are no restrictions on transfer of funds or total capital with other consolidated entities; and no subsidiary exists that is below the minimum total capital requirement.

Capital Structure

The par value of the Bank's common stock is $5 and the par value of the Class B Series 2, 3 and 4 Noncumulative Perpetual Preferred Stock is $100, $1,000 and $1,000 per share, respectively. The minimum initial borrower investment is equal to the greater of $1 thousand or 2% of the Associations' and OFIs' average borrowing from the Bank. Our bylaws permit the Bank's board of directors to set the required level of Association and OFI investment in the Bank within a range of 2% to 5% of the average Association and OFI borrowings. In 2023, the required investment level was 2%. There are no capital sharing agreements between the Bank and its Associations.

Description of Bank Equities

Descriptions of the Bank's equities, capitalization requirements and restrictions are provided as follows:

Class B Series 2 Noncumulative Subordinated Perpetual Preferred Stock (Class B-2 preferred stock) — On July 23, 2013, the Bank issued $300.0 million of Class B noncumulative subordinated perpetual preferred stock, Series 2, representing three million shares at $100 per share par value, for net proceeds of $296.0 million. Dividends on the Class B-2 preferred stock, if declared by the board of directors at its sole discretion, are noncumulative and are payable quarterly in arrears on the fifteenth day of March, June, September and December in each year. Prior to September 15, 2013, dividends were paid at an annual fixed rate of 6.75% of par value of $100 per share. Commencing on September 15, 2023, dividends are paid at a rate of the 3-Month CME Term SOFR plus a "Tenor Spread Adjustment" of 0.26161%, plus 4.01%. The Class B-2 preferred stock is not mandatorily redeemable at any time, but may be redeemed in whole or in part at the option of the Bank on any dividend payment date on or after September 15, 2023. The Class B-2 preferred stock ranks, both as to dividends and upon liquidation, pari passu with respect to the existing Class B-3 and Class B-4 preferred stock, and senior to all other classes of the Bank's outstanding capital stock. Class B-2 preferred stock dividends are required by "dividend/patronage stopper" clauses to be declared and accrued before payment of stock investment and direct note patronages to Associations and OFIs. For regulatory purposes, the Class B-2 preferred stock is included in permanent capital, total capital and tier 1 capital within certain limitations.

Class B Series 3 Noncumulative Subordinated Perpetual Preferred Stock (Class B-3 preferred stock) — On June 25, 2018, the Bank issued $100.0 million of Class B noncumulative subordinated perpetual preferred stock, Series 3, representing one hundred thousand shares at $1,000 per share par value, for net proceeds of $98.7 million. Dividends on the Class B-3 preferred stock, if declared by the board of directors at its sole discretion, are noncumulative and are payable quarterly in arrears on the fifteenth day of March, June, September and December in each year, commencing September 15, 2018, at an annual fixed rate of 6.20% of par value of $1,000 per share up to, but excluding June 15, 2028, from and after which date will be paid at an annual rate of the 3-Month USD LIBOR plus 3.223% or the Alternative Rate determined at that time. The Class B-3 preferred stock is not mandatorily redeemable at any time, but may be redeemed in whole or in part at the option of the Bank on any dividend payment date on or after June 15, 2028. The Class B-3 preferred stock ranks pari passu with respect to the existing Class B-2 and Class B-4 preferred stock, and senior to all of the Bank's outstanding capital stock. Class B-3 preferred stock dividends are required by "dividend/patronage stopper" clauses to be declared and accrued before payment of stock investment and direct note patronages to Associations and OFIs. For regulatory purposes, the Class B-3 preferred stock is included in permanent capital, total capital and tier 1 capital within certain limitations.

Class B Series 4 Noncumulative Subordinated Perpetual Preferred Stock (Class B-4 preferred stock) — On July 15, 2020, the Bank issued $350.0 million of Class B noncumulative subordinated perpetual preferred stock, Series 4 (Class B-4 preferred stock), representing three hundred fifty thousand shares at $1,000 per share par value, for net proceeds of $346.1 million. Dividends on the Class B-4, if declared by the board of directors at its sole discretion, are noncumulative and are payable quarterly in arrears on the fifteenth day of March, June, September and December in each year, commencing September 15, 2020, at an annual fixed rate of 5.70% of par value of $1,000 per share up to, but excluding, September 15, 2025, from and after which date will be paid at an annual rate of the five-year Treasury rate as of the most recent five-year reset dividend determination date plus 5.415%. The Class B-4 is not mandatorily redeemable at any time, but may be redeemed in whole or part at the option of the Bank, with prior approval from the FCA, on any dividend payment date on or after September 15, 2025. The Class B-4 ranks pari passu with respect to the existing Class B-2 and Class B-3 preferred stock and senior to all of the Bank's other outstanding capital stock. Class B-4 preferred stock dividends are required by "dividend/patronage stopper" clauses to be declared and accrued before payment of stock investment and direct note patronages to Associations and OFIs. For regulatory purposes, the Class B-4 preferred stock is included in permanent capital, total capital and tier 1 capital within certain limitations.

