
AgCredit Agricultural Credit Association

FIRST QUARTER 2019

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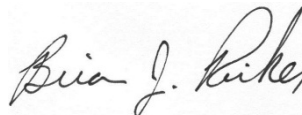
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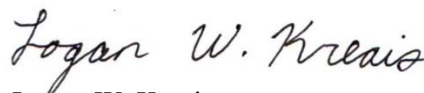
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CERTIFICATION

The undersigned certify that we have reviewed the March 31, 2019 quarterly report of AgCredit Agricultural Credit Association, that the report has been prepared under the oversight of the Audit Committee of the Board of Directors and in accordance with all applicable statutory or regulatory requirements, and that the information contained herein is true, accurate, and complete to the best of our knowledge and belief.



Brian J. Ricker
Chief Executive Officer



Logan W. Kreais
Chief Financial Officer



Scott A. Schroeder
Chairman of the Board

May 9, 2019

AgCredit Agricultural Credit Association

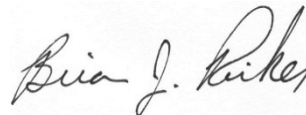
Report on Internal Control Over Financial Reporting

The Association's principal executives and principal financial officers, or persons performing similar functions, are responsible for establishing and maintaining adequate internal control over financial reporting for the Association's Consolidated 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 Association's principal executives and principal financial officers, or persons performing similar functions, and effected by its Board of Directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting information and the preparation of the Consolidated Financial Statements for external purposes in accordance with accounting principles generally accepted in the United States of America 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 Association,
- 2) Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial information in accordance with accounting principles generally accepted in the United States of America, and that receipts and expenditures are being made only in accordance with authorizations of management and directors of the Association, and
- 3) Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Association's assets that could have a material effect on its Consolidated Financial Statements.

The Association's management has completed an assessment of the effectiveness of internal control over financial reporting as of March 31, 2019. In making the assessment, management used the framework in *Internal Control — Integrated Framework (2013)*, promulgated by the Committee of Sponsoring Organizations of the Treadway Commission, commonly referred to as the "COSO" criteria.

Based on the assessment performed, the Association's management concluded that as of March 31, 2019, the internal control over financial reporting was effective based upon the COSO criteria. Additionally, based on this assessment, the Association's management determined that there were no material changes to or weaknesses in the internal control over financial reporting as of March 31, 2019.



Brian J. Ricker
Chief Executive Officer



Logan W. Kreis
Chief Financial Officer

May 9, 2019

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

The following commentary reviews the financial condition and results of operations of AgCredit Agricultural Credit Association (Association) for the three months ended March 31, 2019. These comments should be read in conjunction with the accompanying consolidated financial statements, notes to the consolidated financial statements, the Association's March 31, 2018 quarterly report and the 2018 Annual Report of the Association. The accompanying consolidated financial statements (financial statements) were prepared under the oversight of the Audit Committee of the Board of Directors, which includes David J. Conrad, David M. Stott, Ph.D., CPA and Deborah L. Johlin-Bach. The results for the three months of 2019 are not necessarily indicative of results to be expected for the year.

LOAN PORTFOLIO

The Association provides funds to farmers, rural homeowners, and farm-related businesses for financing of short and intermediate-term loans and long-term real estate mortgage loans through numerous product types. The Association's loan portfolio consists predominantly of grains (primarily soybeans, corn and wheat) which constitute 57 percent of the entire portfolio as of March 31, 2019. The Association recognizes the commodity concentration risk exceeds normally accepted industry standards. This risk, along with the risk associated with large loans, is reduced by members' off-farm income, utilization of crop insurance, and the use of FSA, USDA, Business and Industry, SBA and Farmer Mac loan guarantees. As of March 31, 2019, the Association had \$489,673 of guaranteed loan volume, which is 25.46 percent of loans as compared to \$482,767 of guaranteed volume or 26.15 percent of the portfolio at March 31, 2018. Loan guarantees reduce the potential of loss in the Association's loan portfolio and help to leverage the Association's capital.

Gross loan volume of the Association as of March 31, 2019 was \$1,923,093 a decrease of \$37,299 or 1.90 percent when compared to \$1,960,392 at December 31, 2018. The decrease in loan volume primarily relates to a normal seasonal decline in production and intermediate term (IT) along with a decrease in real estate mortgage volume partially offset by an increase in processing and marketing volume.

From March 31, 2018 to March 31, 2019, volume increased by \$76,770 or 4.16 percent. The increase in loan volume primarily relates to an increase in real estate mortgage and process and marketing and energy volume partially offset by a decrease in

production and IT, communication and rural residential real estate volume.

Net loans outstanding at March 31, 2019 were \$1,912,374 as compared to \$1,949,334 at December 31, 2018. Net loans accounted for 95.76 percent of total assets at March 31, 2019 as compared to 94.70 percent at December 31, 2018.

The following table summarizes the Association's risk assets (accruing volume includes accrued interest receivable):

	<u>3/31/19</u>	<u>12/31/18</u>
Nonaccrual loans	\$ 7,216	\$ 6,120
Accruing restructured loans	6,910	6,760
Accruing loans 90 days or more past due	1,577	-
Total high risk loans	<u>15,703</u>	<u>12,880</u>
Other property owned	-	-
Total high-risk assets	<u>\$ 15,703</u>	<u>\$ 12,880</u>
Ratios:		
Nonaccrual loans to total loans	0.38%	0.31%
High-risk assets to total assets	0.79%	0.63%

High risk assets increased during the first three months of 2019 primarily as a result of increased accruing loans 90 days or more past due and nonaccrual loans. High risk loans increased as a result of the challenging agricultural environment.

There is an inherent risk in the extension of any type of credit, and accordingly, the Association maintains an allowance for loan losses consistent with the risk measured in the portfolio.

General portfolio credit quality remained stable for the three months of 2019 when compared to December 31, 2018, and remains at an acceptable level.

Credit administration is satisfactory.

During the three nine months of 2019 the Association recorded no charge-offs or recoveries and a reversal of allowance for loan losses (reversal) of \$339. The reversal is primarily a result of the seasonal decline in volume previously discussed. For the same period of 2018, the Association recorded no charge-offs or recoveries and reversal of allowance for loan losses of \$1,306. The allowance for loan losses represented 0.56 percent and 0.56 percent of loans at March 31, 2019 and December 31, 2018, respectively.

RESULTS OF OPERATIONS

For the three months ending March 31, 2019

Net income for the three months ended March 31, 2019 (Q1 2019) was \$12,515, a decrease of \$114 or 0.90 percent when compared to the net income of \$12,629 for the same period in 2018 (Q1 2018). Major changes in the components of net income when comparing Q1 2019 to Q1 2018 are identified as follows:

- Net interest income increased by \$662 or 5.21 percent. The increase resulted primarily from earnings on increased loan volume and an increase in earnings on the Association's own funds in loans.
- Reversal of provision for loan losses decreased by \$967 as a result of the reversal of allowance for loan losses being lower in Q1 2019 than Q1 2018. The Q1 2018 reversal included a reduction in the management qualitative allowance (MQA) factor used for cash grains and landlord loans. Management had adjusted the MQA factor due to the declining credit quality for this segment of the portfolio which the original MQA was established. The MQA was previously discontinued so there was no such adjustment in Q1 2019.
- Noninterest income increased by \$19 or 0.44 percent for the following reasons:

Patronage refund from other Farm Credit institutions (patronage refunds) increased by \$182 as a result of higher AgFirst Farm Credit Bank general and participation sold patronage. The increase in the patronage relates to the higher loan volume previously discussed.

