# 2018
ANNUAL REPORT

# CENTRAL KENTUCKY AGRICULTURAL CREDIT ASSOCIATION

# 2018 ANNUAL REPORT

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## Management

James W. Caldwell....President and Chief Executive Officer
Marcus G. Barnett....Vice President and Chief Financial Officer
Jonathan T. Noe....Vice President and Chief Lending Officer
Shane Turner....Vice President and Chief Risk Officer

## Board of Directors

James Alvin Lyons....Chairman
James C. Rankin III....Vice Chairman
James L. May....Director
Joe Myers....Director
Lee Hood....Director
Mary-Lynn Hinkel....Director
Dan Grigson....Director

# *Message from the President*

## CONSISTENCY

Increasingly, we live in a world that seems to be dominated by extremes. In our 24/7 news cycle, we are constantly bombarded with stories of the worst economy or the best economy, the greatest of all time or the worst ever. Even our weather forecasts routinely tout the hottest, coldest, driest or wettest conditions. We watch the "top 10" plays of the day – followed closely by the "not top 10" plays. Extremes on both ends. In Washington and in Frankfort, we have seen the divide between ideologies widen, with both sides entrenching deeper into their corners and few in the middle. In many circles, it can be argued that the middle has disappeared. With our constant connectivity, to attract attention (and audience) every story needs the tagline of the first or the best or the record. It happens so often, people sometimes don't pay attention when a significant event actually does happen.

In our part of the world, we have experienced such an extreme event in 2018 as record rainfall impacted the central Kentucky region. In Lexington, rainfall of over 70 inches for the year set a new record (and some people reported even more). According to WKYT News, "that's over two feet of precipitation above our normal 44 inches for the year!" I had discussions with farmers who saw yields in 2018 they hadn't seen since the drought of 1983. I remember 1983 as the most severe weather event of my career. To have 2018 rival that event brings reality to the old saying that "a dry year will scare you, but a wet year can break you." The record rainfall impacted tobacco yields, limited our ability to harvest corn and soybeans, reduced hay production and quality. And then there's the mud our cattle producers faced during the winter feeding months. In other words, the record rainfall touched every aspect of central Kentucky agriculture. In this environment, we find ourselves looking for consistency in the midst of extremes.

Severe weather is nothing new to agriculture or unique to Kentucky. The Carolinas recently experienced their second major weather event as Hurricane Florence swept through with flooding and record rainfall. Here is where the consistency comes in. In spite of the severity of the situation, in Kentucky or Carolina, the Farm Credit System stands with the farmers through extreme conditions.

One small example of this was the *Ag Credit Cares* effort in providing relief to Hurricane Florence victims. Joining Farm Credit associations from across the country, Central Kentucky Ag Credit sent volunteers or funds to help families get back into their homes. From Central Kentucky, four employees traveled to South Carolina and spent a week helping with the cleanup. That's what a dependable, consistent partner does. They are there in good and bad times.

Agriculture has more than its share of ups and downs. The entire industry, including our most widespread enterprise – beef, operates in cycles. The consistent financial partner is there for you through these ups and downs. While other lenders come and go with the swings of fortune, Ag Credit is there for you during the entire cycle, including these difficult periods. Our goal is to operate the association in a sound and efficient manner so we can survive the cycles, the extremes. When we do that, as the cooperative lending arm of your operation, together we are able to weather the storms.

The 2018 financial reports of the association reflect another strong year. In doing so, we are demonstrating our ability to withstand the downturn and consistently deliver the funding you need at the farms level. As a cooperative, our operation is the financial arm of your farming operation and we can be part of your diversified plan to withstand the extremes. By providing consistent, year-after-year performance, we can be the lending partner you depend on through the down cycle while continuing to provide the patronage distributions that reduce your cost of borrowing.

Central Kentucky Ag Credit has a mission to serve agriculture and rural communities. This mission reflects our dedication in good times and bad. The Annual Report is a reflection of a cooperative institution fulfilling its mission by consistently delivering high quality services in an efficient manner – even in extreme times. With our local ties, traditional lending model and over 20 year track record of patronage distributions, we strive to be the model of consistency that you can depend on, even in the hottest, coldest, driest or wettest of conditions.

James W. Caldwell
Chief Executive Officer

March 13, 2019

# Report of Management

The accompanying consolidated financial statements and related financial information appearing throughout this annual report have been prepared by management of Central Kentucky Agricultural Credit Association Association) in accordance with generally accepted accounting principles appropriate in the circumstances. Amounts which must be based on estimates represent the best estimates and judgments of management. Management is responsible for the integrity, objectivity, consistency, and fair presentation of the consolidated financial statements and financial information contained in this report.

Management maintains and depends upon an internal accounting control system designed to provide reasonable assurance that transactions are properly authorized and recorded, that the financial records are reliable as the basis for the preparation of all financial statements, and that the assets of the Association are safeguarded. The design and implementation of all systems of internal control are based on judgments required to evaluate the costs of controls in relation to the expected benefits and to determine the appropriate balance between these costs and benefits. The Association maintains an internal audit program to monitor compliance with the systems of internal accounting control. Audits of the accounting records, accounting systems and internal controls are performed and internal audit reports, including appropriate recommendations for improvement, are submitted to the Board of Directors.

The consolidated financial statements have been audited by independent auditors, whose report appears elsewhere in this annual report. The Association is also subject to examination by the Farm Credit Administration.

The consolidated financial statements, in the opinion of management, fairly present the financial condition of the Association. The undersigned certify that we have reviewed the 2018 Annual Report of Central Kentucky 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.

James Alvin Lyons
Chairman of the Board

James W. Caldwell
Chief Executive Officer

Marcus G. Barnett
Chief Financial Officer

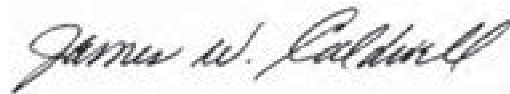
March 13, 2019

# 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 December 31, 2018. 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 December 31, 2018, the internal control over financial reporting was effective based upon the COSO criteria. Additionally, based on this assessment, the Association determined that there were no material weaknesses in the internal control over financial reporting as of December 31, 2018.



James W. Caldwell
Chief Executive Officer

Marcus G. Barnett
Chief Financial Officer

March 13, 2019

# Consolidated Five - Year Summary of Selected Financial Data

| *(dollars in thousands)* | **2018** | **2017** | **December 31,** **2016** | **2015** | **2014** |
|---|---|---|---|---|---|
| **Balance Sheet Data** | | | | | |
| Cash | **$ 3,046** | $ 2,028 | $ 1,605 | $ 1,250 | $ 1,289 |
| Loans | **513,045** | 471,730 | 426,095 | 407,863 | 382,146 |
| Allowance for loan losses | **4,277)** | 4,037) | 3,695) | 3,771) | 3,892) |
| Net loans | **508,768** | 467,693 | 422,400 | 404,092 | 378,254 |
| Equity investments in other Farm Credit institutions | **7,099** | 7,117 | 7,113 | 7,079 | 7,045 |
| Other property owned | **—** | 8 | 8 | — | 640 |
| Other assets | **16,924** | 16,341 | 17,219 | 15,241 | 15,123 |
| Total assets | **$ 535,837** | $ 493,187 | $ 448,345 | $ 427,662 | $ 402,351 |
| Notes payable to AgFirst Farm Credit Bank* | **$ 441,115** | $ 406,457 | $ 368,038 | $ 353,034 | $ 334,747 |
| Accrued interest payable and other liabilities with maturities of less than one year | **6,996** | 6,695 | 7,278 | 6,519 | 6,211 |
| Total liabilities | **448,111** | 413,152 | 375,316 | 359,553 | 340,958 |
| Capital stock and participation certificates | **4,225** | 4,698 | 4,993 | 6,784 | 6,744 |
| Retained earnings | | | | | |
| Allocated | **61,064** | 54,453 | 48,344 | 42,801 | 37,362 |
| Unallocated | **22,437** | 20,884 | 19,692 | 18,524 | 17,287 |
| Total members equity | **87,726** | 80,035 | 73,029 | 68,109 | 61,393 |
| Total liabilities and members' equity | **$ 535,837** | $ 493,187 | $ 448,345 | $ 427,662 | $ 402,351 |
| **Statement of Income Data** | | | | | |
| Net interest income | **$ 12,600** | $ 11,560 | $ 11,096 | $ 10,555 | $ 10,125 |
| Provision for (reversal of allowance for) loan losses | **500** | 350 | 50) | 35) | 350 |
| Noninterest income (expense), net | **108** | 317) | 1,309) | 1,295) | 125) |
| Net income | **$ 12,208** | $ 10,893 | $ 9,837 | $ 9,295 | $ 9,650 |
| **Key Financial Ratios** | | | | | |
| Rate of return on average: | | | | | |
| Total assets | **2.41%** | 2.36% | 2.27% | 2.30% | 2.51% |
| Total members equity | **14.41%** | 14.14% | 13.81% | 14.21% | 16.43% |
| Net interest income as a percentage of average earning assets | **2.57%** | 2.59% | 2.66% | 2.71% | 2.74% |
| Net (chargeoffs) recoveries to average loans | **0.053)%** | 0.002)% | 0.006)% | 0.022)% | 0.014)% |
| Total members' equity to total assets | **16.37%** | 16.23% | 16.29% | 15.93% | 15.26% |
| Debt to members equity (:1) | **5.11** | 5.16 | 5.14 | 5.28 | 5.55 |
| Allowance for loan losses to loans | **0.83%** | 0.86% | 0.87% | 0.92% | 1.02% |
| Permanent capital ratio | **17.45%** | 16.91% | 17.79% | 17.58% | 16.85% |
| Total surplus ratio | | | 16.96% | 16.28% | 15.54% |
| Core surplus ratio | | | 16.96% | 16.28% | 15.54% |
| Common equity tier 1 capital ratio | **17.23%** | 16.66% | | | |
| Tier 1 capital ratio | **17.23%** | 16.66% | | | |
| Total regulatory capital ratio | **18.12%** | 17.54% | | | |
| Tier 1 leverage ratio | **15.08%** | 14.63% | | | |
| Unallocated retained earnings (URE) and URE equivalents leverage ratio | **14.73%** | 14.29% | | | |
| **Net Income Distribution** | | | | | |
| Estimated patronage refunds: | | | | | |
| Cash | **$ 4,040** | $ 3,590 | $ 3,105 | $ 2,617 | $ 2,833 |
| Nonqualified retained earnings | **6,591** | 6,112 | 5,766 | 5,561 | 6,021 |

** General financing agreement is renewable on a one-year cycle. The next renewal date is December 31, 2019.*
*** Not applicable due to changes in regulatory capital requirements effective January 1, 2017.*

# Management's Discussion & Analysis of Financial Condition & Results of Operations

*(dollars in thousands, except as noted)*

## GENERAL OVERVIEW

The following commentary summarizes the financial condition and results of operations of Central Kentucky Agricultural Credit Association (Association) for the year ended December 31, 2018 with comparisons to the years ended December 31, 2017 and December 31, 2016. This information should be read in conjunction with the Consolidated Financial Statements, Notes to the Consolidated Financial Statements and other sections in this Annual Report. The accompanying consolidated financial statements were prepared under the oversight of the Audit Committee of the Board of Directors. For a list of the Audit Committee members, refer to the "Report of the Audit Committee" reflected in this Annual Report. Information in any part of this Annual Report may be incorporated by reference in answer or partial answer to any other item of the Annual Report.

The Association is an institution of the Farm Credit System (System), which was created by Congress in 1916 and has served agricultural producers for over 100 years. The System's mission is to maintain and improve the income and well-being of American farmers, ranchers, and producers or harvesters of aquatic products and farm-related businesses. The System is the largest agricultural lending organization in the United States. The System is regulated by the Farm Credit Administration, (FCA), which is an independent safety and soundness regulator.

The Association is a cooperative, which is owned by the members (also referred to throughout this Annual Report as stockholders or shareholders) served. The territory of the Association extends across a diverse agricultural region of Kentucky. Refer to Note 1, *Organization and Operations*, of the Notes to the Consolidated Financial Statements for counties in the Association's territory. The Association provides credit to farmers, ranchers, rural residents, and agribusinesses. Our success begins with our extensive agricultural experience and knowledge of the market.

The Association obtains funding from AgFirst Farm Credit Bank (AgFirst or Bank). The Association is materially affected and shareholder investment in the Association may be materially affected by the financial condition and results of operations of the Bank. Copies of the Bank's Annual and Unaudited Quarterly Reports are on the AgFirst website, ***www.agfirst.com,*** or may be obtained at no charge by calling 1-800-845-1745, extension 2832, or writing Susanne Caughman, AgFirst Farm Credit Bank, P. O. Box 1499, Columbia, SC 29202.

Copies of the Association's Annual and Unaudited Quarterly reports are also available upon request free of charge on the Association's website, ***www.agcreditonline.com***, or by calling 1-859-253-3249, extension 607, or writing Marcus G. Barnett, Central Kentucky Agricultural Credit Association, P. O. Box 1290, Lexington, KY 40588-1290. The Association prepares an electronic version of the Annual Report, which is available on the website, within 75 days after the end of the fiscal year and distributes the Annual Reports to shareholders within 90 days after the end of the fiscal year. The Association prepares an electronic version of the Quarterly report, which is available on the internet, within 40 days after the end of each fiscal quarter, except that no report needs to be prepared for the fiscal quarter that coincides with the end of the fiscal year of the Association.

## FORWARD LOOKING INFORMATION

This annual information statement 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 and economic conditions and developments in the United States and abroad;
- economic fluctuations in the agricultural, rural utility, international, and farm-related business sectors;
- weather-related, disease, and other adverse climatic or biological conditions that periodically occur that impact agricultural productivity and income;
- changes in United States government support of the agricultural industry and the Farm Credit System, as a government-sponsored enterprise, as well as investor and rating-agency reactions to events involving other government-sponsored enterprises and other financial institutions; and
- actions taken by the Federal Reserve System in implementing monetary policy.