Class A Voting Common Stock — According to the Bank's bylaws, the minimum and maximum stock investments that the Bank may require of the ACAs and FLCA are 2% (or $1 thousand, whichever is greater) and 5%. The investments in the Bank are required to be in the form of Class A voting common stock (with a par value of $5 per share). The current investment required of the Associations is 2% of their average borrowings from the Bank. Under the Capitalized Participation Pool (CPP) program, the stock investment that the Bank requires is 1.6% of each Farmer Mac AMBS pool and 8% of each loan pool. Under the Capitalized and Non-Capitalized Participation Pool (NCPP) program, the Bank redeems stock in the amount of 2.0% of the par value of the loans purchased. No Class A voting common stock may be retired except at the sole discretion of the Bank's board of directors, and provided that after such retirement, the Bank shall meet minimum capital adequacy standards as may from time to time be promulgated by the FCA or such higher level as the board may from time to time establish in the Bank's Capital Plan. There were 98.9 million shares, 94.0 million shares and 81.9 million shares of Class A voting common stock issued and outstanding at December 31, 2023, 2022 and 2021, respectively.

Class A Nonvoting Common Stock — The Bank requires OFIs to make cash purchases of Class A nonvoting common stock (with a par value of $5 per share) in the Bank based on a minimum stock investment of 2% (or $1 thousand, whichever is greater) and on a maximum of 5%. The current investment required of the OFIs is 2% of their average borrowings from the Bank. No Class A nonvoting common stock may be retired except at the sole discretion of the Bank's board of directors, and provided that after such retirement, the Bank shall meet minimum capital adequacy standards as may from time to time be promulgated by the FCA or such higher level as the board may from time to time establish in the Bank's Capital Plan. The Bank has a first lien on these equities for the repayment of any indebtedness to the Bank. There were 220 thousand shares, 174 thousand shares and 150 thousand shares of Class A nonvoting common stock issued and outstanding at December 31, 2023, 2022 and 2021, respectively.

Allocated retained earnings of $101.8 million, $74.0 million and $66.5 million at December 31, 2023, 2022 and 2021, respectively, consisted of allocated equity for the payment of patronage on loans participated with another System bank, and as of December 31, 2023, allocated equity for the payment of direct note patronage to the Associations and OFIs.

The following table provides a summary of the Bank's capital structure at December 31, 2023:

(dollars in thousands)		**Three-Month Average Daily Balance**
Common equity tier 1 capital (CET1)		
Common cooperative equities:		
Purchased other required stock ≥ 7 years	**$**	**434,244**
Allocated stock ≥ 7 years		**36,042**
Allocated equities:		
Qualified allocated equities subject to retirement		**74,952**
Nonqualified allocated equities subject to retirement		—
Nonqualified allocated equities not subject to retirement		—
Unallocated retained earnings		**970,464**
Adjustments for patronage or dividend accrued receivables and payables		**(4,899)**
Paid-in capital		—
Regulatory adjustments and deductions made to CET1		**(132,395)**
Total CET1	**$**	**1,378,408**
Additional tier 1 capital (AT1)		
Noncumulative perpetual preferred stock	**$**	**750,000**
Regulatory adjustments and deductions made to AT1 capital		—
Total AT1 capital		**750,000**
Total tier 1 capital	**$**	**2,128,408**
Tier 2 capital (T2)		
Common cooperative equities not included in CET1	**$**	**—**
T2 capital elements (allowance for credit losses on loans)		**46,530**
Regulatory adjustments and deductions made to T2 capital		—
Total T2 Capital		**46,530**
Total capital	**$**	**2,174,938**
		Balances as of December 31, 2023
Reconciliation to statement of condition:		
Total capital	**$**	**2,100,971**
Additions:		
Accumulated other comprehensive loss		**(521,511)**
Regulatory adjustments and deductions		**163,950**
Subtractions:		
Tier 2 allowance and reserve		**(42,918)**
Regulatory deductions		**(13,798)**
Total shareholders' equity	**$**	**1,686,694**