Lease income increased by \$61 as a result of the change in lease accounting that took effect January 1, 2019.

Gains (losses) on other transactions increased \$312 due to a true up of the Association Mission Fund.

Insurance fund refund decreased by \$569.

- Noninterest expense decreased by \$172 or 3.03 percent primarily due to:

Salary and benefits expense decreased by \$67 or 1.77 percent due to reduced pension expense offset by increased expenses related to scheduled salary increases, additional employees, and miscellaneous benefits.

Occupancy and equipment increased by \$59 or 17.56 percent primarily due to the prior year including lease receipts that are included in lease income in the current year, other office related expenses and depreciation partially offset by reduced maintenance and repairs.

Guarantee fees decreased by \$81 or 32.93 percent due to a decrease in new loan guarantees.

Other operating expenses decreased by \$97 or 9.32 percent due to lower purchased services, travel, communications and advertising. These decreases were partially offset by higher expenses for supervisory and examination and data processing.

The following table shows the key results of operations ratios for the nine months ended March 31, 2019 and March 31, 2018, respectively.

	<u>3/31/19</u>	<u>3/31/18</u>
Return on average assets	2.54%	2.68%
Return on average equity	14.41%	15.69%
Net interest margin	2.80%	2.77%
Members' equity to assets	17.96%	17.40%
Debt to members' equity (:1)	4.57	4.75

CAPITAL RESOURCES

Total members' equity was \$358,575 at March 31, 2019 as compared to \$346,326 at December 31, 2018 for an increase of \$12,249 or 3.54 percent. The increase is due primarily to 2019 year-to-date earnings offset in part by a reduction in class A preferred stock outstanding.

The Association's capital ratios as of March 31, along with FCA minimum requirements, are included in the following regulatory matters section.

Regulatory Capital Ratios

The Association's regulatory ratios are shown in the following table:

	Regulatory Minimum, Including Buffer*	3/31/19	12/31/18	3/31/18
Permanent Capital Ratio	7.00%	20.63%	20.43%	20.24%
Common Equity Tier 1 (CET1) Capital Ratio	5.125%	19.18%	18.96%	18.20%
Tier 1 Capital Ratio	6.625%	19.18%	18.96%	18.20%
Total Capital Ratio	8.625%	20.49%	20.25%	20.09%
Tier 1 Leverage Ratio	5.00%	15.64%	15.35%	14.67%
Unallocated Retained Earnings (URE) and URE Equivalents Leverage Ratio	1.50%	16.20%	15.87%	15.21%

*Includes fully phased-in capital conservation buffers which will be effective January 1, 2020.

The FCA sets minimum regulatory capital adequacy requirements for System banks and associations. The requirements are based on regulatory ratios as defined by the FCA and include common equity tier 1 (CET1), tier 1, total capital, permanent capital, tier 1 leverage, and unallocated retained earnings (URE) and URE equivalents leverage ratios.

The permanent capital, CET1, tier 1, and total capital ratios are calculated by dividing the three-month average daily balance of the capital numerator, as defined by the FCA, by a risk-adjusted asset base. Unlike these ratios, the tier 1 leverage and URE and URE equivalents leverage ratios do not incorporate any risk-adjusted weighting of assets. Risk-adjusted assets refer to the total dollar amount of the institution's assets adjusted by an appropriate credit conversion factor as defined by regulation. Generally, higher credit conversion factors are applied to assets with more inherent risk. The tier 1 leverage and URE and URE equivalents leverage ratios are calculated by dividing the three-month average daily balance of the capital numerator, as defined by the FCA, by the three-month average daily balance of total assets adjusted for regulatory deductions.

For all periods presented, AgCredit exceeded minimum regulatory standards for all of the ratios. The Association's capital ratios increased at March 31, 2019 compared to December 31, 2018. Compared to March 31, 2018, the Association's capital ratios improved due to higher average capital levels in the 2019 period. See Regulatory Matters section below for further discussion of capital ratios.

REGULATORY MATTERS

On April 3, 2019, the Farm Credit Administration issued a proposed rule that would clarify the factors that System institutions should consider when categorizing high-risk loans and placing them in nonaccrual status. The rule would also revise the criteria by which loans are reinstated to accrual status, and would revise the application of the criteria to certain loans in nonaccrual status to distinguish between the types of risk that cause loans to be placed in nonaccrual status. The public comment periods ends on June 3, 2019.

RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS

Please refer to Note 1, *Organization, Significant Accounting Policies, and Recently Issued Accounting Pronouncements*, in the Notes to the Financial Statements, and the 2018 Annual Report to Shareholders for recently issued accounting pronouncements. Additional information is provided in the following table.

The following Accounting Standards Update (ASU) was issued by the Financial Accounting Standards Board (FASB) but has not yet been adopted:

Summary of Guidance	Adoption and Potential Financial Statement Impact
<i>ASU 2016-13 – Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments</i>	
<ul style="list-style-type: none"> • Replaces multiple existing impairment standards by establishing a single framework for financial assets to reflect management’s estimate of current expected credit losses (CECL) over the complete remaining life of the financial assets. • Changes the present incurred loss impairment guidance for loans to a CECL model. • The Update also modifies the other-than-temporary impairment model for debt securities to require an allowance for credit impairment instead of a direct write-down, which allows for reversal of credit impairments in future periods based on improvements in credit. • Eliminates existing guidance for purchased credit impaired (PCI) loans, and requires recognition of an allowance for expected credit losses on these financial assets. • Requires a cumulative-effect adjustment to retained earnings as of the beginning of the reporting period of adoption. • Effective for fiscal years beginning after December 15, 2020, and interim periods within those fiscal years. Early application will be permitted for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. 	<ul style="list-style-type: none"> • Implementation efforts have begun by establishing a cross-discipline governance structure. The implementation includes identification of key interpretive issues, scoping of financial instruments, and assessing existing credit loss forecasting models and processes against the new guidance. • The new guidance is expected to result in an increase in allowance for credit losses due to several factors, including: <ol style="list-style-type: none"> 1. The allowance related to loans and commitments will most likely increase to cover credit losses over the full remaining expected life of the portfolio, and will consider expected future changes in macroeconomic conditions, 2. An allowance will be established for estimated credit losses on any debt securities, 3. The nonaccretable difference on any PCI loans will be recognized as an allowance, offset by an increase in the carrying value of the related loans. • The extent of the increase is under evaluation, but will depend upon the nature and characteristics of the financial instrument portfolios, and the macroeconomic conditions and forecasts at the adoption date. • The guidance is expected to be adopted in first quarter 2021.

Note: The Association obtains funding from AgFirst Farm Credit Bank (the Bank). The Association is materially affected and shareholder investment could be materially affected by the financial condition and results of operations of the Bank. Copies of the Bank’s Annual and Quarterly Reports are on the AgFirst website, www.agfirst.com or may be obtained at no charge by calling 1-800-845-1745, extension 2764, or writing Matthew Miller, AgFirst Farm Credit Bank, P.O. Box 1499, Columbia, SC 29202.