## CRITICAL ACCOUNTING POLICIES

The financial statements are reported in conformity with accounting principles generally accepted 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 must make judgments about matters that

are inherently uncertain. For a complete discussion of significant accounting policies, see Note 2, *Summary of Significant Accounting Policies*, of the Notes to the Consolidated Financial Statements. The following is a summary of certain critical policies.

- *Allowance for loan losses* — The allowance for loan losses is maintained at a level considered adequate by management to provide for probable and estimable losses inherent in the loan portfolio. The allowance for loan losses is increased through provisions for loan losses and loan recoveries and is decreased through allowance reversals and loan charge-offs. The allowance for loan losses is determined according to generally accepted accounting principles and is based on a periodic evaluation of the loan portfolio by management in which numerous factors are considered, including current production and economic conditions, loan portfolio composition, collateral value, portfolio quality and prior loan loss experience.

  Significant individual loans are 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. The allowance for loan losses encompasses various judgments, evaluations and appraisals with respect to the loans and their underlying security that, by nature, contains elements of uncertainty and imprecision. Changes in the agricultural economy and their borrower repayment capacity will cause these various judgments, evaluations and appraisals to change over time. Accordingly, actual circumstances could vary from the Association's expectations and predictions of those circumstances.

  Management considers the following factors in determining and supporting the levels of allowance for loan losses: the concentration of lending in agriculture, combined with uncertainties in farmland values, commodity prices, exports, government assistance programs, regional economic effects and weather-related influences. Changes in the factors considered by management in the evaluation of losses in the loan portfolios could result in a change in the allowance for loan losses and could have a direct impact on the provision for loan losses and the results of operations.

- *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 referred to when estimating fair values for certain assets for which an observable liquid market exists, such as most investment securities. Management utilizes significant estimates and assumptions to value items for which an observable liquid market does not exist. Examples of these items include impaired loans, other property owned, pension and other postretirement benefit obligations, and certain other financial instruments. These valuations require the use of various assumptions, including, among others, discount rates, rates of return on assets, 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 Association's results of operations.

**ECONOMIC CONDITIONS**

The agricultural economy of the territory serviced by the Association is very diverse. It is comprised of a significant beef concentration, as well as equine and grain. The cattle industry has begun seeing a leveling off of prices since the market decline in late 2015 and early 2016. 2019 prices look to be fairly flat for the near term as present supply and demand appears to be in balance. The beef outlook is still somewhat guarded. The equine market has seen considerable improvement over the last couple of years. Recent horse sales in the area have been much stronger, and it appears that this has positively affected the equine real estate market as well. The equine market could be characterized as steady to improving. The grain market continues to be dealing with a very large surplus, which is driving demand and prices down. Other than a weather event or some other event that significantly decreases production, it seems unlikely that an increase in prices is on the horizon for the near future. Overall, the market outlook continues to be uncertain.

Farm size varies and many borrowers in the region have diversified farming operations. This factor, along with numerous opportunities for non-farm employment in the area, significantly impacts the level of dependency on any given commodity. Farm real estate values are mixed with some indication that the market is tightening.

The Association's primary competition continues to come from several banks and one System institution. There has been little change in our market base over the past year. During 2018, the Association targeted certain areas of our business with hopes of increasing market share. Continued efforts are being made to expand services, increase public knowledge of our services and streamline our current delivery of products to enhance our existing portfolio.

## 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 diversification of the Association loan volume by type for each of the past three years is shown below.

| Loan Type | December 31, 2018 | | 2017 | | 2016 | |
|---|---|---|---|---|---|---|
| | *(dollars in thousands)* | | | | | |
| Real estate mortgage | $ 331,734 | 64.66 % | $ 300,833 | 63.77 % | $ 268,880 | 63.10% |
| Production and intermediate-term | 165,054 | 32.17 | 156,798 | 33.24 | 147,903 | 34.71 |
| Rural residential real estate | 8,550 | 1.67 | 8,111 | 1.72 | 7,838 | 1.84 |
| Processing and marketing | 1,114 | 0.22 | 1,168 | 0.25 | 1,053 | 0.25 |
| Farm-related business | 6,593 | 1.28 | 4,820 | 1.02 | 421 | 0.10 |
| Loans to cooperatives | – | – | – | – | – | – |
| Total | $ 513,045 | 100.00 % | $ 471,730 | 100.00 % | $ 426,095 | 100.00 |

While we make loans and provide financial related services to qualified borrowers in the agricultural and rural sectors and to certain related entities, our loan portfolio is diversified.

The geographic distribution of the loan volume by branch/operating unit for the past three years is as follows:

| Branch/Operating Unit | December 31, 2018 | 2017 | 2016 |
|---|---|---|---|
| Lebanon | 26.65% | 26.71% | 26.19% |
| Lexington | 20.20 | 21.08 | 19.88 |
| Paris | 15.85 | 15.35 | 16.45 |
| Danville | 14.47 | 13.84 | 13.63 |
| Stanford | 10.66 | 11.13 | 12.20 |
| Richmond | 8.27 | 8.45 | 8.49 |
| Frankfort | 3.71 | 3.23 | 2.96 |
| Participations Purchased | 0.19 | 0.21 | 0.20 |
| | 100.00% | 100.00% | 100.00% |

Commodity and industry categories are based upon the Standard Industrial Classification system published by the federal government. The system is used to assign commodity or industry categories based upon the largest agricultural commodity of the customer.

The major commodities in the Association loan portfolio are shown below. The predominant commodities are beef cattle, horses, row crops, and hay/pasture, which constitute approximately 83 percent of the entire portfolio.

| Commodity Group | December 31, 2018 | | 2017 | | 2016 | |
|---|---|---|---|---|---|---|
| | *(dollars in thousands)* | | | | | |
| Beef Cattle | $ 236,067 | 46% | $ 222,018 | 47% | $ 202,749 | 48% |
| Horses | 76,589 | 15 | 67,458 | 14 | 65,673 | 15 |
| Row Crops | 70,235 | 14 | 43,782 | 9 | 47,564 | 11 |
| Hay/Pasture | 41,826 | 8 | 40,063 | 9 | 33,084 | 8 |
| Tobacco | 28,958 | 6 | 30,569 | 6 | 30,729 | 7 |
| Ag Services | 16,333 | 3 | 14,237 | 3 | 8,506 | 2 |
| Rural Home | 8,500 | 2 | 8,515 | 2 | 8,554 | 2 |
| Dairy | 6,025 | 1 | 8,627 | 2 | 10,683 | 3 |
| Other | 28,512 | 5 | 36,461 | 8 | 18,553 | 4 |
| Total | $ 513,045 | 100% | $ 471,730 | 100% | $ 426,095 | 100% |

Repayment ability is closely related to the commodities produced by our borrowers, and increasingly, the off-farm income of borrowers. The Association's loan portfolio contains a concentration of beef cattle and horse producers. Although a large percentage of the loan portfolio is concentrated in these commodities, many of these operations are diversified within their enterprise and/or with crop production that reduces overall risk exposure. Demand for beef, prices of field grains, and international trade are some of the factors affecting the price of these commodities. At December 31, 2018, the Association's total commitments to its ten largest borrowers was $41,177, representing 8.03 percent of total loans. The concentration of large loans has increased somewhat over the past several years. The agricultural enterprise mix of these loans however is diversified and similar to that of the overall portfolio. The risk in the portfolio associated with commodity concentration and large loans is reduced by the range of diversity of enterprises in the Association's territory, the borrowers' ability to supplement borrowings with non-farm income, and the level of guarantees obtained on the portfolio.

The increase in gross loan volume for the twelve months ended December 31, 2018, is primarily attributed to increases in farm real estate loans. The Association has attracted some large real estate loans over the past few years in addition to normal business. The short-term portfolio, which is heavily influenced by operating-type loans, normally reaches a peak balance in November and declines in the winter months as commodities are marketed and proceeds are applied to repay the operating loans.

During 2018, the Association continued activity in the selling of loan participations within and outside of the System. This provides a means for the Association to spread credit concentration risk.

The main commodity type in the Participations Purchased portfolio is prepared feeds which accounts for 100% of the portfolio. While these participations help spread total portfolio concentration, they also possess unique risks that include exposure to general economic trends, changes in government policy and counterparty risk. The Association manages this risk through routine monitoring, borrowing base reporting and policy driven portfolio limits. Counterparty risks on the entire Participations Purchased portfolio are reduced by the inclusion of System institutions as the lead lender in 100% of the portfolio.

| Loan Participations: | December 31, 2018 | 2017 | 2016 |
|---|---|---|---|
| | *(dollars in thousands)* | | |
| Participations Purchased – FCS Institutions | $ 993 | $ 1,010 | $ 860 |
| Participations Sold | (40,331) | (32,511) | (34,218) |
| Total | $ (39,338) | $ (31,501) | $ (33,358) |

The Association did not have any loans sold with recourse, retained subordinated participation interests in loans sold, or interests in pools of subordinated participation interests for the period ended December 31, 2018.

The Association sells qualified long-term mortgage loans into the secondary market. For the period ended December 31, 2018, the Association originated and sold into the secondary market loans totaling $12,964.

To mitigate risk of loan losses, the Association may enter into guarantee arrangements with certain GSEs, including the Federal Agricultural Mortgage Corporation (Farmer Mac), and state or federal agencies. These guarantees generally remain in place until the loans are paid in full or expire and give the Association the right to be reimbursed for losses incurred or to sell designated loans to the guarantor in the event of default (typically four months past due), subject to certain conditions. At December 31, 2018, the guaranteed balance of designated loans under these agreements was $85,832.

## CREDIT RISK MANAGEMENT

Credit risk arises from the potential inability of an obligor to meet its repayment obligation. As part of the process to evaluate the success of a loan, the Association continues to review the credit quality of the loan portfolio on an ongoing basis. With the approval of the Association Board of Directors, the Association establishes underwriting standards and lending policies 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 – protection for the lender in the event of default and a potential secondary source of repayment
- Capital – ability of the operation to survive unanticipated risks
- Conditions – intended use of the loan funds

The 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 upon cash flows from operations or other sources of income, including non-farm income. Real estate loans must be collateralized by first liens on the real estate (collateral). As required by FCA regulations, each institution that makes loans on a collateralized basis must have collateral evaluation policies and procedures. Real estate mortgage loans may be made only in amounts up to 85 percent of the original appraised value of the property taken as collateral or up to 97 percent 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 one hundred thousand dollars. In addition, each loan is assigned a credit risk rating based upon the underwriting standards. This credit risk rating process incorporates objective and subjective criteria to identify inherent strengths, weaknesses, and risks in a particular relationship.

We review the credit quality of the loan portfolio on an ongoing basis as part of our risk management practices. Each loan is classified according to the Uniform Classification System, which is used by all Farm Credit System institutions. Below are the classification definitions.

- 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, and/or collateral pledged on the loan.
- Doubtful – Assets exhibit similar weaknesses to substandard assets. However, doubtful assets have additional weaknesses in existing facts, conditions and values that make collection in full highly questionable.
- Loss – Assets are considered uncollectible.

The following table presents selected statistics related to the credit quality of loans including accrued interest at December 31.

| Credit Quality | 2018 | 2017 | 2016 |
|---|---|---|---|
| Acceptable & OAEM | 98.63% | 97.32% | 98.00% |
| Substandard | 1.36% | 2.65% | 1.99% |
| Doubtful | 0.01% | 0.03% | 0.01% |
| Loss | 0.00% | 0.00% | 0.00% |
| Total | 100.00% | 100.00% | 100.00% |

*Nonperforming Assets*

The Association's loan portfolio is divided into performing and high-risk categories. The Administrative Office Credit Department monitors and works with loans classified as high-risk. The high-risk assets, including accrued interest, are detailed in the following table:

| | December 31, | | |
|---|---|---|---|
| High-risk Assets | 2018 | 2017 | 2016 |
| | (dollars in thousands) | | |
| Nonaccrual loans | $ 2,967 | $ 1,703 | $ 2,045 |
| Restructured loans | 1,136 | 1,242 | 1,280 |
| Accruing loans 90 days past due | 695 | 20 | – |
| Total high-risk loans | 4,798 | 2,965 | 3,325 |
| Other property owned | – | 8 | 8 |
| Total high-risk assets | $ 4,798 | $ 2,973 | $ 3,333 |
| **Ratios** | | | |
| Nonaccrual loans to total loans | 0.58% | 0.36% | 0.48% |
| High-risk assets to total assets | 0.90% | 0.60% | 0.74% |

Nonaccrual loans represent all loans where there is a reasonable doubt as to the full collection of principal and/or future interest accruals under the contractual terms of the loan. In substance, nonaccrual loans reflect loans where the accrual of interest has been suspended. Nonaccrual loans increased $1,264 or 74.22 percent in 2018. This increase resulted primarily from the placing of one larger loan into nonaccrual status. Of the $2,967 in nonaccrual volume at December 31, 2018, $510 or 17.21 percent, compared to 41.16 percent and 45.71 percent at December 31, 2017 and 2016, respectively, was current as to scheduled principal and interest payments, but did not meet all regulatory requirements to be transferred into accrual status.

Loan restructuring is available to financially distressed borrowers. Restructuring of loans occurs when the Association grants a concession to a borrower based on either a court order or good faith in a borrower's ability to return to financial viability. The concessions can be in the form of a modification of terms or rates, a compromise of amounts owed, or deed in lieu of foreclosure. Other receipts of assets and/or equity to pay the loan in full or in part are also considered restructured loans. The type of alternative financing structure chosen is based on minimizing the loss incurred by both the Association and the borrower.

*Allowance for Loan Losses*

The allowance for loan losses at each period end was considered by Association management to be adequate to absorb probable losses existing in and inherent to its loan portfolio.