Capital Adequacy and Capital Buffers

In conjunction with the annual business and financial planning process, the board of directors reviews and approves a capital adequacy plan. As part of our business planning process, we perform stress tests to examine the Bank's financial condition and performance, including capital levels, under a variety of market and economic environments, including unanticipated loan growth and prolonged periods of financial and loan quality stress. These stress tests illustrate the Bank's ability to continue to maintain compliance with regulatory requirements through severe market conditions while continuing to fulfill our mission. Results of these stress tests are reviewed with the board of directors and the FCA. The Bank regularly assesses the adequacy of our capital to support current and future activities. This assessment includes maintaining a formal capital plan that addresses our capital targets in relation to our risks and establishes the required investment levels. The plan assesses the capital level and composition necessary to support financial viability and growth. The plan considers factors such as credit risk and allowance levels, quality and quantity of earnings, sufficiency of liquid funds, operational risk, interest rate risk and growth in determining optimal capital levels. The Bank periodically reviews and modifies these targets to reflect current business and economic conditions. Our capital plan is updated at least annually and is subject to change at the discretion of the Bank's board of directors.

Risk-Weighted Assets at December 31, 2023:

(dollars in thousands)	Three-Month Average Daily Balance
On-Balance Sheet Assets:	
Exposures to sovereign entities	$ —
Exposures to supranational entities and Multilateral Development Banks	—
Exposures to government-sponsored entities (direct notes to associations)	4,135,726
Exposures to depository institutions, foreign banks and credit unions	3,204
Exposures to public sector entities	—
Corporate exposures, including borrower loans and exposures to other financing institutions	8,722,190
Residential mortgage exposures	—
Past due and nonaccrual exposures	78,464
Securitization exposures	154,553
Exposures to other assets	813,262
Total Risk-Weighted Assets, On-Balance Sheet	13,907,399
Off-Balance Sheet:	
Letters of credit	95,618
Commitments	2,191,748
Repo-styled transactions	82
Over-the-counter derivatives	18,776
Unsettled transactions	—
Cleared transactions	—
All other off-balance sheet exposures	3,389
Total Risk-Weighted Assets, Off-Balance Sheet	2,309,613
Total Risk-Weighted Assets Before Adjustments	**16,217,012**
Additions:	
Intra-System equity investments	132,395
Deductions:	
Regulatory capital deductions	(132,395)
Total Standardized Risk-Weighted Assets	**$ 16,217,012**

Capital Conservation and Leverage Buffers

As of December 31, 2023, the Bank was well-capitalized and exceeded all capital requirements. Because the Bank's capital and leverage ratios exceeded the minimum regulatory requirements of 8.00% and 4.00%, respectively, the Bank currently has no limitations on its distributions and discretionary bonus payments.

	Regulatory Minimums	Capital Conservation Buffers	Ratios as of December 31, 2023	Calculated Buffer
Common equity tier 1 capital ratio	4.50%	2.50%	8.50%	4.00%
Tier 1 capital ratio	6.00%	2.50%	13.12%	7.12%
Total capital ratio	8.00%	2.50%	13.41%	5.41%
Tier 1 leverage ratio	4.00%	1.00%	5.79%	1.79%

Credit Risk

System entities have specific lending authorities within their chartered territories. The Bank is chartered to serve its Associations in Texas, Alabama, Mississippi, Louisiana and most of New Mexico. Our chartered territory is referred to as the Texas District. FCBT serves its chartered territory by lending to the Texas District's Federal Land Credit Association (FLCA) and Agricultural Credit Associations (ACAs). The allowance for credit losses on loans is determined based on a periodic evaluation of the loan portfolio, which identifies loans that may be impaired based on characteristics such as probability of default (PD) and loss given default (LGD) as is further discussed in the section "Allowance for Credit Losses on Loans and Allowance for Credit Losses on Unfunded Commitments." Allowance needs by geographic region are only considered in circumstances that may not otherwise be reflected in the PD and LGD, such as flooding or drought. There was no allowance attributed to a geographic area as of December 31, 2023.