Copies of the Association’s Quarterly and Annual Reports are available on the Association’s website, www.ageredit.net, or may be obtained upon request free of charge by calling 1-800-837-3678, extension 1048, or writing Logan Kreais, Chief Financial Officer, AgCredit, ACA, 610 W Lytle Street, Fostoria, OH 44830. The Association prepares an electronic version of the Quarterly Report within 40 days after the end of each fiscal quarter, except that no report need be prepared for the fiscal quarter that coincides with the end of the fiscal year of the Association.

AgCredit Agricultural Credit Association

Consolidated Balance Sheets

<i>(dollars in thousands)</i>	March 31, 2019 <i>(unaudited)</i>	December 31, 2018 <i>(audited)</i>
Assets		
Cash	\$ 5,172	\$ 7,950
Investments in debt securities:		
Held to maturity (fair value of \$10,880 and \$10,942, respectively)	10,378	10,594
Loans	1,923,093	1,960,392
Allowance for loan losses	(10,719)	(11,058)
Net loans	1,912,374	1,949,334
Other investments	4,568	—
Accrued interest receivable	28,718	30,937
Equity investments in other Farm Credit institutions	22,400	22,351
Premises and equipment, net	9,248	8,506
Accounts receivable	3,815	26,783
Other assets	283	2,079
Total assets	\$ 1,996,956	\$ 2,058,534
Liabilities		
Notes payable to AgFirst Farm Credit Bank	\$ 1,601,210	\$ 1,673,338
Lease obligations	389	—
Accrued interest payable	4,358	4,439
Patronage refunds payable	1,837	27,686
Accounts payable	557	1,245
Advanced conditional payments	1,184	1,001
Other liabilities	28,846	4,499
Total liabilities	1,638,381	1,712,208
Commitments and contingencies (Note 7)		
Members' Equity		
Capital stock and participation certificates	18,454	18,672
Retained earnings		
Allocated	241,504	241,680
Unallocated	98,617	85,974
Total members' equity	358,575	346,326
Total liabilities and members' equity	\$ 1,996,956	\$ 2,058,534

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

AgCredit Agricultural Credit Association
Consolidated Statements of
Comprehensive Income

(unaudited)

<i>(dollars in thousands)</i>	For the three months ended March 31,	
	2019	2018
Interest Income		
Loans	\$ 26,121	\$ 23,467
Investments	147	159
Total interest income	26,268	23,626
Interest Expense		
Notes payable to AgFirst Farm Credit Bank	12,894	10,914
Net interest income	13,374	12,712
Provision for (reversal of allowance for) loan losses	(339)	(1,306)
Net interest income after provision for (reversal of allowance for) loan losses	13,713	14,018
Noninterest Income		
Loan fees	148	108
Fees for financially related services	8	25
Lease income	61	—
Patronage refunds from other Farm Credit institutions	3,460	3,278
Gains (losses) on sales of premises and equipment, net	1	(9)
Gains (losses) on other transactions	288	(24)
Insurance Fund refunds	323	892
Other noninterest income	9	9
Total noninterest income	4,298	4,279
Noninterest Expense		
Salaries and employee benefits	3,727	3,794
Occupancy and equipment	395	336
Insurance Fund premiums	265	251
Guarantee fees	165	246
Other operating expenses	944	1,041
Total noninterest expense	5,496	5,668
Net income	12,515	12,629
Other comprehensive income	—	—
Comprehensive income	\$ 12,515	\$ 12,629

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

AgCredit Agricultural Credit Association
Consolidated Statements of Changes in
Members' Equity

(unaudited)

<i>(dollars in thousands)</i>	Capital Stock and Participation Certificates	Retained Earnings		Total Members' Equity
		Allocated	Unallocated	
Balance at December 31, 2017	\$ 19,522	\$ 219,004	\$ 81,329	\$ 319,855
Comprehensive income			12,629	12,629
Capital stock/participation certificates issued/(retired), net	230			230
Dividends declared/paid			(46)	(46)
Retained earnings retired		(4)		(4)
Patronage distribution adjustment		(94)	154	60
Balance at March 31, 2018	\$ 19,752	\$ 218,906	\$ 94,066	\$ 332,724
Balance at December 31, 2018	\$ 18,672	\$ 241,680	\$ 85,974	\$ 346,326
Cumulative effect of change in accounting principle			(7)	(7)
Comprehensive income			12,515	12,515
Capital stock/participation certificates issued/(retired), net	(218)			(218)
Dividends declared/paid			(41)	(41)
Patronage distribution adjustment		(176)	176	—
Balance at March 31, 2019	\$ 18,454	\$ 241,504	\$ 98,617	\$ 358,575

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

AgCredit Agricultural Credit Association

Notes to the Consolidated Financial Statements

*(dollars in thousands, except as noted)
(unaudited)*

Note 1 — Organization, Significant Accounting Policies, and Recently Issued Accounting Pronouncements

Organization

The accompanying financial statements include the accounts of AgCredit Agricultural Credit Association and its Production Credit Association (PCA) and Federal Land Credit Association (FLCA) subsidiaries (collectively, the Association). A description of the organization and operations, the significant accounting policies followed, and the financial condition and results of operations for the Association as of and for the year ended December 31, 2018, are contained in the 2018 Annual Report to Shareholders. These unaudited interim consolidated financial statements should be read in conjunction with the latest Annual Report to Shareholders.

Basis of Presentation

In the opinion of management, the accompanying consolidated financial statements contain all adjustments necessary for a fair statement of results for the periods presented. These adjustments are of a normal recurring nature, unless otherwise disclosed.

Certain amounts in the prior period's consolidated financial statements may have been reclassified to conform to the current period presentation. Such reclassifications had no effect on the prior period net income or total capital as previously reported.

The results of any interim period are not necessarily indicative of those to be expected for a full year.

Significant Accounting Policies

The Association's accounting and reporting policies conform with U.S. generally accepted accounting principles (GAAP) and practices in the financial services industry. To prepare the financial statements in conformity with GAAP, management must make estimates based on assumptions about future economic and market conditions (for example, unemployment, market liquidity, real estate prices, etc.) that affect the reported amounts of assets and liabilities at the date of the financial statements, income and expenses during the reporting period, and the related disclosures. Although these estimates contemplate current conditions and expectations of change in the future, it is reasonably possible that actual conditions may be different than anticipated, which could materially affect results of operations and financial condition.

Management has made significant estimates in several areas, including loans and allowance for loan losses (Note 2, *Loans and Allowance for Loan Losses*), investment securities and

other-than-temporary impairment (Note 3, *Investments*), and financial instruments (Note 5, *Fair Value Measurement*). Actual results could differ from those estimates.

For further details of significant accounting policies, see Note 2, *Summary of Significant Accounting Policies*, from the latest Annual Report.

Accounting Standards Updates (ASUs) Issued During the Period

The following ASU was issued by the Financial Accounting Standards Board (FASB) since the most recent year end:

- In March 2019, the FASB issued ASU 2019-01 Leases (Topic 842): Codification Improvements. The Update addresses potential implementation issues that could arise as organizations implement Topic 842. The amendments in the Update include the following items brought to the Board's attention through interactions with stakeholders: 1. Determining the fair value of the underlying asset by lessors that are not manufacturers or dealers; 2. Presentation on the statement of cash flows—sales-type and direct financing leases; 3. Transition disclosures related to Topic 250, Accounting Changes and Error Corrections. Evaluation of any possible effects the guidance may have on the statements of financial condition and results of operations is in progress.