The following table presents the activity in the allowance for loan losses for the most recent three years.

| Allowance for Loan Losses Activity: | Year Ended December 31, 2018 | 2017 | 2016 |
|---|---|---|---|
| | *(dollars in thousands)* | | |
| Balance at beginning of year | $ 4,037 | $ 3,695 | $ 3,771 |
| Charge-offs: | | | |
| Production and intermediate-term | 263) | – | 26) |
| Rural residential real estate | – | 14) | – |
| Total charge-offs | 263) | 14) | 26) |
| Recoveries: | | | – |
| Production and intermediate-term | 3 | 6 | – |
| Total recoveries | 3 | 6 | – |
| Net (charge-offs) recoveries | 260) | 8) | 26) |
| Provision for (reversal of allowance for) loan losses | 500 | 350 | 50) |
| Balance at end of year | $ 4,277 | $ 4,037 | $ 3,695 |
| Ratio of net (charge-offs) recoveries during the period to average loans outstanding during the period | (0.053)% | (0.002)% | (0.006)% |

The net loan charge-offs were primarily associated with charge-offs taken on one loan account. The increase in the provision for loan losses was associated with an increase in the amount of loan reserves allocated to collectively evaluated loans.

The allowance for loan losses by loan type for the most recent three years is as follows.

| Allowance for Loan Losses by Type | December 31, 2018 | 2017 | 2016 |
|---|---|---|---|
| | *(dollars in thousands)* | | |
| Real estate mortgage | $ 3,114 | $ 2,466 | $ 2,308 |
| Production and intermediate-term | 1,068 | 1,460 | 1,296 |
| Agribusiness | 45 | 48 | 13 |
| Rural residential real estate | 50 | 63 | 78 |
| Total loans | $ 4,277 | $ 4,037 | $ 3,695 |

The allowance for loan losses as a percentage of loans outstanding and as a percentage of certain other credit quality indicators is shown below:

| Allowance for Loan Losses as a Percentage of: | December 31, 2018 | 2017 | 2016 |
|---|---|---|---|
| Total loans | 0.83% | 0.86% | 0.87% |
| Nonperforming loans | 89.14% | 136.20% | 111.13% |
| Nonaccrual loans | 144.15% | 237.05% | 180.68% |

Please refer to Note 3, *Loans and Allowance for Loan Losses*, of the Notes to the Consolidated Financial Statements, for further information concerning the allowance for loan losses.

## RESULTS OF OPERATIONS

*Net Interest Income*

Net interest income was $12,600, $11,560 and $11,096 in 2018, 2017 and 2016, respectively. Net interest income is the difference between interest income and interest expense. Net interest income is the principal source of earnings for the Association and is impacted by volume, yields on assets and cost of debt. The effects of changes in average volume and interest rates on net interest income over the past three years are presented in the following table:

| | Volume* | Rate | Total |
|---|---|---|---|
| **12/31/18 - 12/31/17** | | | |
| Interest income | $ 2,059 | $ 1,524 | $ 3,583 |
| Interest expense | (1,038) | (1,505) | (2,543) |
| Change in net interest income | $ 1,021 | $ 19 | $ 1,040 |
| **12/31/17 - 12/31/16** | | | |
| Interest income | $ 1,421 | $ 479 | $ 1,900 |
| Interest expense | 583) | 853) | 1,436) |
| Change in net interest income | $ 838 | $ 374) | $ 464 |

* *Volume variances can be the result of increased/decreased loan volume or from changes in the percentage composition of assets and liabilities between periods.*

*Noninterest Income*

Noninterest income for each of the three years ended December 31 is shown in the following table:

| Noninterest Income | For the Year Ended December 31, 2018 | 2017 | 2016 | Percentage Increase/(Decrease) 2018/2017 | 2017/2016 |
|---|---|---|---|---|---|
| | *(dollars in thousands)* | | | | |
| Loan fees | $ 696 | $ 620 | $ 591 | 12.26% | 4.91% |
| Patronage refund from other Farm Credit Institutions | 6,762 | 6,730 | 5,138 | 0.48 | 30.97 |
| Gains (losses) on sales of rural home loans | 9 | 11 | 9 | (18.18) | 22.22 |
| Gains (losses) from sales of premises and equipment, net | – | 6 | 5 | 100.00) | 20.00 |
| Other noninterest income | 45 | 34 | 17 | 32.35 | 105.88 |
| Total noninterest income | $ 7,972 | $ 7,401 | $ 5,760 | 7.72% | 28.49% |

Regarding patronage refunds received from other Farm Credit Institutions, the Association received $3,308 in a patronage refund and $3,454 in a special distribution from the Bank for the year ended December 31, 2018, compared to $3,045 and $3,662 for 2017, and $2,856 and $2,231 for 2016.

*Noninterest Expense*

Noninterest expense for each of the three years ended December 31 is shown in the following table:

| | For the Year Ended December 31, | | | Percentage Increase/(Decrease) | |
|---|---|---|---|---|---|
| **Noninterest Expense** | **2018** | **2017** | **2016** | **2018 2017** | **2017 2016** |
| | *(dollars in thousands)* | | | | |
| Salaries and employee benefits | $ 4,269 | $ 3,913 | $ 3,682 | 9.10% | 6.27% |
| Post retirement benefits | 1,267 | 1,432 | 1,169 | 11.52) | 22.50 |
| Occupancy and equipment expense | 366 | 353 | 316 | 3.68 | 11.71 |
| Insurance Fund premium | 317 | 483 | 515 | (34.37) | (6.21) |
| (Gains) losses on other property owned, net | 1) | – | 1 | (100.00) | 100.00) |
| Other operating expense | 1,642 | 1,525 | 1,439 | 7.67 | 5.98 |
| Total noninterest expense | $ 7,860 | $ 7,706 | $ 7,122 | 2.00% | 8.20% |

Salaries and employee benefits increased in 2018, as compared with 2017, primarily due to increased costs associated with additional staffing, merit increases and bonuses. Post retirement benefits decreased $165 or 11.52 percent in 2018 as compared with 2017. During 2017, the method of recording expenses for the Association's defined benefit pension plan and other postretirement benefit plan was modified. This change resulted in the reduction of Other Assets by $1,762 and the reduction of Other Liabilities by $1,467 on the Association's Balance Sheets, and a corresponding increase in postretirement benefit costs on the Association's Statements of Income of $295 during 2017. This change in method of recording defined benefit pension expenses, offset somewhat by an increase in regular pension expenses for 2018 represent the primary reasons for the decrease in post retirement benefits. Refer to Note 9, *Employee Benefit Plans,* of the Notes to the Consolidated Financial Statements, for further information concerning postretirement benefit expenses.

Occupancy and equipment expense increased $13 or 3.68 percent in 2018 as compared with 2017. This increase is primarily associated with increased maintenance and repairs on association property. Insurance Fund premiums decreased $166 or 34.37 percent for the twelve months ended December 31, 2018, compared to the same period of 2017 due primarily to a decrease in rates charged by the Farm Credit System Insurance Corporation (FCSIC). Other operating expenses increased $117 or 7.67 percent in 2018 as compared with 2017. The increase is primarily associated with an increase in guarantee fee expenses and travel expenses.

*Income Taxes*

The Association recorded a provision for income taxes of $4 for the year ended December 31, 2018, as compared to a benefit of $12 for 2017 and a provision of $53 for 2016. Refer to Note 2, *Summary of Significant Accounting Policies, Income Taxes*, of the Notes to the Consolidated Financial Statements, for more information concerning Association income taxes.

*Key Results of Operations Comparisons*

Key results of operations comparisons for each of the twelve months ended December 31 are shown in the following table:

| | For the 12 Months Ended | | |
|---|---|---|---|
| **Key Results of Operations Comparisons** | **12/31/18** | **12/31/17** | **12/31/16** |
| Return on average assets | 2.41% | 2.36% | 2.27% |
| Return on average members' equity | 14.41% | 14.14% | 13.81% |
| Net interest income as a percentage of average earning assets | 2.58% | 2.59% | 2.66% |
| Net (charge-offs) recoveries to average loans | (0.053)% | (0.002)% | (0.006)% |

The primary factors influencing the increases in return on average assets and return on members' equity were proportionately larger increases in association net earnings than the increase in assets and members' equity.

Key factors in the growth of net income for future years will be continued improvement in net interest and noninterest income along with a moderate increase in operating expenses and additional provisions made for loan losses. Our goal is to generate earnings sufficient to fund operations, adequately capitalize the Association, and achieve an adequate rate of return for our members. To meet this goal, the agricultural economy must continue to remain healthy and the Association must meet certain objectives. These objectives are to attract and maintain high quality loan volume priced at competitive rates and to manage credit risk in our entire portfolio, while efficiently meeting the credit needs of our members.

## LIQUIDITY AND FUNDING SOURCES

*Liquidity and Funding*

The principal source of funds for the Association is the borrowing relationship established with the Bank through a General Financing Agreement (GFA . The GFA utilizes the Association's credit and fiscal performance as criteria for establishing a line of credit on which the Association may draw funds. The Bank advances the funds to the Association, creating notes payable (or direct loans) to the Bank. The Bank manages interest rate risk through direct loan pricing and

asset/liability management. The notes payable are segmented into variable rate and fixed rate components. The variable rate note is utilized by the Association to fund variable rate loan advances and operating funds requirements. The fixed rate note is used specifically to fund fixed rate loan advances made by the Association. Association capital levels effectively create a borrowing margin between the amount of loans outstanding and the amount of notes payable outstanding. This margin is commonly referred to as "Loanable Funds." Interest rates on both variable and fixed rate notes payable are generally established loan-by-loan based on the Bank's marginal cost of funds, capital position, operating costs and return objectives. In the event of prepayment of any portion of a fixed rate advance, the Association may incur a prepayment penalty in accordance with the terms of the GFA, which will be included in interest expense. The interest rate is periodically adjusted by the Bank based upon an agreement between the Bank and the Association.

The weighted average interest rates on the variable rate notes were 3.40 percent for LIBOR-based loans, 3.49 percent for Prime-based loans, and the weighted average remaining maturities were 1.7 years and 1.7 years, respectively, at December 31, 2018. The weighted average interest rate on the fixed rate and adjustable rate mortgage (ARM) notes payable which are match funded by the Bank was 3.36 percent and the weighted average remaining maturity was 13.0 years at December 31, 2018. The weighted average interest rate on all interest-bearing notes payable was 3.37 percent and the weighted average remaining maturity was 11.2 years at December 31, 2018.

Variable rate and fixed rate notes payable represent approximately 2.16 percent and 97.84 percent, respectively, of total notes payable at December 31, 2018.

Total notes payable to the Bank at December 31, 2018, was $441,115 as compared to $406,457 at December 31, 2017 and $368,038 at December 31, 2016. The increase of 8.53 percent compared to December 31, 2017 and the increase of 10.43 percent compared to December 31, 2016, was attributable to larger than normal loan growth in the Association. The average volume of outstanding notes payable to the Bank was $417,672 and $380,698 for the years ended December 31, 2018 and 2017, respectively. Refer to Note 6, *Notes Payable to AgFirst Farm Credit Bank*, of the Notes to the Consolidated Financial Statements, for additional information concerning the Association's notes payable.

Liquidity management is the process whereby funds are made available to meet all financial commitments including the extension of credit, payment of operating expenses and payment of debt obligations. The Association receives access to funds through its borrowing relationship with the Bank and from income generated by operations. The liquidity policy of the Association is to manage cash balances to maximize debt reduction and to increase loan volume. As borrower payments are received, they are applied to the Association's note payable to the Bank. The Association's participation in investments and secondary market programs provides additional liquidity. Sufficient liquid funds have been available to meet all financial obligations. There are no known trends likely to result in a liquidity deficiency for the Association.

The Association had no lines of credit outstanding from third party financial institutions as of December 31, 2018.

*Funds Management*

The Bank and the Association manage assets and liabilities to provide a broad range of loan products and funding options, which are designed to allow the Association to be competitive in all interest rate environments. The primary objective of the asset/liability management process is to provide stable and rising earnings, while maintaining adequate capital levels by managing exposure to credit and interest rate risks.

Demand for loan types is a driving force in establishing a funds management strategy. The Association offers fixed, adjustable and variable rate loan products that are marginally priced according to financial market rates. Variable rate loans may be indexed to market indices such as the Prime Rate or the 90-day London Interbank Offered Rate (LIBOR). Adjustable rate mortgages are indexed to U.S. Treasury Rates. Fixed rate loans are priced based on the current cost of System debt of similar terms to maturity.

The majority of the interest rate risk in the Association's Consolidated Balance Sheets is transferred to the Bank through the notes payable structure. The Bank, in turn, actively utilizes funds management techniques to identify, quantify and control risk associated with the loan portfolio. The Association utilizes differential pricing for its loans based on credit risk, length of maturity, service cost, and market variables, thereby giving the Association the ability in large part to control its interest rate margins. Net interest income as a percentage of average earning assets was 2.57% for 2018, 2.59% for 2017, and 2.66% for 2016. The decrease in net interest income as a percentage of average earning assets for 2018 as compared to the previous year is primarily due to a decrease in the average interest rate margin realized on the loan portfolio as compared to the previous year.

*Relationship with the Bank*

In both financial and non-financial areas, the Association has a materially interdependent relationship with the Bank.

The Association's statutory obligation to borrow only from the Bank is discussed in Note 6, *Notes Payable to AgFirst Farm Credit Bank*, of the Notes to the Consolidated Financial Statements in this annual report.

The Bank's ability to require additional capital contributions from the Association is discussed in Note 4, *Investment in Other Farm Credit Institutions*, included in this annual report.

The Bank's role in mitigating the Association's exposure to interest rate risk is described in the "Liquidity and Funding" section of this Management's Discussion and Analysis and in Note 6, *Notes Payable to AgFirst Farm Credit Bank*, included in this annual report.