Nonperforming Loans

Nonperforming loans include nonaccrual loans and loans 90 days past due still accruing interest. Nonperforming loans are loans for which there is reasonable doubt that all principal and interest will not be collected according to the original contractual terms and are generally considered substandard or doubtful, which is in accordance with the risk rating model, as described below. A loan is considered contractually past due when any principal repayment or interest payment required by the loan instrument is not received on or before the due date. A loan shall remain contractually past due until it is modified or until the entire amount past due, including principal accrued interest and penalty interest incurred as the result of past due status is collected or otherwise discharged in full, scheduled loan payments have not been received in full on or before the contractual due date and remains due.

Loans are generally placed in nonaccrual status when principal or interest is delinquent for 90 days (unless adequately secured and in the process of collection), circumstances indicate that collection of principal and interest is in doubt or legal action, including foreclosure or other forms of collateral conveyance, has been initiated to collect the outstanding principal and interest. At the time a loan is placed in nonaccrual status, accrued interest that is considered uncollectible is either reversed (if accrued in the current year) or charged against the allowance for credit losses on loans (if accrued in prior years). Loans are charged off at the time they are determined to be uncollectible.

When loans are in nonaccrual status, interest payments received in cash are generally recognized as interest income if the collectibility of the loan principal is fully expected and certain other criteria are met. Otherwise, payments received on nonaccrual loans are applied against the recorded investment in the loan asset. Nonaccrual loans are returned to accrual status if all contractual principal and interest is current, the borrower is fully expected to fulfill the contractual repayment terms and after remaining current as to principal and interest for a sustained period or having a recent repayment pattern demonstrating future repayment capacity to make on-time payments. If previously unrecognized interest income exists at the time the loan is transferred to accrual status, cash received at the time of or subsequent to the transfer should first be recorded as interest income until such time as the recorded balance equals the contractual indebtedness of the borrower.

Allowance for Credit Losses on Loans and Allowance for Credit Losses on Unfunded Commitments

The Bank uses a two-dimensional risk rating model based on internally generated combined System risk-rating guidance that incorporates a 14-point probability of default rating scale to identify and track the probability of borrower default and a separate scale addressing loss given default over a period of time. Probability of default is management's assumption of the probability that a borrower will experience a default during the life of the loan. A default is considered to have occurred if the Bank believes the borrower will not be able to pay its obligation in full or the borrower is past due more than 90 days. The loss given default is management's assumption as to the anticipated principal loss on a specific loan assuming default has occurred or is expected to occur within the next 12 months.

Each of the probability of default categories carries a distinct percentage of default probability. The 14-point probability of default rating scale provides for granularity of the probability of default, especially in the acceptable ratings. There are nine acceptable categories that range from a borrower of the highest quality to a borrower of minimally acceptable quality. The probability of default between 1 and 9 is very narrow and would reflect almost no default to a minimal default percentage. The probability of default grows more rapidly as a loan moves from a 9 to other assets especially mentioned and grows significantly as a loan moves to a substandard (viable) level. A substandard (nonviable) rating indicates that the probability of default is almost certain.

The credit risk rating methodology is a key component of the Bank's allowance for credit losses on loans (ACLL) evaluation, and is generally incorporated into the Bank's loan underwriting standards and internal lending limit. As discussed more fully in Note 2, "Summary of Significant Accounting Policies," beginning January 1, 2023, the ACL represents the estimated current expected credit losses over the remaining contractual life of financial assets measured at amortized cost and certain off-balance sheet credit exposures. The ACL takes into consideration relevant information about past events, current conditions and reasonable and supportable macroeconomic forecasts of future conditions. The allowance for credit losses (ACL) includes the allowance for credit losses on loans, the allowance for credit losses on unfunded commitments and the allowance for credit losses on investment securities. Determining the appropriate ACL is complex and requires judgment by management about the effect of matters that are inherently uncertain.

The Bank employs a disciplined process and methodology to establish its ACLL that has two basic components: first, an asset-specific component involving individual loans that do not share risk characteristics with other loans and the measurement of expected credit losses for such individual loans; and second, a pooled component for estimated expected credit losses for pools of loans that share similar risk characteristics.

Asset-specific loans are generally collateral dependent loans (including those loans for which foreclosure is probable) and nonaccrual loans. For an asset-specific loan, expected credit losses are measured as the difference between the amortized cost basis in the loan and the present value of expected future cash flows discounted at the loan's effective interest rate except that, for collateral-dependent loans, credit loss is measured as the difference between the amortized cost basis in the loan and the fair value of the underlying collateral. The fair value of the collateral is adjusted for the estimated cost to sell if repayment or satisfaction of a loan is dependent on the sale (rather than only on the operation) of the collateral. When an updated appraisal or collateral valuation is received, management reassesses the need for adjustments to the loan's expected credit loss measurements and, where appropriate, records an adjustment. If the calculated expected credit loss is determined to be permanent, fixed or non-recoverable, the credit loss portion of the loan will be charged off against the allowance for credit losses.