ASUs Pending Effective Date

For a detailed description of the ASUs below, see the latest Annual Report.

Potential effects of ASUs issued in previous periods:

- In August 2018, the FASB issued ASU 2018-15 Intangibles—Goodwill and Other—Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract. The amendments align the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal use software license). The accounting for the service element of a hosting arrangement that is a service contract is not affected by the amendments in this Update. The guidance is effective for public business entities for fiscal years beginning after December 15, 2019,

and interim periods within those fiscal years. Early adoption is permitted, including adoption in any interim period, for all entities. The amendments should be applied either retrospectively or prospectively to all implementation costs incurred after the date of adoption. Evaluation of any possible effects the guidance may have on the statements of financial condition and results of operations is in progress.

- In August 2018, the FASB issued ASU 2018-13 Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement. The amendments are part of the FASB’s disclosure framework project. The project’s objective and primary focus are to improve the effectiveness of disclosures in the notes to financial statements by facilitating clear communication of the information required by GAAP that is most important to users of each entity’s financial statements. The amendments remove, modify or add certain disclosures contained in the financial statement footnotes related to fair value. Additionally, the guidance is intended to promote the appropriate exercise of discretion by entities when considering fair value measurement disclosures and to clarify that materiality is an appropriate consideration of entities and their auditors when evaluating disclosure requirements. The amendments are effective for all entities for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. Certain amendments should be applied prospectively for only the most recent interim or annual period presented in the initial fiscal year of adoption. All other amendments should be applied retrospectively to all periods presented upon their effective date. Early adoption is permitted upon issuance. Entities are permitted to early adopt any removed or modified disclosures upon issuance of this Update and delay adoption of the additional disclosures until their effective date. The removed disclosures were adopted effective with the 2018 Annual Report. Evaluation of any possible effects the additional and modified disclosures guidance may have on the statements of financial condition and results of operations is in progress.
- In June 2016, the FASB issued ASU 2016-13 Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments. This Update, and subsequent clarifying guidance issued, is intended to improve financial reporting by requiring timelier recording of credit losses on financial instruments. It requires an organization to measure all expected credit losses for financial assets held at the reporting date. Financial institutions and other organizations will use forward-looking information to estimate their credit losses. Additionally, the ASU amends the accounting for credit losses on available-for-sale debt securities and purchased financial assets with credit deterioration. For public companies that are not SEC filers, it will take effect for fiscal years beginning after December 15, 2020, and interim periods within those fiscal years. Early application

will be permitted for all organizations for fiscal years, and interim periods within those fiscal years, beginning after December 31, 2018. Evaluation of any possible effects the guidance may have on the statements of financial condition and results of operations is in progress.

Accounting Standards Effective During the Period

There were no changes in the accounting principles applied from the latest Annual Report, other than any discussed below.

No recently adopted accounting guidance issued by the FASB had a significant effect on the current period reporting. See the most recent Annual Report for a detailed description of each of the standards below:

- In March 2017, the FASB issued ASU 2017-08 Receivables—Nonrefundable Fees and Other Costs (Subtopic 310-20): Premium Amortization on Purchased Callable Debt Securities. The guidance relates to certain callable debt securities and shortens the amortization period for any premium to the earliest call date. The Update was effective for interim and annual periods beginning after December 15, 2018 for public business entities. Adoption of this guidance had no impact on the statements of financial condition and results of operations.

In February 2016, the FASB issued ASU 2016-02 Leases (Topic 842). This Update, and subsequent clarifying guidance issued, requires organizations that lease assets to recognize on the balance sheet the assets and liabilities for the rights and obligations created by those leases. Leases will be classified as either finance leases or operating leases. This distinction will be relevant for the pattern of expense recognition in the income statement. Lessor accounting activities are largely unchanged from existing lease accounting. The Update also eliminates leveraged lease accounting but allows existing leveraged leases to continue their current accounting until maturity, termination or modification. The amendments were effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years, for public business entities.

Transition Information

- The guidance was adopted using the optional modified retrospective method and practical expedients for transition. Under this transition method, an entity initially applies the new leases standard at the adoption date and recognizes a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption.
- The package of practical expedients was elected, which allowed existing leases to be largely accounted for consistent with current guidance, except for the incremental balance sheet recognition for lessees.

- There will not be a material change to the timing of future expense recognition.
- Upon adoption, a cumulative-effect adjustment to equity of approximately \$(7) was recorded. In addition, a Right of Use Asset in the amount of \$408 and Lease Liability in the amount of \$415 were recognized.
- Given the limited changes to lessor accounting, there were no material changes to recognition or measurement.

Note 2 — Loans and Allowance for Loan Losses

The Association maintains an allowance for loan losses at a level considered adequate by management to provide for probable and estimable losses inherent in the loan portfolio as of

the report date. The allowance for loan losses is increased through provisions for loan losses and loan recoveries and is decreased through loan charge-offs and allowance reversals. A review of individual loans in each respective portfolio is performed periodically to determine the appropriateness of risk ratings and to ensure loss exposure to the Association has been identified. See Note 3, *Loans and Allowance for Loan Losses*, from the latest Annual Report for further discussion.

Credit risk arises from the potential inability of an obligor to meet its repayment obligation. The Association manages credit risk associated with lending activities through an assessment of the credit risk profile of an individual obligor. The Association sets its own underwriting standards and lending policies that provide direction to loan officers and are approved by the Board of Directors.

A summary of loans outstanding at period end follows:

	March 31, 2019	December 31, 2018
Real estate mortgage	\$ 1,171,575	\$ 1,178,021
Production and intermediate-term	552,672	600,444
Loans to cooperatives	4,031	3,412
Processing and marketing	56,877	39,658
Farm-related business	16,033	16,588
Power and water/waste disposal	3,385	3,385
Rural residential real estate	117,978	118,238
Lease receivables	542	646
Total loans	\$ 1,923,093	\$ 1,960,392

A substantial portion of the Association's lending activities is collateralized, and exposure to credit loss associated with lending activities is reduced accordingly.

The Association may purchase or sell participation interests with other parties in order to diversify risk, manage loan volume, and comply with Farm Credit Administration (FCA) regulations. The following tables present the principal balance of participation loans at periods ended:

March 31, 2019

	Within AgFirst District		Within Farm Credit System		Outside Farm Credit System		Total	
	Participations Purchased	Participations Sold	Participations Purchased	Participations Sold	Participations Purchased	Participations Sold	Participations Purchased	Participations Sold
Real estate mortgage	\$ 18,989	\$ 57,508	\$ 225	\$ 2,027	\$ 26,215	\$ —	\$ 45,429	\$ 59,535
Production and intermediate-term	14,622	222,717	178	584	6,755	—	21,555	223,301
Loans to cooperatives	4,047	—	—	—	—	—	4,047	—
Processing and marketing	36,549	5,372	—	11,413	—	—	36,549	16,785
Power and water/waste disposal	3,393	—	—	—	—	—	3,393	—
Total	\$ 77,600	\$ 285,597	\$ 403	\$ 14,024	\$ 32,970	\$ —	\$ 110,973	\$ 299,621