The Association receives a patronage refund from the Bank which it records on an accrual basis.

In addition to the financial relationships described, the Association may act as a service provider to the Bank on certain

participation loans that the Association has sold to the Bank. The Bank also provides operational assistance to the Association in many areas including cash management, accounting and reporting, computer networks and technology.

**CAPITAL RESOURCES**

Capital serves to support asset growth and provide protection against unexpected credit and interest rate risk and operating losses. Capital is also needed for future growth and investment in new products and services.

The Association Board of Directors establishes, adopts, and maintains a formal written capital adequacy plan to ensure that adequate capital is maintained for continued financial viability, to provide for growth necessary to meet the needs of members/borrowers, and to ensure that all stockholders are treated equitably. There were no material changes to the capital plan for 2018 that would affect minimum stock purchases or would have an effect on the Association's ability to retire stock and distribute earnings. The Association Board of Directors adopted a change in the maximum member stock requirement, effective March 1, 2016, whereby the maximum requirement was reduced to 2% or $1,000, whichever is less, from the previous requirement of 2% or $3,000, whichever is less.

Total members' equity at December 31, 2018, increased 9.61 percent to $87,726 from the December 31, 2017, total of $80,035. At December 31, 2017, total members' equity increased 9.59 percent from the December 31, 2016 total of $73,029. The increases were primarily attributed to net income, partially offset by cash patronage paid.

Total capital stock and participation certificates were $4,225 on December 31, 2018, compared to $4,698 on December 31, 2017 and $4,993 on December 31, 2016. The decrease was primarily attributed to the association making an additional stock purchase in the Bank as a part of its annual stock equalization process. The additional stock purchase was facilitated by reducing a Bank reciprocal stock balance held on the Association's balance sheet.

FCA regulations require all Farm Credit institutions to maintain minimum levels of several regulatory capital and leverage ratios. Effective January 1, 2017, the regulatory capital requirements for System Banks and Associations were modified. The new regulations ensure that the System's capital requirements are comparable to the Basel III framework and the standardized approach that the federal banking regulatory agencies have adopted. New regulations replaced total surplus and core surplus ratios with common equity tier 1 (CET1), tier 1 capital, and total capital risk-based capital ratios, as well as a tier 1 leverage ratio and an unallocated retained earnings equivalents (UREE) leverage ratio. The permanent capital ratio remains in effect. The capital ratios are calculated by dividing various levels of capital by a risk-adjusted asset base. Risk-adjusted assets have been defined by FCA regulations as balance sheet assets and off-balance sheet commitments adjusted by various percentages, depending on the level of risk inherent in the various types of assets. Calculation of permanent capital ratio risk-adjusted assets includes the allowance for loan losses as a deduction from risk-adjusted assets. This differs from the other risk-based capital calculations. The leverage ratios are calculated by dividing various types of capital by total regulatory assets (not risk-adjusted). For all periods represented, the Association exceeded the minimum regulatory standard for all of the ratios.

The following sets forth the regulatory capital ratios, which were effective January 1, 2017:

| | 2018 | 2017 | Minimum Requirement | Capital Conservation Buffer* | Regulatory Minimum with Capital Conservation Buffer |
|---|---|---|---|---|---|
| CET1 capital ratio | 17.23% | 16.66% | 4.5% | 1.255% | 5.75% |
| Tier 1 capital ratio | 17.23% | 16.66% | 6.0% | 1.255% | 7.25% |
| Total capital ratio | 18.12% | 17.54% | 8.0% | 1.255% | 9.25% |
| Permanent capital ratio | 17.45% | 16.91% | 7.0% | 0.000% | 7.00% |
| Tier 1 leverage ratio | 15.08% | 14.63% | 4.0% | 1.000% | 5.00% |
| UREE leverage ratio | 14.73% | 14.29% | 1.5% | 0.000% | 1.50% |

**-The capital conservation buffers have a 3 year phase-in period and will become fully effective January 1, 2020. Risk-adjusted ratio minimums will increase 0.625% each year until fully phased in. There is no phase-in period for the Tier 1 Leverage Ratio.*

If the capital ratios fall below the minimum regulatory requirements, including the buffer amounts, capital distributions (equity redemptions, dividends, and patronage) and discretionary senior executive bonuses are restricted or prohibited without prior FCA approval.

The following sets forth regulatory capital ratios as previously reported:

| | 2016 | 2015 | 2014 | 2013 | 2012 | Regulatory Minimum |
|---|---|---|---|---|---|---|
| Permanent capital ratio | 17.79% | 17.58% | 16.85% | 15.99% | 14.18% | 7.00% |
| Total surplus ratio | 16.96% | 16.28% | 15.54% | 14.62% | 12.80% | 7.00% |
| Core surplus ratio | 16.96% | 16.28% | 15.54% | 14.62% | 12.69% | 3.50% |

The increase in the Association's regulatory capital ratios for December 31, 2018 was attributed to increased retained earnings from net income proportionately stronger than the growth in loan volume. There are no trends, commitments, contingencies, or events that are likely to affect the Association's ability to meet regulatory minimum capital standards and capital adequacy requirements.

See Note 7, *Members' Equity*, of the Consolidated Financial Statements, for further information concerning capital resources.

**PATRONAGE PROGRAM**

Prior to the beginning of any fiscal year, the Association's Board of Directors, by adoption of a resolution, may establish a Patronage Allocation Program to distribute to borrowers on a patronage basis all or any portion of its available patronage sourced consolidated net earnings. This resolution provides for the application of net earnings in the manner described in the Association's Bylaws. This includes the setting aside of funds to increase surplus to meet minimum capital adequacy standards established by FCA Regulations, to increase surplus to meet Association capital adequacy standards to a level necessary to support competitive pricing at targeted earnings levels, and for reasonable reserves for necessary purposes of the Association. After excluding net earnings attributable to (a) purchase money mortgages and sales contracts, (b) participation loans purchased, c) loans specified in advance as non-patronage, (d) the Association's defined benefit retirement plan income, (e) extraordinary income resulting from a change in accounting procedure, and (f) other non-patronage income as allowed by law, including lease income, the remaining consolidated net earnings are eligible for allocation to borrowers. Refer to Note 7, *Members' Equity*, of the Notes to the Consolidated Financial Statements, for more information concerning the patronage allocations. The Association declared total patronage allocations of $10,631 in 2018, $9,702 in 2017, and $8,871in 2016. Of those amounts, the Association declared a cash patronage payable of $4,040 in 2018, $3,590 in 2017 and $3,105 in 2016. The remaining patronage allocations were in the form of allocated retained earnings. With the resulting improvements in earnings and capital levels, the Association increased its cash patronage payout percentage for 2017 and 2018.

**YOUNG, BEGINNING AND SMALL (YBS) FARMERS AND RANCHERS PROGRAM**

The Association's mission is to provide financial services to agriculture and the rural community, which includes providing credit to Young*, Beginning** and Small*** farmers.

* Young farmers are defined as those farmers, ranchers, producers or harvesters of aquatic products who are age 35 or younger as of the date the loan is originally made.

** Beginning farmers are defined as those farmers, ranchers, producers or harvesters of aquatic products who have 10 years or less farming or ranching experience as of the date the loan is originally made.

*** Small farmers are defined as those farmers, ranchers, producers or harvesters of aquatic products who normally generate less than $250 in annual gross sales of agricultural or aquatic products at the date the loan is originally made.

Because of the unique needs of these individuals, and their importance to the future growth of the Association, the Association has established annual marketing goals to increase our market share of loans to YBS farmers. Specific marketing plans have been developed to target these groups, and resources have been designated to help ensure YBS borrowers have access to a stable source of credit. Actual program results in 2018 were 100% of program goals or better in all categories except number of young farmer loans and beginning farmer loans, which were at 98.9% of program goal and 98.5% of program goal, respectively.

The following table outlines the loan volume and number of YBS loans in the loan portfolio for the Association.

| | As of December 31, 2018 | | | |
|---|---|---|---|---|
| | Number of Loans | | Amount of Loans | |
| | Actual | Goal | Actual | Goal |
| Young | 1,207 | 1,220 | 90,985 | 87,000 |
| Beginning | 1,281 | 1,300 | 104,440 | 95,000 |
| Small | 4,114 | 3,900 | 223,569 | 203,000 |

*Note: For purposes of the above table, a loan could be classified in more than one category, depending upon the characteristics of the underlying borrower.*

The 2012 USDA-NASS Ag census data has been used as a benchmark to measure penetration of the Association's marketing efforts. The census data indicated that within the Association's chartered territory (counties) there were 14,595 reported farmers of which by definition 856 or 5.87 percent were Young, 2,642 or 18.10 percent were Beginning, and 13,999 or 95.92 percent were Small. Comparatively, as of December 31, 2018, the demographics of the Association's agricultural portfolio contained 3,309 farmers, of which by definition 717 or 21.67 percent were Young, 865 or 26.14 percent were Beginning and 2,520 or 76.16 percent were Small.

In addition to our marketing strategies, in 2018 the Association utilized the following strategies and outreach programs:

- Support of 4H, FFA and young farmer organizations through sponsorships and donations.
- Offering loan guarantees and interest rate subsidies through Preferred Lender Programs with Farm Services Administration (FSA).
- FSA Loan Guarantee Fee Subsidy Program.
- Reduced Rate Coordination Programs with the Kentucky Agricultural Finance Corporation.
- Utilizing the Central Kentucky Ag Start Program, a program developed in collaboration with a Young Farmers Advisory Council.

The Association met its 2018 qualitative goals in coordination of programs, FSA Guarantee Loan Volume, Reduced Rate Coordination Program, and statewide youth program advertising and sponsorships.

The Vice President of Information Systems coordinates the Association's efforts for YBS programs. The Association includes YBS goals in the annual strategic plan, and reports on those goals and achievements to the Board of Directors on a quarterly basis.

*Demographics*

The Association has used the 2012 USDA-NASS Ag Census as our source of demographic data for the counties in our territory. There are several differences in the methods by which the demographic and YBS Farmer data is presented. Young farmers are defined by the FCA as 35 years old or less. The UDSA-NASS Ag Census demographic stratification breaks at 34 years old, which was used to compare to FCA's definition. Beginning farmers are defined by the FCA as having 10 years or less farming experience. There is no measurement matching this definition in the USDA-NASS Ag Census; however the census does identify farmers on their current farm less than 10 years. That statistic may include beginning farmers, but may also include experienced farmers who have recently changed farmsteads. As with the case of the Young information, the Beginning information in the USDA-NASS Ag Census is not an exact comparison to the FCA definition, but will be utilized as the best comparison available. The FCA Small definition matches with the USDA-NASS Ag Census delineation of farm entities with sales of less than $250 thousand. Other data differences: The farmers experience is as of the date of the USDA-NASS Ag Census, while the Association data is compiled as to the date the loan was made. Small farmers is by each individual farm entity from the USDA-NASS Ag Census data, while the Association data is compiled as of the date of the loan and represents the total value of sales of closely related entities rather than individual entities. The USDA-NASS Ag Census data reflects all farms whether they use debt or not. While the statistical results of the USDA-NASS Ag Census do not match the FCA definitions exactly and there are timing issues, they do provide a consistent source of measurement with which to assess Association targets and goals.

## REGULATORY MATTERS

On May 10, 2018, the Farm Credit Administration adopted a final rule that amends the regulations governing investments of System banks and associations. The final rule strengthens eligibility criteria for the investments the banks may purchase and hold. It also implements Section 939A of the Dodd-Frank Act by removing references to and requirements for credit ratings and substitutes the eligibility requirement with other appropriate standards of credit worthiness. In addition, it grants associations greater flexibility regarding the risk management purposes for investments and limits the type and amount of investments that an association may hold. Only securities that are issued by, or are unconditionally guaranteed or insured as to the timely payment of principal and interest by, the U.S. government or its agencies are eligible for association risk management purposes. An association may purchase and hold investments not to exceed 10 percent of its 90-day average daily balance of outstanding loans on the last business day of the quarter. The final rule became effective January 1, 2019.

***Farm Bill***

The Agricultural Improvement Act of 2018 (Farm Bill) was signed into law on December 20, 2018. This new Farm Bill will govern an array of federal farm and food programs, including commodity price support payments, farm credit, conservation programs, research, rural development and foreign and domestic food programs for five years through 2023. The new Farm Bill continues to provide support for crop insurance and commodity support programs, strengthen livestock disaster programs, and provides dairy producers with an updated voluntary margin protection program that will provide additional risk management options to dairy operations.

The Farm Bill also clarifies and updates the Insurance Corporation's authorities to act as conservator or receiver of a System institution. The Congressional Conference Committee report states that Congress intends "for the authorities of the Corporation to be functionally equivalent to the parallel authorities of the Federal Deposit Insurance Corporation." In addition, the Farm Bill provides, among other authorities, the Insurance Corporation with the authority to organize, and the Farm Credit Administration to charter, a System bridge bank, which has all the powers of a System bank with a maximum life span of five years.

Many provisions of the Farm Bill will require the United States Department of Agriculture to develop rules and procedures to fully implement these authorities. The timing for the issuance of those rules is uncertain.

## LIBOR TRANSITION

On July 27, 2017, the United Kingdom Financial Conduct Authority (the Conduct Authority announced that it will no longer persuade or compel such banks to submit rates for the calculation of the LIBOR rates after 2021. The Conduct Authority regulates the panel banks that submit quotes for the purpose of calculating LIBOR to the Intercontinental Exchange (ICE) Benchmark Administration (the entity that is responsible for calculating LIBOR). Accordingly, it is uncertain whether the ICE Benchmark Administration will continue to quote LIBOR after 2021. Furthermore, in the United States, efforts to identify a set of alternative U.S. dollar reference interest rates include proposals by the Alternative Reference Rates Committee ARRC) of the Federal Reserve Board and the Federal Reserve Bank of New York. Specifically, the ARRC has proposed the Secured Overnight Financing Rate (SOFR) as the recommended alternative to LIBOR and the Federal Reserve Bank of New York began publishing SOFR in April of 2018. SOFR is based on a broad segment of the overnight Treasury repurchase market and is a broad measure of the cost of borrowing cash overnight collateralized by Treasury securities.