In estimating the pooled component of the ACLL, loans are evaluated collectively and segregated into loan pools considering the risk associated with the specific pool. Relevant risk characteristics include loan type and credit quality rating, or a combination of these classes. The ACLL is determined based on a quantitative calculation of the expected life-of-loan loss percentage for each loan pool by considering the probability of default, based on the migration of loans from performing to loss by credit quality rating and the loss given default, based on the aggregate net lifetime losses incurred per loan pool. The ACLL also considers factors for each loan pool to adjust for differences between the historical period used to calculate historical default and loss given default rates and expected macroeconomic forecasts in future periods.

The allowance for credit losses on loans encompasses various judgments, evaluations and appraisals with respect to the loans and their underlying security that, by their nature, contain elements of uncertainty and imprecision. Changes in the reasonable and supportable macroeconomic forecasts of future conditions and the agricultural economy and the impact on borrower repayment capacity will cause these various judgments, evaluations and appraisals to change over time. Accordingly, actual circumstances could vary significantly from the Bank's expectations and predictions of those circumstances. The allowance is increased through provisions for credit losses and loan recoveries and is decreased through reversals of provisions for credit losses and loan charge-offs.

Prior to January 1, 2023, the allowance for credit losses on loans was maintained at a level considered adequate to provide for probable losses existing in and inherent in the loan portfolio. The allowance was based on a periodic evaluation of the loan portfolio in which numerous factors are considered, including economic conditions, collateral values, borrowers' financial conditions, loan portfolio composition and prior loan loss experience.

The Bank evaluates the need for an allowance for credit losses on unfunded commitments and, if required, an amount is recognized and included in other liabilities on the Balance Sheet. The amount of expected losses is determined by calculating a commitment usage factor over the contractual period for exposures that are not unconditionally cancellable by the Bank and applying the loss factors used in the ACLL methodology to the results of the usage calculation. No allowance for credit losses is recorded for commitments that are unconditionally cancellable.

Credit Risk Management

Credit Risk Mitigation Related to Loans

Credit risk arises from the potential inability of an obligor to meet its repayment obligation and exists in our outstanding loans, letters of credit, unfunded loan commitments, investment portfolio and derivative counterparty credit exposures. The Bank manages credit risk associated with our lending activities through an assessment of the credit risk profile of an individual borrower. The Bank sets its own underwriting standards and lending policies, approved by the board of directors that provide direction to loan officers. Underwriting standards include, among other things, an evaluation of:

- *character* — borrower integrity and credit history;
- *capacity* — repayment capacity of the borrower based on cash flows from operations or other sources of income;
- *collateral* — protects the lender in the event of default and represents a potential secondary source of loan repayment;
- *capital* — ability of the operation to survive unanticipated risks; and
- *conditions* — requirements that govern intended use of loan funds.

The retail credit risk management process begins with an analysis of the borrower's credit history, repayment capacity and financial position. Repayment capacity focuses on the borrower's ability to repay the loan based on cash flows from operations or other sources of income, including non-farm income. Real estate loans with terms greater than 10 years must be secured by first liens on the real estate (collateral). As required by Farm Credit Administration regulations, each institution that makes loans on a secured basis must have collateral evaluation policies and procedures. Real estate loans with terms greater than 10 years may be made only in amounts up to 85% of the original appraised value of the property taken as security or up to 97% of the appraised value if guaranteed by a state, federal or other governmental agency. The actual loan to appraised value when loans are made is generally lower than the statutory maximum percentage. Appraisals are required for loans of more than $250,000. This risk rating process incorporates objective and subjective criteria to identify inherent strengths and weaknesses and risks in a particular relationship.

This credit risk probability of default rating process uses a two dimensional loan rating structure, incorporating a 14-point probability of default rating scale to identify and track the probability of borrower default and a separate 4-point scale addressing loss given default. The 14-point probability of default rating scale provides for nine "acceptable" categories, one "other assets especially mentioned" category, two "substandard" categories, one "doubtful" category and one "loss" category. The loss given default scale establishes ranges of anticipated principal loss if the loan defaults.

By buying and selling loans or interests in loans to or from other institutions within the System or outside the System, the Bank limits our exposure to either a borrower or commodity concentration. This also allows us to manage growth and capital, and to improve geographic diversification. Portfolio credit risk is also evaluated with the goal of managing the concentration of credit risk. Concentration risk is reviewed and measured by industry, commodity, geography and customer limits.