December 31, 2018

	Within AgFirst District		Within Farm Credit System		Outside Farm Credit System		Total	
	Participations Purchased	Participations Sold	Participations Purchased	Participations Sold	Participations Purchased	Participations Sold	Participations Purchased	Participations Sold
Real estate mortgage	\$ 19,085	58,745	\$ 225	\$ 2,027	\$ 21,891	\$ —	\$ 41,201	\$ 60,772
Production and intermediate-term	13,813	185,206	135	392	6,720	—	20,668	185,598
Loans to cooperatives	3,428	—	—	—	—	—	3,428	—
Processing and marketing	20,315	4,803	—	10,387	—	—	20,315	15,190
Power and water/waste disposal	3,393	—	—	—	—	—	3,393	—
Total	\$ 60,034	\$ 248,754	\$ 360	\$ 12,806	\$ 28,611	\$ —	\$ 89,005	\$ 261,560

A significant source of liquidity for the Association is the repayments of loans. The following table presents the contractual maturity distribution of loans by loan type at the latest period end:

	March 31, 2019			
	Due Less Than 1 Year	Due 1 Through 5 Years	Due After 5 Years	Total
Real estate mortgage	\$ 4,600	\$ 64,716	\$ 1,102,259	\$ 1,171,575
Production and intermediate-term	202,892	241,823	107,957	552,672
Loans to cooperatives	-	4,031	-	4,031
Processing and marketing	8,718	18,881	29,278	56,877
Farm-related business	3,927	3,204	8,902	16,033
Power and water/waste disposal	-	-	3,385	3,385
Rural residential real estate	447	3,383	114,148	117,978
Lease receivables	176	318	48	542
Total loans	<u>\$ 220,760</u>	<u>\$ 336,356</u>	<u>\$ 1,365,977</u>	<u>\$ 1,923,093</u>
Percentage	11.48%	17.49%	71.03%	100.00%

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

The following table shows the recorded investment of loans, classified under the FCA Uniform Loan Classification System, as a percentage of the recorded investment of total loans by loan type as of:

	March 31, 2019	December 31, 2018		March 31, 2019	December 31, 2018
Real estate mortgage:			Power and water/waste disposal:		
Acceptable	95.29%	95.03%	Acceptable	100.00%	100.00%
OAEM	1.79	1.88	OAEM	-	-
Substandard/doubtful/loss	2.92	3.09	Substandard/doubtful/loss	-	-
	<u>100.00%</u>	<u>100.00%</u>		<u>100.00%</u>	<u>100.00%</u>
Production and intermediate-term:			Rural residential real estate:		
Acceptable	90.54%	90.03%	Acceptable	95.41%	94.89%
OAEM	5.89	5.67	OAEM	3.65	4.21
Substandard/doubtful/loss	3.57	4.30	Substandard/doubtful/loss	0.94	0.90
	<u>100.00%</u>	<u>100.00%</u>		<u>100.00%</u>	<u>100.00%</u>
Loans to cooperatives:			Lease receivables:		
Acceptable	100.00%	100.00%	Acceptable	100.00%	100.00%
OAEM	-	-	OAEM	-	-
Substandard/doubtful/loss	-	-	Substandard/doubtful/loss	-	-
	<u>100.00%</u>	<u>100.00%</u>		<u>100.00%</u>	<u>100.00%</u>
Processing and marketing:			Total loans:		
Acceptable	93.36%	90.91%	Acceptable	93.81%	93.35%
OAEM	-	-	OAEM	3.01	3.13
Substandard/doubtful/loss	6.64	9.09	Substandard/doubtful/loss	3.18	3.52
	<u>100.00%</u>	<u>100.00%</u>		<u>100.00%</u>	<u>100.00%</u>
Farm-related business:					
Acceptable	86.33%	86.52%			
OAEM	0.04	0.54			
Substandard/doubtful/loss	13.63	12.94			
	<u>100.00%</u>	<u>100.00%</u>			

The following tables provide an aging analysis of the recorded investment of past due loans as of:

	March 31, 2019				
	30 Through 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
Real estate mortgage	\$ 7,409	\$ 1,774	\$ 9,183	\$ 1,179,841	\$ 1,189,024
Production and intermediate-term	6,809	2,000	8,809	554,334	563,143
Loans to cooperatives	-	-	-	4,033	4,033
Processing and marketing	-	-	-	57,000	57,000
Farm-related business	-	84	84	16,098	16,182
Power and water/waste disposal	-	-	-	3,388	3,388
Rural residential real estate	535	8	543	117,846	118,389
Lease receivables	-	-	-	542	542
Total	<u>\$ 14,753</u>	<u>\$ 3,866</u>	<u>\$ 18,619</u>	<u>\$ 1,933,082</u>	<u>\$ 1,951,701</u>

December 31, 2018					
	30 Through 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
Real estate mortgage	\$ 5,363	\$ 697	\$ 6,060	\$ 1,191,297	\$ 1,197,357
Production and intermediate-term	2,239	966	3,205	608,173	611,378
Loans to cooperatives	—	—	—	3,415	3,415
Processing and marketing	—	—	—	39,774	39,774
Farm-related business	65	—	65	16,656	16,721
Power and water/waste disposal	—	—	—	3,388	3,388
Rural residential real estate	306	9	315	118,270	118,585
Lease receivables	—	—	—	646	646
Total	\$ 7,973	\$ 1,672	\$ 9,645	\$ 1,981,619	\$ 1,991,264

Nonperforming assets (including related accrued interest as applicable) and related credit quality statistics at period end were as follows:

	March 31, 2019	December 31, 2018
Nonaccrual loans:		
Real estate mortgage	\$ 4,915	\$ 4,033
Production and intermediate-term	2,170	2,037
Farm-related business	84	—
Rural residential real estate	47	50
Total	\$ 7,216	\$ 6,120
Accruing restructured loans:		
Real estate mortgage	\$ 321	\$ 321
Production and intermediate-term	6,589	6,439
Total	\$ 6,910	\$ 6,760
Accruing loans 90 days or more past due:		
Real estate mortgage	\$ 639	\$ —
Production and intermediate-term	938	—
Total	\$ 1,577	\$ —
Total nonperforming loans	\$ 15,703	\$ 12,880
Other property owned	—	—
Total nonperforming assets	\$ 15,703	\$ 12,880
Nonaccrual loans as a percentage of total loans	0.38%	0.31%
Nonperforming assets as a percentage of total loans and other property owned	0.82%	0.66%
Nonperforming assets as a percentage of capital	4.38%	3.72%

The following table presents information related to the recorded investment of impaired loans at period end. Impaired loans are loans for which it is probable that all principal and interest will not be collected according to the contractual terms of the loan.

	March 31, 2019	December 31, 2018
Impaired nonaccrual loans:		
Current as to principal and interest	\$ 3,710	\$ 4,341
Past due	3,506	1,779
Total	\$ 7,216	\$ 6,120
Impaired accrual loans:		
Restructured	\$ 6,910	\$ 6,760
90 days or more past due	1,577	—
Total	\$ 8,487	\$ 6,760
Total impaired loans	\$ 15,703	\$ 12,880
Additional commitments to lend	\$ —	\$ 38

The following tables present additional impaired loan information at period end. Unpaid principal balance represents the contractual principal balance of the loan.