At this time, it is not possible to predict, among other uncertainties, whether (i) LIBOR will be discontinued, (ii) the effect of any changes to the methodology for calculating LIBOR, or (iii) any establishment of alternative reference rates or any other reforms to LIBOR that may be enacted in the United Kingdom, in the United States or elsewhere. Uncertainty as to the nature of such potential changes, alternative reference rates or other reforms may adversely affect the trading market for LIBOR based instruments, including certain of the Systemwide Debt Securities, System borrowings, loans, investments, derivatives, other System assets and liabilities and preferred stock that are indexed to LIBOR. Accordingly, reform of, or the replacement or disappearance of, LIBOR and the proposed regulation of LIBOR and other "benchmarks" may adversely affect the rates of interest the System pays on its Systemwide Debt Securities (including changes to their value and liquidity, return, and usefulness for intended purpose), on

other borrowings and preferred stock, as well as the value of and return on loans and investments and the value and effectiveness of derivatives. This could adversely affect the System's cash flows. Moreover, if LIBOR is replaced, System institutions will need to take steps to restructure their debt and derivatives, which could adversely affect operations.

The System institutions are currently evaluating the potential impact of the eventual replacement of the LIBOR benchmark interest rate, including the possibility of using SOFR as the alternative to LIBOR. While each system institution is required by the regulator to have a transition plan, the transition from LIBOR to SOFR is expected to be complex and to include the development of term and credit adjustments to minimize, to the extent possible, discrepancies between LIBOR and SOFR. Accordingly, the transition may introduce additional basis risk for market participants, including when an alternative index, e.g., SOFR, exists in conjunction with LIBOR. There can be no guarantee that SOFR will become the dominant alternative to U.S. dollar LIBOR or that SOFR will be widely used. In addition, other alternatives may or may not be developed with additional complications.

Changes in LIBOR may result in interest rates and/or payments that are higher or lower than, or that do not otherwise correlate over time with, the interest rates and/or payments that would have been associated with LIBOR-based Systemwide Debt Securities, or loans or investments that are based on LIBOR, which may increase or decrease the payments to be made on such LIBOR-based Systemwide Debt Securities, or loans or investments that are based on LIBOR.

**RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS**

Please refer to Note 2, *Summary of Significant Accounting Policies*, in the Notes to the Consolidated Financial Statements for recently issued accounting pronouncements.

The following Accounting Standards Updates (ASUs) were issued by the Financial Accounting Standards Board (FASB) but have not yet been adopted:

| Summary of Guidance | Adoption and Potential Financial Statement Impact |
|---|---|
| ***ASU 2016-13 – Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*** | |
| • 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.<br>• Changes the present incurred loss impairment guidance for loans to a CECL model.<br>• 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.<br>• Eliminates existing guidance for purchased credit impaired (PCI  loans, and requires recognition of an allowance for expected credit losses on these financial assets.<br>• Requires a cumulative-effect adjustment to retained earnings as of the beginning of the reporting period of adoption.<br>• 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. | • The Association has begun implementation efforts by establishing a cross-discipline governance structure and will implement a third-party model. The Association is currently identifying key interpretive issues and assessing processes against the new guidance to determine what modifications may be required.<br>• The Association expects that the new guidance will result in an increase in its allowance for credit losses due to several factors, including:<br>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,<br>2. An allowance will be established for estimated credit losses on any debt securities,<br>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.<br>• The extent of the increase is under evaluation, but will depend upon the nature and characteristics of the Association's portfolio at the adoption date, and the macroeconomic conditions and forecasts at that date.<br>• The Association expects to adopt the guidance in first quarter 2021. |
| ***ASU 2016-02 – Leases (Topic 842)*** | |
| • Requires lessees to recognize leases on the balance sheet with lease liabilities and corresponding right-of-use assets based on the present value of lease payments.<br>• Lessor accounting activities are largely unchanged from existing lease accounting.<br>• The Update also eliminates leveraged lease accounting but allows existing leveraged leases to continue their current accounting until maturity, termination or modification.<br>• Also, expands qualitative and quantitative disclosures of leasing arrangements.<br>• Requires adoption using a modified cumulative-effect approach wherein the guidance is applied to all periods presented. A recent amendment provides an additional (and optional) transition method to adopt the new leases standard. Under this new 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.<br>• Effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Early adoption is permitted. | • The practical expedients allow entities to largely account for existing leases consistent with current guidance, except for the incremental balance sheet recognition for lessees.<br>• The Association completed its evaluation of leasing contracts and activities and developed its methodology to estimate the right-of-use assets and lease liabilities, which is based on the present value of lease payments. There will not be a material change to the timing of expense recognition.<br>• Given the limited changes to lessor accounting, there were no material changes to recognition or measurement for the Association.<br>• The Association will need to provide additional disclosure information as a result of adopting the Update.<br>• The Association will adopt the guidance in first quarter 2019 using the optional modified retrospective method and practical expedients for transition.<br>• Upon adoption, the Association will record a cumulative-effect adjustment to equity of approximately $0. In addition, a Right of Use Asset in the amount of $50 and Lease Liability in the amount of $50 will be recorded. |

# Disclosure Required by Farm Credit Administration Regulations

**Description of Business**

Descriptions of the territory served, persons eligible to borrow, types of lending activities engaged in, financial services offered and related Farm Credit organizations are incorporated herein by reference to Note 1, *Organization and Operations*, of the Consolidated Financial Statements included in this Annual Report to shareholders.

The description of significant developments that had or could have a material impact on earnings or interest rates to borrowers, acquisitions or dispositions of material assets, material changes in the manner of conducting the business, seasonal characteristics, developments that had or could have a material impact on patronage or dividends, changes in patronage policies and practices, and concentrations of assets, if any, is incorporated in *"Management's Discussion and Analysis of Financial Condition and Results of Operations"* included in this Annual Report.

**Description of Property**

The following table sets forth certain information regarding the properties of the reporting entity, all of which are located in Kentucky:

| Location | Description | Form of Ownership |
|---|---|---|
| 640 South Broadway<br>Lexington | Administrative | Owned |
| 640 South Broadway<br>Lexington | Branch | Owned |
| 485 N Danville Bypass<br>Danville | Branch | Owned |
| 1000 Ival James Boulevard<br>Richmond | Branch | Owned |
| 201 Commerce Drive<br>Paris | Branch | Owned |
| 842 W Main<br>Lebanon | Branch | Owned |
| 106 Agriculture Way<br>Stanford | Branch | Owned |
| 1120 US Highway 127 South<br>Frankfort | Branch | Leased |

**Legal Proceedings**

Information, if any, to be disclosed in this section is incorporated herein by reference to Note 11, *Commitments and Contingencies*, of the Consolidated Financial Statements included in this Annual Report.

**Description of Capital Structure**

Information to be disclosed in this section is incorporated herein by reference to Note 7, *Members' Equity*, of the Consolidated Financial Statements included in this Annual Report.

**Description of Liabilities**

The description of liabilities, contingent liabilities and obligations to be disclosed in this section is incorporated herein by reference to Notes 2, 6, 9 and 11 of the Consolidated Financial Statements included in this Annual Report.

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

*"Management's Discussion and Analysis of Financial Condition and Results of Operations,"* which appears in this Annual Report and is to be disclosed in this section, is incorporated herein by reference.

**Senior Officers**

The following represents certain information regarding the senior officers of the Association:

| Senior Officer | Position |
|---|---|
| James W. Caldwell | *President and Chief Executive Officer* - since January, 2009 |
| Jonathan T. Noe | *Vice President and Chief Lending Officer* – since September, 2008 |
| Marcus G. Barnett | *Vice President and Chief Financial Officer* – since August, 2004 |
| Shane Turner | *Vice President and Chief Risk Officer* – since October, 2017 |

The business experience for the past five years for senior officers is with the Farm Credit System.

The total amount of compensation earned by the CEO and the highest paid officers as a group during the years ended December 31, 2018, 2017 and 2016, is as follows:

| Name of Individual or Number in Group | Year | Received Compensation: Salary | Bonus | Total Received | Perquisites and Other Compensation: Change in Pension** | Perq./ Other* | Total Perq. and Other | Total Compensation |
|---|---|---|---|---|---|---|---|---|
| James W. Caldwell | 2018 | $ 306,012 | $ 3,900 | $ 309,912 | $ 40,560 | $ 9,706 | $ 50,266 | $ 360,178 |
| James W. Caldwell | 2017 | $ 285,011 | $ 5,400 | $ 290,411 | $ 87,365 | $ 8,085 | $ 95,450 | $ 385,861 |
| James W. Caldwell | 2016 | $ 267,510 | $ 3,900 | $ 271,410 | $ 292,747 | $ 8,606 | $ 301,353 | $ 572,763 |
| 5 | 2018 | $ 706,927 | $ 33,608 | $ 740,535 | $ 2,050 | $ 5,543 | $ 7,593 | $ 748,128 |
| 5 | 2017 | $ 670,876 | $ 45,093 | $ 715,969 | $ 512,262 | $ 5,747 | $ 518,009 | $ 1,233,978 |
| 5 | 2016 | $ 637,624 | $ 28,951 | $ 666,575 | $ 386,094 | $ 5,473 | $ 391,567 | $ 1,058,142 |

**The Perquisites/Other amount disclosed in the above chart includes automobile compensation, cost of group insurance in excess of $50,000, and spousal travel.*
***This figure is a third party actuarial determination of the change in present value of the estimated pension cash flows.* ***Please refer to information provided below giving further explanation of assumptions used in order to calculate the present value of pension benefits.***

The total compensation paid during 2018 to any senior officer, or to any other employee included in the aggregate group total as reported in the table above is available and will be disclosed to the shareholders of the institution upon request.

On October 3, 2012, FCA adopted a regulation that requires enhanced disclosures pertaining to Senior Officer compensation, specifically additional information pertaining to the present value of pension benefits and the change in the present value of pension benefits from the previous year.

The present value of pension benefits is the value at a specific date of the expected future benefit payment stream based on actuarial assumptions, chiefly the discount rate. Other assumptions are also used, such as expected retirement age and life expectancy. Actuarial assumptions are updated periodically. Changes in the actuarial assumptions can increase or decrease the pension values.

The discount rate, which is derived using an AA corporate bond yield curve, is updated every year based on the interest rate environment at December 31. A decrease in the discount rate will normally increase the present values and vice versa.

In addition to the discount rate, other factors such as increases in compensation or additional years of service for plan participants will also cause a change in the present value of pension benefits. Specifically, an additional year of service leading up to the earliest unreduced retirement date and increases in compensation may lead to increases in present value of pension benefits. An additional year of service past the unreduced retirement date may lead to a decrease in the present value of pension benefits. A decrease in the discount rate assumption from the prior year was the primary cause for the increase in pension values at December 31, 2017. At December 31, 2018, an increase in the discount rate assumption caused pension values to decrease, but this was offset by other factors such as increases in compensation and additional years of service for plan participants.

In October 2014, the Society of Actuaries issued revised mortality tables and a mortality improvement scale for use by actuaries, insurance companies, governments, benefit plan sponsors and others in setting assumptions regarding life expectancy in the United States for purposes of estimating pension and other postemployment benefit obligations, costs and required contribution amounts. The new mortality tables indicated substantial life expectancy improvements since the last study published in 2000. The adoption of these new tables at December 31, 2016 resulted in increased pension values as the benefit payments are expected to be made for a longer time span.

On February 4, 2015, the FCA Board approved the final rule, “Disclosure to Shareholders; Pension Benefit Disclosures.” The rule amends FCA regulations to exclude employee compensation from being reported in the Summary Compensation Table if the employee would be considered a “highly compensated employee” solely because of payments related to or change(s) in value of the employee’s qualified pension plan provided that the plan was available to all similarly situated employees on the same basis at the time the employee joined the plan.

Additional information on pension benefits related to the CEO and the highest paid officers as a group for the year ended December 31, 2018 is as follows:

**Pension Benefits Table**
**As of December 31, 2018**

| Name of Individual or Number in Group | Year | Plan Name | Number of Years Credited Service | Actuarial Present Value of Accumulated Benefits** | Payments During 2018 |
|---|---|---|---|---|---|
| James W. Caldwell | 2018 | Independent Associations Retirement Plan | 38 | $ 2,421,028 | $ – |
| **Senior Officers and Highly Compensated Employees:** | | | | | |
| 5 | 2018 | Independent Associations Retirement Plan | 29 | $ 3,693,896 | $ – |

** Represents the average years of credited service for the group.*
***This figure is a third party actuarial determination of the present value of the estimated pension cash flows.* ***Please refer to information provided above giving further explanation of assumptions used in order to calculate the present value of pension benefits.***

In addition to a base salary, the branch lending staff can earn additional compensation under an incentive plan. There were no material changes to the incentive plan adopted for 2018 as the plan design continues to motivate new business development. In addition to this incentive plan for the lending staff, the entire Association staff, including senior officers, may receive a bonus at the discretion of the Board of Directors. While discretionary, these bonuses are generally based on the efforts of staff, including senior officers, in striving to accomplish business plan objectives such as profitability, growth, credit quality and overall performance. All of these bonuses were paid in the 2018 calendar year. Additionally, all employees are reimbursed for all direct travel expenses incurred when traveling on Association business. A copy of the travel policy is available to shareholders upon written request.

**Directors**

Directors are reimbursed on an actual cost basis for all expenses incurred in the performance of official duties. Such expenses may include transportation, lodging, meals, tips, tolls, parking of cars, laundry, registration fees, and other expenses associated with travel on official business. A copy of the policy is available to shareholders of the Association upon request.