Refer to the Risk-Weighted Asset table on page 103 for the Bank's total and average loans, investment securities, off-balance sheet commitments and over-the-counter (OTC) derivatives. The following table illustrates the Bank's total exposure (including commitments) by loan type as of December 31, 2023.

	Total Exposure
Direct notes receivable from District Associations	$ 27,377,225
Real estate mortgage	1,288,581
Production and intermediate-term	1,553,085
Agribusiness	
Loans to cooperatives	1,090,789
Processing and marketing	4,703,732
Farm-related business	415,354
Communications	890,829
Energy (rural utilities)	2,353,708
Water and waste disposal	357,318
Mission-related	2,082
Rural home	2,848
International	355,085
Leases	4,697
Loans to other financing institutions	72,628
Total	$ 40,467,961

The following table provides an overview of the remaining contractual maturity of the Bank's credit risk portfolio categorized by exposure at December 31, 2023. The remaining contractual maturity for the direct notes receivable from the District Associations is included in the loans line item based on the contractual terms of the underlying Association retail loans. Unfunded commitments for direct notes from District Associations reflects the aggregate remaining amount that the District Associations can borrow from the Bank and is included in the unfunded commitments line item within the due in one year or less column.

(dollars in thousands)	Due in one year or less	Due after one year through five years	Due after five years	Total
Loans	$ 12,231,436	$ 10,058,847	$ 7,435,193	$ 29,725,476
Off-balance sheet commitments:				
Financial letters of credit	68,413	23,190	241	91,844
Performance letters of credit	6,240	518	—	6,758
Commercial letters of credit	7,365	978	1,577	9,920
Unfunded commitments	7,362,577	3,143,593	127,793	10,633,963
Investments	896,588	880,055	4,833,786	6,610,429
Derivatives (notional)	20,000	945,000	550,000	1,515,000
Total	$ 20,592,619	$ 15,052,181	$ 12,948,590	$ 48,593,390

The following table illustrates the Bank's total exposure (including commitments) by geographic distribution as of December 31, 2023.

State**	Percentage
Texas	58%
Mississippi	6
Alabama	6
Louisiana	4
California	2
All other states	24
	100%

** The geographic distribution is based on the state in which the borrower is headquartered and may not be representative of their operations or business activities.

Refer to Note 4 of the accompanying financial statements for amounts of loans in nonaccrual status and greater than 90 days past due and still accruing, nonaccrual loans with or without a related allowance for credit losses, the allowance at the end of each reporting period, charge-offs during the period, and changes in components of our allowance for credit losses.

Counterparty Credit Risk and Credit Risk Mitigation

Credit Risk Mitigation Related to Derivatives

By using derivative instruments, the Bank exposes itself to credit and market risk. The Bank's derivative activities are monitored by its Asset-Liability Management Committee (ALCO) as part of the Bank's asset/liability and treasury functions. ALCO is responsible for approving hedging strategies that are developed through its analysis of data derived from financial simulation models and other internal and industry sources. The resulting hedging strategies are then incorporated into the Bank's overall interest rate risk-management strategies.

If a counterparty fails to fulfill its performance obligations under a derivative contract, the Bank's credit risk will equal the fair value gain of the derivative. Generally, when the fair value of a derivative contract is positive, this indicates that the counterparty owes the Bank, thus creating a repayment risk for the Bank. When the fair value of the derivative contract is negative, the Bank owes the counterparty and, therefore, assumes no repayment risk. To minimize the risk of credit losses, the Bank maintains collateral agreements to limit exposure to agreed-upon thresholds. The Bank deals with counterparties that have an investment grade or better credit rating from a major rating agency, and also monitors the credit standing of, and levels of exposure to, individual counterparties. When certain thresholds are met, the Bank's over-the-counter derivative contracts require the Bank or its counterparties to post cash or securities as collateral when the fair values of the derivatives change based on changes in interest rates.

To minimize the risk of credit losses from derivatives, all interest rate swap derivative contracts are cleared through a Futures Commission Merchant. Cleared derivative contracts are required to be 100% collateralized and the Derivatives Clearing Organization (DCO) takes on the obligation of both sides of the transaction.