Impaired loans:	March 31, 2019			Three Months Ended March 31, 2019	
	Recorded Investment	Unpaid Principal Balance	Related Allowance	Average Impaired Loans	Interest Income Recognized on Impaired Loans
With a related allowance for credit losses:					
Real estate mortgage	\$ 1,994	\$ 2,142	\$ 419	\$ 1,974	\$ 33
Production and intermediate-term	331	343	77	327	5
Total	\$ 2,325	\$ 2,485	\$ 496	\$ 2,301	\$ 38
With no related allowance for credit losses:					
Real estate mortgage	\$ 3,881	\$ 3,936	\$ –	\$ 3,840	\$ 64
Production and intermediate-term	9,366	19,647	–	9,269	154
Farm-related business	84	84	–	84	1
Rural residential real estate	47	52	–	47	1
Total	\$ 13,378	\$ 23,719	\$ –	\$ 13,240	\$ 220
Total impaired loans:					
Real estate mortgage	\$ 5,875	\$ 6,078	\$ 419	\$ 5,814	\$ 97
Production and intermediate-term	9,697	19,990	77	9,596	159
Farm-related business	84	84	–	84	1
Rural residential real estate	47	52	–	47	1
Total	\$ 15,703	\$ 26,204	\$ 496	\$ 15,541	\$ 258

Impaired loans:	December 31, 2018			Year Ended December 31, 2018	
	Recorded Investment	Unpaid Principal Balance	Related Allowance	Average Impaired Loans	Interest Income Recognized on Impaired Loans
With a related allowance for credit losses:					
Real estate mortgage	\$ 1,995	\$ 2,143	\$ 419	\$ 2,079	\$ 186
Production and intermediate-term	159	169	74	166	15
Total	\$ 2,154	\$ 2,312	\$ 493	\$ 2,245	\$ 201
With no related allowance for credit losses:					
Real estate mortgage	\$ 2,360	\$ 2,450	\$ –	\$ 2,461	\$ 221
Production and intermediate-term	8,316	18,778	–	8,670	778
Rural residential real estate	50	111	–	52	5
Total	\$ 10,726	\$ 21,339	\$ –	\$ 11,183	\$ 1,004
Total impaired loans:					
Real estate mortgage	\$ 4,355	\$ 4,593	\$ 419	\$ 4,540	\$ 407
Production and intermediate-term	8,475	18,947	74	8,836	793
Rural residential real estate	50	111	–	52	5
Total	\$ 12,880	\$ 23,651	\$ 493	\$ 13,428	\$ 1,205

A summary of changes in the allowance for loan losses and recorded investment in loans for each reporting period follows:

	Real Estate Mortgage	Production and Intermediate- term	Agribusiness*	Communication	Power and Water/Waste Disposal	Rural Residential Real Estate	Lease Receivables	Total
Activity related to the allowance for credit losses:								
Balance at December 31, 2018	\$ 2,743	\$ 6,851	\$ 887	\$ —	\$ 21	\$ 555	\$ 1	\$ 11,058
Charge-offs	—	—	—	—	—	—	—	—
Recoveries	—	—	—	—	—	—	—	—
Provision for loan losses	7	(556)	215	—	—	(5)	—	(339)
Balance at March 31, 2019	\$ 2,750	\$ 6,295	\$ 1,102	\$ —	\$ 21	\$ 550	\$ 1	\$ 10,719
Balance at December 31, 2017	\$ 2,504	\$ 8,912	\$ 304	\$ 11	\$ 15	\$ 582	\$ 2	\$ 12,330
Charge-offs	—	—	—	—	—	—	—	—
Recoveries	—	—	—	—	—	—	—	—
Provision for loan losses	(163)	(1,531)	347	—	—	41	—	(1,306)
Balance at March 31, 2018	\$ 2,341	\$ 7,381	\$ 651	\$ 11	\$ 15	\$ 623	\$ 2	\$ 11,024
Allowance on loans evaluated for impairment:								
Individually	\$ 419	\$ 77	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 496
Collectively	2,331	6,218	1,102	—	21	550	1	10,223
Balance at March 31, 2019	\$ 2,750	\$ 6,295	\$ 1,102	\$ —	\$ 21	\$ 550	\$ 1	\$ 10,719
Individually	\$ 419	\$ 74	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 493
Collectively	2,324	6,777	887	—	21	555	1	10,565
Balance at December 31, 2018	\$ 2,743	\$ 6,851	\$ 887	\$ —	\$ 21	\$ 555	\$ 1	\$ 11,058
Recorded investment in loans evaluated for impairment:								
Individually	\$ 5,875	\$ 9,697	\$ 84	\$ —	\$ —	\$ 47	\$ —	\$ 15,703
Collectively	1,183,149	553,446	77,131	—	3,388	118,342	542	1,935,998
Balance at March 31, 2019	\$ 1,189,024	\$ 563,143	\$ 77,215	\$ —	\$ 3,388	\$ 118,389	\$ 542	\$ 1,951,701
Individually	\$ 4,354	\$ 8,476	\$ —	\$ —	\$ —	\$ 50	\$ —	\$ 12,880
Collectively	1,193,003	602,902	59,910	—	3,388	118,535	646	1,978,384
Balance at December 31, 2018	\$ 1,197,357	\$ 611,378	\$ 59,910	\$ —	\$ 3,388	\$ 118,585	\$ 646	\$ 1,991,264

*Includes the loan types: Loans to cooperatives, Processing and marketing, and Farm-related business.

A restructuring of a debt constitutes a troubled debt restructuring (TDR) if the creditor for economic or legal reasons related to the debtor's financial difficulties grants a concession to the debtor that it would not otherwise consider. There were no new TDRs that occurred during the three months ended March 31, 2019 or March 31, 2018.

Interest concessions may include interest forgiveness and interest deferment. Principal concessions may include principal forgiveness, principal deferment, and maturity extension. Other concessions may include additional compensation received which might be in the form of cash or other assets.

There were no TDRs that occurred during the previous twelve months and for which there was a subsequent payment default during periods presented. Payment default is defined as a payment that was thirty days or more past due.

The following table provides information at period end on outstanding loans restructured in troubled debt restructurings. These loans are included as impaired loans in the impaired loan table:

	Total TDRs		Nonaccrual TDRs	
	March 31, 2019	December 31, 2018	March 31, 2019	December 31, 2018
Real estate mortgage	\$ 446	\$ 447	\$ 125	\$ 126
Production and intermediate-term	6,705	6,559	116	120
Total loans	\$ 7,151	\$ 7,006	\$ 241	\$ 246
Additional commitments to lend	\$ —	\$ 38		

The following table presents information as of period end:

	March 31, 2019
Carrying amount of foreclosed residential real estate properties held as a result of obtaining physical possession	\$ —
Recorded investment of consumer mortgage loans secured by residential real estate for which formal foreclosure proceedings are in process	\$ —

Note 3 — Investments

Investments in Debt Securities

The Association's investments consist primarily of Rural America Bonds (RABs), which are private placement securities purchased under the Mission Related Investment (MRI) program approved by the FCA. In its Conditions of Approval for the program, the FCA generally considers a RAB ineligible if its investment rating, based on the internal 14-point probability of default scale used to also grade loans, falls below 9 and requires System institutions to provide notification to FCA when a security becomes ineligible. Any other bonds purchased under the MRI program, approved on a case-by-case basis by FCA, may have different eligibility requirements. At March 31, 2019, the Association held two RABs totaling \$535 whose credit quality had deteriorated beyond the program limits.