The aggregate amount of reimbursement for travel, subsistence and other related expenses for all directors as a group was $25,662 for 2018, $25,955 for 2017 and $38,362 for 2016.

Subject to approval by the board, the Association may allow the chairman of the board of directors, the chairman of the audit committee, and other director's honoraria of $800, $750 and $700 respectively for attendance at meetings, committee meetings, or special assignments. Directors also receive $100 for participation in board or committee related conference calls. In 2018, total cash compensation paid to directors as a group was $73,950. No non-cash compensation was paid to directors in 2018.

The following represents certain information regarding the directors of the Association and their principal occupations:

***James Alvin Lyons*** was re-elected to a four-year term on the Board of Directors at the 2016 Annual Meeting. His current term expires in 2020. He presently serves as Chairman of the Board, a position he has held since April 2011. During the past 5 years, Mr. Lyons has produced alfalfa, corn, soybeans, wheat, tobacco, has a commercial cow-calf program and backgrounds feeder cattle on his farming operation in Scott County. Mr. Lyons serves as a Board member of the Scott County Farm Bureau and is a member of the Scott County Beef Improvement Board. In addition, he serves as a member of the Scott County Rural Land Management Board. Mr. Lyons is also a Magistrate on the Scott County Fiscal Court. Since January 2018, Mr. Lyons has served as a director for the AgFirst Farm Credit Bank. During 2018, Mr. Lyons served 10 days at Association Board meetings, 0 days in other official activities, participated in 1 conference call, and was paid $7,800 in compensation.

***James C. ("Jim") Rankin III*** was elected to a four-year term on the Board of Directors at the 2016 Annual Meeting. His current term expires in 2020. He presently serves as Vice Chairman of the Board, a position he has held since February 2014. During the past 5 years, Mr. Rankin has produced soybeans, wheat and alfalfa on his farming operation in Bourbon County. Mr. Rankin owns thoroughbred mares, and boards mares and foals. He also raises and trains thoroughbreds for racing. In addition, Mr. Rankin partners with a son in the thoroughbred horse operation, in a cow/calf operation, feeders, hay and grain. He also partners with another son in a cow/calf operation, feeders, hay and grain. During 2018, Mr. Rankin served 9 days at Association Board meetings, 15 days in other official activities, participated in 1 conference call, and was paid $15,550 in compensation.

***James L. May*** was re-elected to a four-year term on the Board of Directors at the 2015 Annual Meeting. His current term expires in 2019. He served as Chairman of the Board from 1999 to 2011, and previously served as Vice Chairman of the Board from April 1991. He currently serves as the Chairman of the Board Compensation Committee. During the past five years, Mr. May and his wife have owned Mayhaven Farm LLC in Lincoln County where they have produced corn, hay, soybeans, wheat, have backgrounded feeder cattle, and have a 200 head cow/calf program in addition to operating a retail agricultural seed business. In addition, Mr. May serves as Chairman of the Lincoln County Extension Council and serves on the Lincoln County Farm Bureau Board. From January, 2006 through December 2017, Mr. May served as a director for the AgFirst Farm Credit Bank. During 2018, Mr. May served 9 days at Association Board meetings, 3 days in other official activities, participated in 2 conference calls, and was paid $8,450 in compensation.

***Joe Myers*** was elected to a four-year term on the Board of Directors at the 2018 Annual Meeting. His current term expires in 2022. During the past 5 years, Mr. Myers has owned and operated Myers Angus Farm, a 60 head purebred angus cow operation on his farming operation in Mercer County, marketing registered bulls, females, and embryos throughout Kentucky, multiple states, and foreign countries. He also serves as a Beef Sire Analyst for Select Sires, Inc. where he is responsible for purchasing/leasing bulls to enter into the A.I. Genetics Program. He is also a former Farm Manager for Anderson Circle Farms. Mr. Myers serves on the Central Kentucky Angus Association Board, and the Mercer County Cattleman's Board. During 2018, Mr. Myers served 10 days at Association Board meetings, 6 days in other official activities, participated in 0 conference calls, and was paid $10,450 in compensation.

***Lee Hood*** was elected to a four-year term on the Board of Directors at the 2017 Annual Meeting. Her current term expires in 2021. During the past 5 years, Ms. Hood has served as Chief Financial officer for Clements Ag Supply, Inc. in Springfield, Kentucky. She owns and leases land in Washington County were she operates a cow/calf operation, backgrounds feeder cattle, and produces 300 acres of hay. During 2018, Ms. Hood served 9 days at Association Board meetings, 7 days in other official activities, participated in 2 conference calls, and was paid $11,100 in compensation.

Pursuant to the Agricultural Credit Act of 1987 and in compliance with Association Bylaws, the Association Board of Directors first elected during 2001 a member to the Board who is not a director, officer, employee or shareholder of any Farm Credit System institution (i.e. Outside Director).

***Dan Grigson*** was first elected as an Outside Director by the Association Board of Directors in 2017. His current term expires in April 2021. Mr. Grigson retired from the University of Kentucky College of Agriculture in 2017 where he served as an Agricultural Extension Agent from 1974 through 2016. He currently serves on the staff of the Spurlin Funeral Home. During the past 5 years Mr. Grigson has served as a director of the Buffalo Springs Cemetery Board. He has also served as a director of the Lincoln County Fair Board, and as Vice President of the Lincoln County Farm Bureau Federation. During 2018, Mr. Grigson served 10 days at Association Board meetings, 7 days in other official activities, participated in 1 conference call, and was paid $11,700 in compensation.

***Mary-Lynn Hinkel*** was first elected as an Outside Director by the Association Board of Directors in 2014. She was reelected in 2016, and her current term expires in April 2020. She currently serves as the Chairman of the Board Audit Committee. Ms. Hinkel serves as HR Staffing Coordinator for CMTA Consulting Engineers, recruiting staff for eight offices located throughout the U.S. Previously, Ms. Hinkel was Associate Director of Tax Services at Dean, Dorton, Allen, Ford, PLLC where she provided compliance services including tax, financial statements and accounting for business, individuals, and non-profit organizations. Her services concentrated in physicians and the healthcare industry, manufacturing, and real estate of closely-held and family-owned businesses. During the past 5 years Ms. Hinkel has served on the United Way of the Bluegrass Agency Review Executive Committee, and as a Banking Committee member for Equestrian Events, Inc. She has served as a past member of the Finance Committee and Education Committee for the Cathedral of Christ the King, and has served as past Treasurer and President of the Parent Teacher Organization for Christ the King School. She has also served as a Board Member and Treasurer for Lexington and Central Kentucky Youth Salute. During 2018, Ms. Hinkel served 9 days at Association Board meetings, 3 days in other official activities, participated in 2 conference calls, and was paid $8,900 in compensation.

**Transactions with Senior Officers and Directors**

The reporting entity's policies on loans to and transactions with its officers and directors, to be disclosed in this section are incorporated herein by reference to Note 10, *Related Party Transactions*, of the Consolidated Financial Statements included in this Annual Report. There have been no transactions between the Association and senior officers or directors which require reporting per FCA regulations.

**Transactions Other Than Loans**

There have been no transactions that occurred at any time during the year ended December 31, 2018, between the Association and senior officers or directors, their immediate family members or any organizations with which they are affiliated, which require reporting per FCA regulations. There were no transactions with any senior officer or director related to the purchase or retirement of preferred stock of the Association for the year ended December 31, 2018.

**Involvement in Certain Legal Proceedings**

There were no matters which came to the attention of management or the board of directors regarding involvement of current directors or senior officers in specified legal proceedings which should be disclosed in this section. No directors or senior officers have been involved in any legal proceedings during the last five years which require reporting per FCA regulations.

**Involvement in Unincorporated Business Entities**

The Association holds no equity investments in Unincorporated Business Entities (UBEs) at December 31, 2018.

**Relationship with Independent Auditors**

There were no changes in or material disagreements with our independent auditors on any matter of accounting principle or financial statement disclosure during this period.

Aggregate fees incurred by the Association for services rendered by its independent auditors for the year ended December 31, 2018 were as follows:

| | 2018 |
|---|---|
| ***Independent Auditors*** | |
| PricewaterhouseCoopers LLP | |
| Audit services | $ 67,656 |
| Total | $ 67,656 |

Audit fees were for the annual audit of the consolidated financial statements.

**Consolidated Financial Statements**

The consolidated financial statements, together with the report thereon of PricewaterhouseCoopers LLP dated March 13, 2019 and the report of management, which appear in this Annual Report are incorporated herein by reference.

Copies of the Association's Unaudited Quarterly reports are available upon request free of charge by calling 1-859-253-3249, or writing Marcus G. Barnett, Chief Financial Officer, Central Kentucky Agricultural Credit Association, P.O. Box 1290, Lexington, Kentucky 40588-1290, or accessing the website, ***www.agcreditonline.com.*** The Association prepares an electronic version of the Annual Report which is available on the Association's website within 75 days after the end of the fiscal year and distributes the Annual Reports to shareholders within 90 days after the end of the fiscal year. The Association prepares an electronic version of the Unaudited 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 institution.

**Borrower Information Regulations**

Since 1972, Farm Credit Administration (FCA) regulations have required that borrower information be held in strict confidence by Farm Credit System (FCS) 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 FCS 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. 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 Farmers and Ranchers and Producers or Harvesters of Aquatic Products**

Information to be disclosed in this section is incorporated herein by reference to the similarly named section in the *"Management's Discussion and Analysis of Financial Condition and Results of Operations"* section included in this Annual Report to the shareholders.

**Shareholder Investment**

Shareholder investment in the Association may be materially affected by the financial condition and results of operations of AgFirst Farm Credit Bank (Bank or AgFirst). Copies of the Bank's Annual and Unaudited Quarterly reports are available upon request free of charge by calling 1-800-845-1745, ext. 2832, or writing Susanne Caughman, AgFirst Farm Credit Bank, P. O. Box 1499, Columbia, SC 29202. Information concerning AgFirst Farm Credit Bank can also be obtained by going to AgFirst's web site at ***www.agfirst.com***. The Bank prepares an electronic version of the Annual Report, which is available on the website, within 75 days after the end of the fiscal year. The Bank prepares an electronic version of the Unaudited Quarterly report within 40 days after the end of each fiscal quarter, except that no report needs to be prepared for the fiscal quarter that coincides with the end of the fiscal year of the Bank.

# *Report of the Audit Committee*

The Audit Committee of the Board of Directors (Committee) is comprised of the directors named below. None of the directors who serve on the Committee is an employee of Central Kentucky Agricultural Credit Association (Association) and in the opinion of the Board of Directors, each is free of any relationship with the Association or management that would interfere with the director's independent judgment on the Committee.

The Committee has adopted a written charter that has been approved by the Board of Directors. The Committee has reviewed and discussed the Association's audited financial statements with management, which has primary responsibility for the financial statements.

PricewaterhouseCoopers LLP (PwC), the Association's independent auditors for 2018, is responsible for expressing an opinion on the conformity of the Association's audited financial statements with accounting principles generally accepted in the United States of America. The Committee has discussed with PwC the matters that are required to be discussed by Statement on Auditing Standards No. 114 *(The Auditor's Communication With Those Charged With Governance)*. The Committee discussed with PwC its independence from Central Kentucky Agricultural Credit Association. The Committee also reviewed the non-audit services provided by PwC and concluded that these services were not incompatible with maintaining PwC's independence.

Based on the considerations referred to above, the Committee recommended to the Board of Directors that the audited financial statements be included in the Association's Annual Report for 2018. The foregoing report is provided by the following independent directors, who constitute the Committee:

Mary-Lynn Hinkel
Chairman of the Audit Committee

**Members of Audit Committee**

James Alvin Lyons
James C. Rankin III
James L. May
Joe Myers
Lee Hood
Dan Grigson

March 13, 2019

## Report of Independent Auditors

To the Board of Directors and Management of
Central Kentucky Agricultural Credit Association

We have audited the accompanying consolidated financial statements of Central Kentucky Agricultural Credit Association and its subsidiaries (the "Association"), which comprise the consolidated balance sheets as of December 31, 2018, 2017 and 2016, and the related consolidated statements of income, comprehensive income, changes in members' equity and cash flows for the years then ended.