The Bank has exposure to interest rate cap derivatives that are supported by bilateral collateral agreements with counterparties requiring the posting of collateral in the event certain dollar thresholds of exposure of one party to the other are reached; thresholds may vary depending on the counterparty's credit rating from a major rating agency. The Bank also monitors the credit standing of, and levels of exposure to, individual counterparties. Interest rate caps derivatives are under master agreements that contain netting provisions. These provisions allow the Bank to require the net settlement of covered contracts with the same counterparty in the event of default by the counterparty on one or more contracts. The amount of collateral the Bank would have to provide if the Bank's own creditworthiness deteriorated would be dependent upon the terms of the contract with the counterparty, including agreed-upon thresholds to limit exposure, and changes in interest rates.

At December 31, 2023, the Bank had posted cash collateral of $41.0 million and received cash collateral of $43.2 million from counterparties for cleared derivative contracts. Refer to Note 17 of the accompanying financial statements for details on the notional, fair value, collateral held and credit ratings of the Bank's derivative contracts. The Bank did not hold any purchased credit derivatives for its own credit portfolio as of December 31, 2023.

The table below shows the notional value of derivatives, segregated by interest rate caps and pay-fixed swaps which are traded in over-the-counter markets as of December 31, 2023 and the fair value of these derivatives with excess variation margin for cleared activities.

	Notional Amount	Gross Positive Fair Value
Interest rate caps	$ 115,000	$ 217
Pay-fixed swaps	1,400,000	2,112
Total Derivatives	**$ 1,515,000**	**$ 2,329**

Credit Risk Mitigation Related to Investments

Credit risk in our investment portfolio is largely mitigated by investing primarily in securities issued or guaranteed by the U.S. government or one of its agencies. At December 31, 2023, 55.09% of our $6.61 billion investment portfolio consisted of securities that carry a full faith and credit guarantee of the U.S. government. Such securities include mortgage-backed securities (MBS) issued by the Government National Mortgage Association (Ginnie Mae), Export-Import Bank of the United States and U.S. Treasury. The Bank's investment portfolio consisted of 35.24% of securities issued by government agencies that carry the implicit backing of the U.S. government, including MBS issued by the Federal National Mortgage Association (Fannie Mae), the Federal Home Loan Mortgage Corporation (Freddie Mac) and Farmer Mac. Another 9.67% of our investment portfolio is made up of asset-backed investments, certificates of deposit and corporate debt which primarily represents the credit risk in the Bank's investment portfolio.

Credit risk in our investment portfolio also arises from the inability of guarantors and third-party providers of other credit enhancements, such as bond insurers or Farmer Mac, to meet their contractual obligations to us.

For each separately disclosed credit risk portfolio, see the following table for the total exposure that is covered by guarantees/credit derivatives, and the risk-weighted asset amount associated with that exposure. The Bank did not hold eligible financial collateral for its loan and investment portfolios at December 31, 2023.

(dollars in thousands) Government-Guaranteed Asset Type	90-Day Average	Risk Weighting	Risk-Weighted Amount
Investments	$ 5,174,499	0%	$ —
Loans	1,972	0%	—
Total	$ 5,176,471		$ —

Securitization

Securitizations are transactions in which:

- The credit risk of the underlying exposure is transferred to third parties, and has been separated into two or more tranches;
- The performance of the securitization depends upon the performance of the underlying exposures or reference assets; and
- All or substantially all of the underlying exposures or reference assets are financial exposures.

Securitizations include on- or off-balance sheet exposures (including credit enhancements) that arise from a securitization or resecuritization transaction, or an exposure that directly or indirectly references a securitization (e.g., credit derivative). A resecuritization is a securitization transaction in which one or more of the underlying exposures that have been securitized is itself a securitization. The Bank does not currently hold any credit-related resecuritization investments.

The Bank currently only participates in credit-related securitizations as investors through the purchase of highly rated asset-backed securities (ABS) as included in its investment portfolio. The Bank also holds securitization exposures through the purchase of U.S. government and agency guaranteed securities. The Bank has not transferred any exposures that it has originated or purchased from a third party in connection with a securitization of assets as of December 31, 2023, nor does it have any outstanding exposures that it intends to be securitized as of December 31, 2023. The Bank did not recognize any gain or loss on securitized assets for the year ended December 31, 2023.

We are subject to liquidity risk with respect to our purchased securitization exposures. In volatile market conditions, it could be difficult to sell such investments, if the need arises, and the discounts from face value could likely be significant. In addition, because of the inherent uncertainty of determining the fair value of such investments that do not have a readily available market value during volatile market conditions, the fair value of our investments may differ significantly from the values that would have been used had a ready market existed for the investments. The Bank monitors its purchased ABS holdings on an ongoing basis, reviewing monthly credit performance metrics against outstanding credit enhancements, monitoring issuer and servicer performance, and tracking relevant ABS market conditions and credit spreads.