A summary of the amortized cost and fair value of investment securities held-to-maturity follows:

March 31, 2019					
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Yield
RABs	\$ 10,378	\$ 672	\$ (170)	\$ 10,880	5.43%

December 31, 2018					
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Yield
RABs	\$ 10,594	\$ 510	\$ (162)	\$ 10,942	5.43%

A summary of the contractual maturity, amortized cost and estimated fair value of investment securities held-to-maturity follows:

March 31, 2019				
	Amortized Cost	Fair Value	Weighted Average Yield	
In one year or less	\$ —	\$ —	—%	
After one year through five years	512	522	5.14	
After five years through ten years	2,997	2,865	5.33	
After ten years	6,869	7,493	5.50	
Total	\$ 10,378	\$ 10,880	5.43%	

A portion of these investments has contractual maturities in excess of ten years. However, expected maturities for these types of securities can differ from contractual maturities because borrowers may have the right to prepay obligations with or without prepayment penalties.

An investment is considered impaired if its fair value is less than its cost. The following tables show the fair value and gross unrealized losses for investments that were in a continuous unrealized loss position aggregated by investment category at each reporting period. A continuous unrealized loss position for an investment is measured from the date the impairment was first identified.

March 31, 2019			
Less Than 12 Months		12 Months or Greater	
Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
\$ —	\$ —	\$ 3,962	\$ (170)

December 31, 2018			
Less Than 12 Months		12 Months or Greater	
Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
\$ —	\$ —	\$ 4,096	\$ (162)

The recording of an impairment is predicated on: (1) whether or not management intends to sell the security, (2) whether it is more likely than not that management would be required to sell the security before recovering its costs, and (3) whether management expects to recover the security's entire amortized cost basis (even if there is no intention to sell). If the Association intends to sell the security or it is more likely than not that it would be required to sell the security, the impairment loss equals the full difference between amortized cost and fair value of the security. When the Association does not intend to sell securities in an unrealized loss position and it is not more likely than not that it would be required to sell the securities, other-than-temporary impairment loss is separated into credit loss and non-credit loss. Credit loss is defined as the shortfall of the present value of the cash flows expected to be collected in relation to the amortized cost basis.

The Association performs periodic credit reviews, including other-than-temporary impairment analyses, on its investment securities portfolio. The objective is to quantify future possible loss of principal or interest due on securities in the portfolio. Factors considered in determining whether an impairment is other-than-temporary include among others: (1) the length of time and the extent to which the fair value is less than cost, (2) adverse conditions specifically related to the industry, (3) geographic area and the condition of the underlying collateral, (4) payment structure of the security, (5) ratings by rating agencies, (6) the credit worthiness of bond insurers, and (7) volatility of the fair value changes.

The Association uses the present value of cash flows expected to be collected from each debt security to determine the amount of credit loss. This technique requires assumptions related to the underlying collateral, including default rates, amount and timing of prepayments, and loss severity. Assumptions can vary widely from security to security and are influenced by such factors as loan interest rate, geographical location of the borrower, borrower characteristics, and collateral type.

Significant inputs used to estimate the amount of credit loss include, but are not limited to, performance indicators of the underlying assets in the security (including default rates, delinquency rates, and percentage of nonperforming assets), loan-to-collateral value ratios, third-party guarantees, current

levels of subordination, vintage, geographic concentration, and credit ratings. The Association may obtain assumptions for the default rate, prepayment rate, and loss severity rate from an independent third party, or generate the assumptions internally.

The Association has not recognized any credit losses as any impairments were deemed temporary and resulted from non-credit related factors. The Association has the ability and intent to hold these temporarily impaired investments until a recovery of unrealized losses occurs, which may be at maturity, and at this time expects to collect the full principal amount and interest due on these securities, especially after considering credit enhancements.

Equity Investments in Other Farm Credit System Institutions
Equity investments in other Farm Credit System institutions are generally nonmarketable investments consisting of stock and participation certificates, allocated surplus, and reciprocal investments in other institutions regulated by the FCA. These investments are carried at cost and evaluated for impairment based on the ultimate recoverability of the par value rather than by recognizing temporary declines in value.

Associations are required to maintain ownership in AgFirst (AgFirst or the Bank) in the form of Class B or Class C stock as determined by the Bank. The Bank may require additional capital contributions to maintain its capital requirements. The Association owned 8.08 percent of the issued stock of the Bank as of March 31, 2019 net of any reciprocal investment. As of that date, the Bank's assets totaled \$32.7 billion and shareholders' equity totaled \$2.3 billion. The Bank's earnings were \$67 million for the first three months of 2019. In addition, the Association held investments of \$444 related to other Farm Credit institutions.

Note 4 — Debt

Notes Payable to AgFirst Farm Credit Bank

The Association's indebtedness to the Bank represents borrowings by the Association to fund its earning assets. This indebtedness is collateralized by a pledge of substantially all of the Association's assets. The contractual terms of the revolving line of credit are contained in the General Financing Agreement (GFA). The GFA also defines Association performance criteria for borrowing from the Bank, which includes borrowing base margin, earnings and capital covenants, among others.

Note 5 — Fair Value Measurement

Fair value is defined 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.

Accounting guidance establishes a hierarchy for disclosure of fair value measurements to maximize the use of observable inputs, that is, inputs that reflect the assumptions market participants would use in pricing an asset or liability based on market data obtained from sources independent of the reporting entity. The hierarchy is based upon the transparency of inputs to the valuation of an asset or liability as of the measurement date. A financial instrument's categorization within the hierarchy tiers is based upon the lowest level of input that is significant to the fair value measurement.

The classifications within the fair value hierarchy are as follows:

Level 1 inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets.

Level 2 inputs include quoted prices for similar assets and liabilities in active markets; quoted prices in markets that are not active; and inputs that are observable, or can be corroborated, for substantially the full term of the asset or liability.

Level 3 inputs are unobservable and supported by little or no market activity. Valuation is determined using pricing models, discounted cash flow methodologies, or similar techniques, and could include significant management judgment or estimation. Level 3 assets and liabilities also could include instruments whose price has been adjusted based on dealer quoted pricing that is different than the third-party valuation or internal model pricing.

For a complete discussion of the inputs and other assumptions considered in assigning various assets and liabilities to the fair value hierarchy levels, see the latest Annual Report to Shareholders.

There were no Level 3 assets or liabilities measured at fair value on a recurring basis for the periods presented. The Association had no transfers of assets or liabilities into or out of Level 1 or Level 2 during the periods presented.

Fair values are estimated at each period end date for assets and liabilities measured at fair value on a recurring basis. Other Financial Instruments are not measured at fair value in the statement of financial position, but their fair values are estimated as of each period end date. The following tables summarize the carrying amounts of these assets and liabilities at period end, and their related fair values.