### *Management's Responsibility for the Consolidated Financial Statements*

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

### *Auditors' Responsibility*

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

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the Association's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Association's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### *Opinion*

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Central Kentucky Agricultural Credit Association and its subsidiaries as of December 31, 2018, 2017 and 2016, and the results of their operations and their cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

PricewaterhouseCoopers LLP
Miami, Florida

March 13, 2019

*PricewaterhouseCoopers LLP, 333 SE 2nd Avenue, Suite 3000, Miami, FL 33131*
*T: (305) 375 7400, F:(305) 375 6221,* www.pwc.com/us

# Consolidated Balance Sheets

| (dollars in thousands) | December 31, 2018 | 2017 | 2016 |
|---|---|---|---|
| **Assets** | | | |
| Cash | **$ 3,046** | $ 2,028 | $ 1,605 |
| Loans | **513,045** | 471,730 | 426,095 |
| Allowance for loan losses | **4,277)** | 4,037) | 3,695) |
| Net loans | **508,768** | 467,693 | 422,400 |
| Loans held for sale | **—** | 133 | 1,428 |
| Accrued interest receivable | **7,155** | 6,467 | 5,781 |
| Equity investments in other Farm Credit institutions | **7,099** | 7,117 | 7,113 |
| Premises and equipment, net | **2,927** | 2,960 | 3,014 |
| Other property owned | **—** | 8 | 8 |
| Accounts receivable | **6,815** | 6,758 | 5,135 |
| Other assets | **27** | 23 | 1,861 |
| Total assets | **$ 535,837** | $ 493,187 | $ 448,345 |
| **Liabilities** | | | |
| Notes payable to AgFirst Farm Credit Bank | **$ 441,115** | $ 406,457 | $ 368,038 |
| Accrued interest payable | **1,259** | 1,007 | 815 |
| Patronage refunds payable | **4,141** | 3,694 | 3,195 |
| Accounts payable | **652** | 536 | 709 |
| Other liabilities | **944** | 1,458 | 2,559 |
| Total liabilities | **448,111** | 413,152 | 375,316 |
| Commitments and contingencies Note 11 | | | |
| **Members' Equity** | | | |
| Capital stock and participation certificates | **4,225** | 4,698 | 4,993 |
| Retained earnings | | | |
| Allocated | **61,064** | 54,453 | 48,344 |
| Unallocated | **22,437** | 20,884 | 19,692 |
| Total members equity | **87,726** | 80,035 | 73,029 |
| Total liabilities and members' equity | **$ 535,837** | $ 493,187 | $ 448,345 |

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

# Consolidated Statements of Comprehensive Income

| *(dollars in thousands)* | For the year ended December 31, 2018 | 2017 | 2016 |
|---|---|---|---|
| **Interest Income** | | | |
| Loans | **$ 25,826** | $ 22,243 | $ 20,343 |
| **Interest Expense** | | | |
| Notes payable to AgFirst Farm Credit Bank | **13,226** | 10,683 | 9,247 |
| Net interest income | **12,600** | 11,560 | 11,096 |
| Provision for (reversal of allowance for) loan losses | **500** | 350 | 50) |
| Net interest income after provision for (reversal of allowance for) loan losses | **12,100** | 11,210 | 11,146 |
| **Noninterest Income** | | | |
| Loan fees | **696** | 620 | 591 |
| Lease income | **44** | 33 | 17 |
| Patronage refunds from other Farm Credit institutions | **6,762** | 6,730 | 5,138 |
| Gains losses) on sales of rural home loans, net | **9** | 11 | 9 |
| Gains losses) on sales of premises and equipment, net | **—** | 6 | 5 |
| Insurance Fund refunds | **460** | — | — |
| Other noninterest income | **1** | 1 | — |
| Total noninterest income | **7,972** | 7,401 | 5,760 |
| **Noninterest Expense** | | | |
| Salaries and employee benefits | **5,536** | 5,050 | 4,851 |
| Occupancy and equipment | **366** | 353 | 316 |
| Insurance Fund premiums | **317** | 483 | 515 |
| (Gains) losses on other property owned, net | **1)** | — | 1 |
| Other operating expenses | **1,642** | 1,820 | 1,439 |
| Total noninterest expense | **7,860** | 7,706 | 7,122 |
| Income before income taxes | **12,212** | 10,905 | 9,784 |
| Provision (benefit) for income taxes | **4** | 12 | 53) |
| Net income | **12,208** | 10,893 | 9,837 |
| Other comprehensive income | **—** | — | — |
| Comprehensive income | **$ 12,208** | $ 10,893 | $ 9,837 |

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

# Consolidated Statements of Changes in Members' Equity

| *(dollars in thousands)* | Capital Stock and Participation Certificates | Retained Earnings | | Total Members' Equity |
|---|---|---|---|---|
| | | Allocated | Unallocated | |
| Balance at December 31, 2015 | $ 6,784 | $ 42,801 | $ 18,524 | $ 68,109 |
| Comprehensive income | | | 9,837 | 9,837 |
| Capital stock/participation certificates issued/(retired), net | 1,791) | | | 1,791) |
| Patronage distribution | | | | |
| Cash | | | 3,105) | 3,105) |
| Nonqualified retained earnings | | 5,766 | 5,766) | — |
| Patronage distribution adjustment | | 223) | 202 | 21) |
| Balance at December 31, 2016 | $ 4,993 | $ 48,344 | $ 19,692 | $ 73,029 |
| Comprehensive income | | | 10,893 | 10,893 |
| Capital stock/participation certificates issued/(retired), net | 295) | | | 295) |
| Patronage distribution | | | | |
| Cash | | | 3,590) | 3,590) |
| Nonqualified retained earnings | | 6,112 | 6,112) | — |
| Patronage distribution adjustment | | 3) | 1 | 2) |
| Balance at December 31, 2017 | $ 4,698 | $ 54,453 | $ 20,884 | $ 80,035 |
| **Comprehensive income** | | | **12,208** | **12,208** |
| **Capital stock/participation certificates issued/(retired), net** | **473)** | | | **473)** |
| **Patronage distribution** | | | | |
| **Cash** | | | **4,040)** | **4,040)** |
| **Nonqualified retained earnings** | | **6,591** | **6,591)** | **—** |
| **Patronage distribution adjustment** | | **20** | **24)** | **4)** |
| **Balance at December 31, 2018** | **$ 4,225** | **$ 61,064** | **$ 22,437** | **$ 87,726** |

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

# Consolidated Statements of Cash Flows

| *(dollars in thousands)* | For the year ended December 31, 2018 | 2017 | 2016 |
|---|---|---|---|
| **Cash flows from operating activities:** | | | |
| Net income | **$ 12,208** | $ 10,893 | $ 9,837 |
| Adjustments to reconcile net income to net cash provided by  used in  operating activities: | | | |
| Depreciation on premises and equipment | **159** | 162 | 143 |
| Amortization  accretion  of net deferred loan costs  fees | **1** | 1 | 4 |
| Provision for  reversal of allowance for  loan losses | **500** | 350 | 50 |
| Gains  losses on sales of premises and equipment, net | **—** | 6 | 5 |
| Gains  losses on sales of rural home loans, net | **9** | 11 | 9 |
| Changes in operating assets and liabilities: | | | |
| Origination of loans held for sale | **12,964)** | 11,110 | 10,058 |
| Proceeds from sales of loans held for sale, net | **13,106** | 12,416 | 8,789 |
| Increase  decrease in accrued interest receivable | **688** | 686 | 644 |
| (Increase) decrease in accounts receivable | **57)** | 1,623) | 205 |
| Increase  decrease in other assets | **4** | 1,838 | 237 |
| Increase  decrease  in accrued interest payable | **252** | 192 | 59 |
| Increase (decrease) in accounts payable | **116** | 173) | 208 |
| Increase  decrease  in other liabilities | **514** | 1,101) | 8 |
| Total adjustments | **104** | 247 | 1,531 |
| Net cash provided by  used in  operating activities | **12,104** | 11,140 | 8,306 |
| **Cash flows from investing activities:** | | | |
| Net  increase  decrease in loans | **41,574** | 45,642) | 18,262) |
| Increase  decrease in equity investments in other Farm Credit institutions | **18** | 4) | 34) |
| Purchases of premises and equipment | **126** | 108) | 232) |
| Proceeds from sales of premises and equipment | **—** | 6 | 6 |
| Proceeds from sales of other property owned | **8** | — | — |
| Net cash provided by (used in) investing activities | **41,674)** | 45,748) | 18,522) |
| **Cash flows from financing activities:** | | | |
| Advances on  repayment of  notes payable to AgFirst Farm Credit Bank,  net | **34,658** | 38,419 | 15,004 |
| Capital stock and participation certificates issued/ retired , net | **473** | 295) | 1,791) |
| Patronage refunds and dividends paid | **3,597** | 3,093) | 2,642) |
| Net cash provided by  used in  financing activities | **30,588** | 35,031 | 10,571 |
| Net increase  decrease  in cash | **1,018** | 423 | 355 |
| Cash, beginning of period | **2,028** | 1,605 | 1,250 |
| Cash, end of period | **$ 3,046** | $ 2,028 | $ 1,605 |
| | | | |
| **Supplemental schedule of non-cash activities:** | | | |
| Receipt of property in settlement of loans | **$ —** | $ — | $ 8 |
| Estimated cash dividends or patronage distributions declared or payable | **4,040** | 3,590 | 3,105 |
| **Supplemental information:** | | | |
| Interest paid | **12,974** | 10,492 | 9,188 |
| Taxes  refunded  paid, net | **10** | 69) | — |

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

# Notes to the Consolidated Financial Statements

*(dollars in thousands, except as noted)*

**Note 1 — Organization and Operations**

A. **Organization:** Central Kentucky Agricultural Credit Association (Association) is a member-owned cooperative that provides credit and credit-related services to qualified borrowers in the counties of Anderson, Bourbon, Boyle, Clark, Fayette, Franklin, Garrard, Harrison, Jessamine, Lincoln, Madison, Marion, Mercer, Montgomery, Scott, Washington and Woodford in the state of Kentucky.

The Association is a lending institution in the Farm Credit System (System), a nationwide network of cooperatively owned banks and associations. It was established by Acts of Congress and 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.

The nation is served by three Farm Credit Banks (FCBs) and one Agricultural Credit Bank (ACB), (collectively, the System Banks) each of which has specific lending authorities within its chartered territory. The ACB also has additional specific nationwide lending authorities.

Each System Bank serves one or more Agricultural Credit Associations (ACAs) that originate long-term, short-term and intermediate-term loans, Production Credit Associations (PCAs) that originate and service short- and intermediate-term loans, and/or Federal Land Credit Associations (FLCAs) that originate and service long-term real estate mortgage loans. These associations borrow a majority of the funds for their lending activities from their related bank. System Banks are also responsible for supervising the activities of associations within their districts. AgFirst (Bank) and its related associations (Associations or District Associations) are collectively referred to as the AgFirst District. The District Associations jointly own substantially all of AgFirst's voting stock. As of year end, the District consisted of the Bank and nineteen District Associations. All nineteen were structured as ACA holding companies, with PCA and FLCA subsidiaries. FLCAs are tax-exempt while ACAs and PCAs are taxable.

The Farm Credit Administration (FCA) is delegated authority by Congress to regulate the System banks and associations. The FCA examines the activities of the associations and certain actions by the associations are subject to the prior approval of the FCA and the supervising bank.

The Farm Credit Act also established the Farm Credit System Insurance Corporation Insurance Corporation) to administer the Farm Credit Insurance Fund (Insurance Fund). The Insurance Fund is required to be used (1) to ensure the timely payment of principal and interest on Systemwide debt obligations (Insured Debt), (2) to 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 discretionary uses by the Insurance Corporation to provide assistance to certain troubled System institutions and to cover the operating expenses of the Insurance Corporation. Each System bank has been required to pay premiums, which may be passed on to the Association, into the Insurance Fund, based on its average adjusted outstanding Insured Debt until the assets in the Insurance Fund reach the "secure base amount." The secure base amount is defined in the Farm Credit Act as 2.0 percent 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 the Insurance Corporation at its sole discretion determines to be actuarially sound. When the amount in the Insurance Fund exceeds the secure base amount, the Insurance Corporation is required to reduce premiums and may return excess funds above the secure base amount to System institutions. However, it must still ensure that reduced premiums are sufficient to maintain the level of the Insurance Fund at the secure base amount.

B. **Operations:** The Farm Credit Act sets forth the types of authorized lending activity and financial services that can be offered by the Association, and the persons eligible to borrow.

The Associations borrow from the Bank and in turn may originate and service short- and intermediate-term loans to their members, as well as long-term real estate mortgage loans.

The Bank primarily lends to the District Associations in the form of a line of credit to fund the Associations' earning assets. These lines of credit (or Direct Notes) are collateralized by a pledge of substantially all of each Association's assets. The terms of the Direct Notes are governed by a General Financing Agreement (GFA) between the Bank and Association. Each advance is structured such 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 Associations' exposure to interest rate risk is minimized.

In addition to providing funding for earning assets, the Bank provides District Associations with banking and support services such as accounting, human resources, information systems, and marketing. The costs of these support services are included in cost of the Direct Note, or in some cases billed directly to certain Associations that use a specific service.

The Association is 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, rural residents, and farm-related businesses.

The Association may sell to any System borrowing member, on an optional basis, credit or term life insurance appropriate to protect the loan commitment in the event of death of the debtor(s). The sale of other insurance necessary to protect a member's farm or aquatic unit is permitted, but limited to hail and multi-peril crop insurance, and insurance necessary to protect the facilities and equipment of aquatic borrowers.

**Note 2 — Summary of Significant Accounting Policies**

The accounting and reporting policies of the Association conform with accounting principles generally accepted in the United States of America (GAAP) and prevailing practices within the banking industry. The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the Consolidated Financial Statements and accompanying notes. Significant estimates are discussed in these footnotes, as applicable. Actual results may differ from these estimates.

The accompanying consolidated financial statements include the accounts of the ACA, PCA and FLCA.

Certain amounts in the prior year financial statements have been reclassified to conform to the current period presentation. Such reclassifications had no effect on net income or total members' equity of prior years.

A. **Cash:** Cash represents cash on hand and on deposit at banks.

B. **Loans and Allowance for Loan Losses:** The Association is authorized to make long-term real estate loans with maturities of 5 to 40 years and certain short- and intermediate-term loans for agricultural production or operating purposes with maturities of not more than 10 years.

Loans are carried at their principal amount outstanding adjusted for charge-offs, premiums, discounts, deferred loan fees or costs, and derivative instruments and hedging valuation adjustments, if any. Interest on loans is accrued and credited to interest income based upon the daily principal amount outstanding. The difference in the total investment in a loan and its principal amount may be deferred as part of the carrying amount of the loan and the net difference amortized over the life of the related loan as an adjustment to interest income using the effective interest method.

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 and are generally considered substandard or doubtful, which is in accordance with the loan rating model, as described below. Impaired loans include nonaccrual loans, restructured loans, and loans past due 90 days or more and still accruing interest. 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 remains contractually past due 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. A formal restructuring may also cure a past due status.

Loans are generally classified as nonaccrual when principal or interest is delinquent for 90 days (unless adequately collateralized and in the process of collection) or circumstances indicate that collection of principal and/or interest is in doubt. When a loan is placed in nonaccrual status, accrued interest deemed uncollectible is reversed (if accrued in the current year) or charged against the allowance for loan losses (if accrued in the prior year).