Below is an overview of our purchased securitization exposures held as of December 31, 2023, by exposure type and categorized by risk weighting band and risk-based capital approach. Refer to Note 3 of the accompanying financial statements:

Description of Securitization	Risk-Based Capital Approach	Exposure Amount (dollars in thousands)	Risk Weighted
Agency MBS:			
GNMA	Standardized Risk Weight	$ 3,135,926	0%
FNMA and FHLMC	Standardized Risk Weight	2,465,791	0%-20%
Total Agency MBS		$ 5,601,717	
Asset-backed securities:			
Small Business Administration	Standardized Risk Weight	$ 57,836	0%
Asset-backed securities	Gross-up	137,347	20%-100%
Total Asset-backed securities		$ 195,183	

Equities

The Bank is a limited partner in certain Rural Business Investment Companies (RBICs) for various relationship and strategic reasons. These RBICs facilitate equity and debt investments in agriculture-related businesses that create growth and job opportunities in rural America. There have been no sales or liquidations of these investments during the period. These investments are accounted for under the equity method as the Bank is considered to have significant influence. These investments are not publicly traded and the book value reflects fair value. The Bank had realized gains or losses recognized either on the balance sheet or through earnings.

(dollars in thousands)	Disclosed in Other Assets	Life-to-Date (Losses) Gains Recognized in Retained Earnings*
RBICs	$25,985	$(4,822)

*Retained earnings is included in common equity tier 1 and total capital ratios.

Interest Rate Risk

Asset/liability management is the Bank's process for directing and controlling the composition, level and flow of funds related to the Bank's and Texas District's interest-rate-sensitive assets and liabilities. The Bank is able to manage the balance sheet composition by using various debt issuance strategies and hedging transactions to match its asset cash flows. Management's objective is to generate adequate and stable net interest income in a changing interest rate environment.

The Bank uses a variety of techniques to manage its financial exposure to changes in market interest rates. These include monitoring the difference in the maturities or repricing cycles of interest-rate-sensitive assets and liabilities; simulating changes in net interest income under various interest rate scenarios; and monitoring the change in the market value of interest-rate-sensitive assets and liabilities under various interest rate scenarios. The Bank measures interest rate risk on a quarterly basis.

The interest rate risk inherent in a Texas District Association's loan portfolio is substantially mitigated through its funding relationship with the Bank. The Bank manages the Texas District interest rate risk through its direct loan pricing and funding processes. Under the Farm Credit Act, an Association is obligated to borrow only from the Bank unless the Bank approves borrowing from other funding sources. An Association's indebtedness to the Bank, under a general financing agreement between the Bank and the Association, represents demand borrowings by the Association to fund the majority of its loan advances to Association members and is secured by the total assets of the Association.

The Bank's net interest income is determined by the difference between income earned on loans and investments and the interest expense paid on funding sources, typically Systemwide bonds and discount notes. The Bank's level of net interest income is affected by both changes in market interest rates and timing differences in the maturities or repricing cycles of interest-rate-sensitive assets and liabilities.

Depending upon the direction and magnitude of changes in market interest rates, the Bank's net interest income may be affected either positively or negatively by the mismatch in the maturity or the repricing cycle of interest-rate-sensitive assets and liabilities.

The Bank maintains a loan pricing philosophy that loan rates should be based on competitive market rates of interest. The Associations offer a wide variety of products, including SOFR- and prime-indexed variable-rate loans and loans with fixed-rate terms ranging from under one year to 30 years. The interest rates on these loans are directly related to the Bank's cost to issue debt in the capital markets and a credit spread added for borrower risk.

The Bank offers an array of loan programs to Associations that are designed to meet the needs of the Associations' borrowers. These loan programs have varying repayment terms, including fixed and level principal payments, and a choice of payment frequencies, such as monthly, quarterly, semiannual and annual payments. Additionally, the Bank offers a choice of prepayment options to meet customer needs.

Refer to the net interest income and market value of equity table in the Management's Discussion and Analysis on pages 25-27, which sets forth the Bank's projected sensitivity to interest rate movements as prescribed by policy as of December 31, 2023, based on the Bank's interest-earning assets and interest-bearing liabilities at December 31, 2023.

FARM CREDIT
BANK OF TEXAS

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