		March 31, 2019				
		Total Carrying Amount	Level 1	Level 2	Level 3	Total Fair Value
Recurring Measurements						
Assets:						
Assets held in trust funds	\$	117	\$ 117	\$ –	\$ –	\$ 117
Recurring Assets	\$	117	\$ 117	\$ –	\$ –	\$ 117
Liabilities:						
Recurring Liabilities	\$	–	\$ –	\$ –	\$ –	\$ –
Nonrecurring Measurements						
Assets:						
Impaired loans	\$	1,829	\$ –	\$ –	\$ 1,829	\$ 1,829
Other property owned	–	–	–	–	–	–
Nonrecurring Assets	\$	1,829	\$ –	\$ –	\$ 1,829	\$ 1,829
Other Financial Instruments						
Assets:						
Cash	\$	5,172	\$ 5,172	\$ –	\$ –	\$ 5,172
Investments in debt securities, held-to-maturity	10,378	–	–	10,880	10,880	10,880
Loans	1,910,545	–	–	1,873,644	1,873,644	1,873,644
Other Financial Assets	\$	1,926,095	\$ 5,172	\$ –	\$ 1,884,524	\$ 1,889,696
Liabilities:						
Notes payable to AgFirst Farm Credit Bank	\$	1,601,210	\$ –	\$ –	\$ 1,577,427	\$ 1,577,427
Other Financial Liabilities	\$	1,601,210	\$ –	\$ –	\$ 1,577,427	\$ 1,577,427
		December 31, 2018				
		Total Carrying Amount	Level 1	Level 2	Level 3	Total Fair Value
Recurring Measurements						
Assets:						
Assets held in trust funds	\$	81	\$ 81	\$ –	\$ –	\$ 81
Recurring Assets	\$	81	\$ 81	\$ –	\$ –	\$ 81
Liabilities:						
Recurring Liabilities	\$	–	\$ –	\$ –	\$ –	\$ –
Nonrecurring Measurements						
Assets:						
Impaired loans	\$	1,660	\$ –	\$ –	\$ 1,660	\$ 1,660
Other property owned	–	–	–	–	–	–
Nonrecurring Assets	\$	1,660	\$ –	\$ –	\$ 1,660	\$ 1,660
Other Financial Instruments						
Assets:						
Cash	\$	7,950	\$ 7,950	\$ –	\$ –	\$ 7,950
Investments in debt securities, held-to-maturity	10,594	–	–	10,942	10,942	10,942
Loans	1,947,674	–	–	1,890,840	1,890,840	1,890,840
Other Financial Assets	\$	1,966,218	\$ 7,950	\$ –	\$ 1,901,782	\$ 1,909,732
Liabilities:						
Notes payable to AgFirst Farm Credit Bank	\$	1,673,338	\$ –	\$ –	\$ 1,629,824	\$ 1,629,824
Other Financial Liabilities	\$	1,673,338	\$ –	\$ –	\$ 1,629,824	\$ 1,629,824

SENSITIVITY TO CHANGES IN SIGNIFICANT UNOBSERVABLE INPUTS

Discounted cash flow or similar modeling techniques are generally used to determine the recurring fair value measurements for Level 3 assets and liabilities. Use of these techniques requires determination of relevant inputs and assumptions, some of which represent significant unobservable inputs as indicated in the tables that follow. Accordingly, changes in these unobservable inputs may have a significant impact on fair value.

Certain of these unobservable inputs will (in isolation) have a directionally consistent impact on the fair value of the instrument for a given change in that input. Alternatively, the fair value of the instrument may move in an opposite direction for a given change in another input. Where multiple inputs are used within the valuation technique of an asset or liability, a change in one input in a certain direction may be offset by an opposite change in another input having a potentially muted impact to the overall fair value of that particular instrument. Additionally, a change in one unobservable input may result in a change to another unobservable input (that is, changes in

certain inputs are interrelated with one another), which may counteract or magnify the fair value impact.

Investments in Debt Securities

The fair values of predominantly all Level 3 investments in debt securities have consistent inputs, valuation techniques and correlation to changes in underlying inputs. The models used to determine fair value for these instruments use certain significant unobservable inputs within a discounted cash flow or market comparable pricing valuation technique. Such inputs generally include discount rate components including risk premiums, prepayment estimates, default estimates and loss severities. These Level 3 assets would decrease (increase) in value based upon an increase (decrease) in discount rates, defaults, or loss severities. Conversely, the fair value of these assets would generally increase (decrease) in value if the prepayment input were to increase (decrease).

Generally, a change in the assumption used for defaults is accompanied by a directionally similar change in the risk premium component of the discount rate (specifically, the portion related to credit risk) and a directionally opposite change in the assumption used for prepayments. Unobservable

inputs for loss severities do not normally increase or decrease based on movements in the other significant unobservable inputs for these Level 3 assets.

Inputs to Valuation Techniques

Management determines the Association’s valuation policies and procedures. The Bank performs the majority of the Association’s valuations, and its valuation processes are calibrated annually by an independent consultant. The fair value measurements are analyzed on a quarterly basis. For other valuations, documentation is obtained for third party information, such as pricing, and periodically evaluated alongside internal information and pricing that is available.

Quoted market prices are generally not available for the instruments presented. Accordingly, fair values are based on judgments regarding anticipated cash flows, future expected loss experience, current economic conditions, risk characteristics of various financial instruments, and other factors. These estimates involve uncertainties and matters of judgment, and therefore cannot be determined with precision. Changes in assumptions could significantly affect the estimates.

Quantitative Information about Recurring and Nonrecurring Level 3 Fair Value Measurements

	Fair Value	Valuation Technique(s)	Unobservable Input	Range
Impaired loans and other property owned	\$ 1,829	Appraisal	Income and expense Comparable sales Replacement cost Comparability adjustments	* * * *

* Ranges for this type of input are not useful because each collateral property is unique.

Information about Other Financial Instrument Fair Value Measurements

	Valuation Technique(s)	Input
Cash	Carrying Value	Par/Principal and appropriate interest yield
Loans	Discounted cash flow	Prepayment forecasts Probability of default Loss severity
Investments in debt securities, held-to-maturity	Discounted cash flow	Prepayment rates Risk-adjusted spread
Notes payable to AgFirst Farm Credit Bank	Discounted cash flow	Prepayment forecasts Probability of default Loss severity

Note 6 — Employee Benefit Plans

The following is a table of retirement and other postretirement benefit expenses for the Association:

	Three Months Ended March 31,	
	2019	2018
Pension	\$ 306	\$ 577
401(k)	186	172
Other postretirement benefits	49	51
Total	\$ 541	\$ 800

The following is a table of retirement and other postretirement benefit contributions for the Association:

	Actual YTD Through 3/31/19	Projected Contributions For Remainder of 2019	Projected Total Contributions 2019
Pension	\$ —	\$ 1,225	\$ 1,225
Other postretirement benefits	49	144	193
Total	\$ 49	\$ 1,369	\$ 1,418

Contributions in the above table include allocated estimates of funding for multi-employer plans in which the Association participates. These amounts may change when a total funding amount and allocation is determined by the respective Plan’s Sponsor Committee. Also, market conditions could impact

discount rates and return on plan assets which could change contributions necessary before the next plan measurement date of December 31, 2019.

Further details regarding employee benefit plans are contained in the 2018 Annual Report to Shareholders.

Note 7 — Commitments and Contingent Liabilities

From time to time, legal actions are pending against the Association in which claims for money damages are asserted. On at least a quarterly basis, the Association assesses its liabilities and contingencies in connection with outstanding legal proceedings utilizing the latest information available. While the outcome of legal proceedings is inherently uncertain, on the basis of information presently available, management, after consultation with legal counsel, is of the opinion that the ultimate liability, if any, from these actions, would not be material in relation to the financial position of the Association. Because it is not probable that the Association will incur a loss or the loss is not estimable, no liability has been recorded for any claims that may be pending.

Note 8 — Subsequent Events

The Association evaluated subsequent events and determined there were none requiring disclosure through May 9, 2019, which was the date the financial statements were issued.