When loans are in nonaccrual status, payments are applied against the recorded investment in the loan asset. If collection of the recorded investment in the loan is fully expected and the loan does not have a remaining unrecovered prior charge-off associated with it, the interest portion of payments received in cash may be recognized as interest income. Nonaccrual loans may be returned to accrual status when principal and interest are current, prior charge-offs have been recovered, the ability of the borrower to fulfill the contractual repayment terms is fully expected, and the loan is not classified "doubtful" or "loss." Loans are charged off at the time they are determined to be uncollectible.

In cases where a borrower experiences financial difficulties and the Association makes certain monetary concessions to the borrower through modifications to the contractual terms of the loan, the loan is classified as a restructured loan. A restructured loan constitutes a troubled debt restructuring TDR) if for economic or legal reasons related to the debtor's financial difficulties the Association grants a concession to the debtor that it would not otherwise consider. If the borrower's ability to meet the revised payment schedule is uncertain, the loan is classified as a nonaccrual loan.

The allowance for loan losses is maintained 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. The allowance for loan losses is a valuation account used to reasonably estimate loan losses as of the financial statement date. Determining the appropriate allowance for loan losses balance involves significant judgment about when a loss has been incurred and the amount of that loss.

The Association considers the following factors, among others, when determining the allowance for loan losses:

- Changes in credit risk classifications

- Changes in collateral values
- Changes in risk concentrations
- Changes in weather-related conditions
- Changes in economic conditions

A specific allowance may be established for impaired loans under Financial Accounting Standards Board (FASB) guidance on accounting by creditors for impairment of a loan. Impairment of these loans is measured based on the present value of expected future cash flows discounted at the loan's effective interest rate or, as practically expedient, at the loan's observable market price or fair value of the collateral if the loan is collateral dependent.

A general allowance may also be established under FASB guidance on accounting for contingencies, to reflect estimated probable credit losses inherent in the remainder of the loan portfolio which excludes impaired loans considered under the specific allowance discussed above. A general allowance can be evaluated on a pool basis for those loans with similar characteristics. The level of the general allowance may be based on management's best estimate of the likelihood of default adjusted for other relevant factors reflecting the current environment.

The credit risk rating methodology is a key component of the Association's allowance for loan losses evaluation, and is generally incorporated into the institution's loan underwriting standards and internal lending limit. The Association uses a two-dimensional loan rating model based on 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 the probability that a borrower will experience a default within 12 months from the date of the determination of the risk rating. 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 estimate as to the anticipated economic loss on a specific loan assuming default has occurred or is expected to occur within the next 12 months.

Each of the 14 categories carries a distinct percentage of default probability. The 14-point risk 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 (non-viable) rating indicates that the probability of default is almost certain.

C. **Loans Held for Sale:** Loans are classified as held for sale when there is intent to sell the loans within a reasonable period of time. Loans intended for sale are carried at the lower of cost or fair value.

D. **Other Property Owned (OPO):** Other property owned, consisting of real estate, personal property, and other assets acquired through a collection action, is recorded upon acquisition at fair value less estimated selling costs. Any initial reduction in the carrying amount of a loan to the fair value of the collateral received is charged to the allowance for loan losses. Revised estimates to the fair value less cost to sell are reported as adjustments to the carrying amount of the asset, provided that such adjusted value is not in excess of the carrying amount at acquisition. Income, expenses, and carrying value adjustments related to other property owned are included in Gains (Losses) from Other Property Owned, Net in the Consolidated Statements of Comprehensive Income.

E. **Premises and Equipment:** Land is carried at cost. Premises and equipment are carried at cost less accumulated depreciation. Depreciation is provided on the straight-line method over the estimated useful lives of the assets. Gains and losses on dispositions are reflected in current earnings. Maintenance and repairs are charged to expense and improvements are capitalized. Premises and equipment are evaluated for impairment whenever events or circumstances indicate that the carrying value of the asset may not be recoverable.

From time to time, assets classified as premises and equipment are transferred to held for sale for various reasons. These assets are carried in Other Assets at the lower of the recorded investment in the asset or fair value less estimated cost to sell based upon the property's appraised value at the date of transfer. Any write-down of property held for sale is recorded as a loss in the period identified.

F. **Investments:** The Association may hold investments as described below.

***Equity Investments in Other Farm Credit System Institutions***
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.

***Investment Income***
Dividends from Investments in Other Farm Credit Institutions are generally recorded as patronage income and included in Noninterest Income.

G. **Voluntary Advance Conditional Payments:** The Association is authorized under the Farm Credit Act to accept advance payments from borrowers. To the extent the borrower's access to such advance payments is restricted, the advanced conditional payments are netted against the borrower's related loan balance. Amounts in excess of the related loan balance and amounts to which the borrower has unrestricted access are presented as other liabilities in the accompanying Consolidated Balance Sheets. Advanced conditional payments are not insured.

Interest is generally paid by the Association on such accounts.

H. **Employee Benefit Plans:** The Association participates in District and multi-District sponsored benefit plans. These plans may include defined benefit final average pay retirement, defined benefit cash balance retirement, defined benefit other postretirement benefits, and defined contribution plans.

***Defined Contribution Plans***
Substantially all employees are eligible to participate in the defined contribution Farm Credit Benefit Alliance (FCBA) 401(k) Plan, subsequently referred to as the 401(k) Plan, which qualifies as a 401(k) plan as defined by the Internal Revenue Code. Employee deferrals are not to exceed the maximum deferral as determined and adjusted by the Internal Revenue Service. Company contributions to the 401(k) Plan are expensed as funded.

Additional information may be found in Note 9.

***Multi-Employer Defined Benefit Plans***
Substantially all employees hired before January 1, 2009 may participate in the Independent Associations Retirement Plan or the AgFirst Farm Credit Cash Balance Retirement Plan (Plan), which is a defined benefit plan and considered multi-employer under FASB accounting guidance. The Plan is noncontributory and includes eligible Association and District employees. The "Projected Unit Credit" actuarial method is used for financial reporting purposes.

In addition to pension benefits, the Association provides certain health care and life insurance benefits for retired employees (other postretirement benefits) through a multi-District sponsored retiree healthcare plan. Substantially all employees are eligible for those benefits when they reach early retirement age while working for the Association. Authoritative accounting guidance requires the accrual of the expected cost of providing these benefits to an employee, their beneficiaries and covered dependents during the years the employee renders service necessary to become eligible for benefits.

Since the foregoing plans are multiemployer, the Association does not apply the provisions of FASB guidance on employers' accounting for defined benefit pension and other postretirement plans in its stand-alone financial statements. Rather, the effects of this guidance are reflected in the Annual Information Statement of the Farm Credit System.

Additional information may be found in Note 9 and in the Notes to the Annual Information Statement of the Farm Credit System.

I. **Income Taxes:** The Association evaluates tax positions taken in previous and current years according to FASB guidance. A tax position can result in a permanent reduction of income taxes payable, a deferral of income taxes otherwise currently payable to future years, or a change in the expected realizability of deferred tax assets. The term tax position also encompasses, but is not limited to, an entity's status, including its status as a pass-through entity or tax-exempt entity.

The Association is generally subject to Federal and certain other income taxes. As previously described, the ACA holding company has two wholly-owned subsidiaries, a PCA and a FLCA. The FLCA subsidiary is exempt from federal and state income taxes as provided in the Farm Credit Act. The ACA holding company and the PCA subsidiary are subject to federal, state and certain other income taxes.

The Association is eligible to operate as a cooperative that qualifies for tax treatment under Subchapter T of the Internal Revenue Code. Accordingly, under specified conditions, the Association can exclude from taxable income amounts distributed as qualified patronage refunds in the form of cash, stock or allocated surplus. Provisions for income taxes are made only on those taxable earnings that will not be distributed as qualified patronage refunds. The Association distributes patronage on the basis of book income.

The Association accounts for income taxes under the asset and liability method, recognizing deferred tax assets and liabilities for the expected future tax consequences of the temporary differences between the carrying amounts and tax bases of assets and liabilities. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be realized or settled.

The Association records a valuation allowance at the balance sheet dates against that portion of the Association's deferred tax assets that, based on management's best estimates of future events and circumstances, more likely than not (a likelihood of more than 50 percent) will not be realized. The consideration of valuation allowances involves various estimates and assumptions as to future taxable earnings, including the effects of the expected patronage program, which reduces taxable earnings.

J. **Due from AgFirst Farm Credit Bank:** The Association records patronage refunds from the Bank and certain District Associations on an accrual basis.

K. **Valuation Methodologies:** FASB 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. This guidance also 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. It prescribes three levels of inputs that may be used to measure fair value.

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

Level 2 inputs to the valuation methodology 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 to the valuation methodology 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 a third-party valuation or internal model pricing.

The Association may use the Bank, internal resources or third parties to obtain fair value prices. Quoted market prices are generally used when estimating fair values of any assets or liabilities for which observable, active markets exist.

A number of methodologies may be employed to value items for which an observable active market does not exist. Examples of these items include: impaired loans, other property owned, and certain derivatives, investment securities and other financial instruments. Inputs to these valuations can involve estimates and assumptions that require a substantial degree of judgment. Some of the assumptions used include, among others, discount rates, rates of return on assets, repayment rates, cash flows, default rates, costs of servicing, and liquidation values. The use of different assumptions could produce significantly different asset or liability values, which could have material positive or negative effects on results of operations.

Additional information may be found in Note 8.

L. **Off-Balance-Sheet Credit Exposures:** The credit risk associated with commitments to extend credit and 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.

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.

Letters of credit are 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 third party.

M. **Revenue Recognition:** The Association generates income from multiple sources.

***Financial Instruments***
The largest source of revenue for the Association is Interest Income. Interest income is recognized on an accrual basis driven by nondiscretionary formulas based on written contracts, such as loan agreements or securities contracts.

Credit-related fees, including letter of credit fees, finance charges and other fees are recognized in Noninterest Income when earned. Other types of noninterest revenues, such as service charges, professional services and broker fees, are accrued and recognized into income as services are provided and the amount of fees earned is reasonably determinable.

***Contracts with Customers***
In May 2014, the FASB issued ASU 2014-09 Revenue from Contracts with Customers (Topic 606). This guidance, which became effective January 1, 2018, changed the recognition of revenue from contracts with customers. The core principle of the guidance is that an entity should recognize revenue to reflect the transfer of goods and services to customers in an amount equal to the consideration the entity receives or expects to receive. The guidance also included expanded disclosure requirements that result in an entity providing users of financial statements with comprehensive information about the nature, amount, timing, and uncertainty of revenue and cash flows arising from the entity's contracts with customers. Based on input received from stakeholders, the FASB issued several additional Updates that generally provided clarifying guidance where there was the potential for diversity in practice, or address the cost and complexity of applying Topic 606.

The Association maintains contracts with customers to provide support services in various areas such as accounting, lending transactions, consulting, insurance, and information technology. The Association does not generally incur costs to obtain contracts. As most of the contracts are to provide access to expertise or system capacity that the Association maintains, there are no material incremental costs to fulfill these contracts that should be capitalized.

Transition Information

- The Association identified ancillary revenues affected by this Update and adopted the guidance on January 1, 2018.
- The amendments were applied using the modified retrospective approach.
- The Association elected to only apply the guidance to contracts that were not completed at the date of initial application.
- Subtopics 610-20 on gains and losses from the derecognition of nonfinancial assets, and 340-40 on other assets and deferred costs-contracts with customers were adopted using the same transition options.
- Adoption did not have an impact on the Association's financial condition or results of operations.

***Gains and Losses from Nonfinancial Assets***
Any gains or losses on sales of Premises and Equipment and OPO are included as part of Noninterest Income. These gains and losses are recognized, and the nonfinancial asset is derecognized, when the Association has entered into a valid contract with a noncustomer and transferred control of the asset. If the criteria to meet the definition of a contract have not been met, the Association does not derecognize the nonfinancial asset and any consideration

received is recognized as a liability. If the criteria for a contract are subsequently met, or if the consideration received is or becomes nonrefundable, a gain or loss may be recognized at that time.

N. **Accounting Standards Updates (ASUs):** 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.

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. Entities may early adopt the provisions in whole upon issuance or may early adopt any removed or modified disclosures upon issuance and delay adoption of the additional disclosures until their effective date. The Association has adopted the removed disclosures effective with the 2018 Annual Report.

In July 2018, the FASB issued ASU 2018-09 Codification Improvements. The amendments affect a wide variety of Topics in the Codification. They apply to all reporting entities within the scope of the affected accounting guidance. The Board has an ongoing project on its agenda about improvements to clarify the Codification or to correct unintended application of guidance. Those items generally are not expected to have a significant effect on current accounting practice. The transition and effective date guidance is based on the facts and circumstances of each amendment.

In February 2018, the FASB issued ASU 2018-02 Income Statement—Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income. The guidance allows a reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the Tax Cuts and Jobs Act. The amendments eliminate the stranded tax effects resulting from the Tax Cuts and Jobs Act and are intended to improve the usefulness of information reported to financial statement users. However, because the amendments only relate to the reclassification of the income tax effects of the Tax Cuts and Jobs Act, the underlying guidance that requires that the effect of a change in tax laws or rates be included in income from continuing operations is not affected. The Update also requires certain disclosures about stranded tax effects. The guidance is effective for all entities for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years.

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 will be effective for interim and annual periods beginning after December 15, 2018 for public business entities. The Association is in the process of evaluating what effects the guidance may have on the statements of financial condition and results of operations.

In January 2017, the FASB issued ASU 2017-01 Business Combinations (Topic 805): Clarifying the Definition of a Business. The amendments provide a more robust framework to use in determining when a set of assets and activities is a business. They also support more consistency in applying the guidance, reduce the costs of application, and make the definition of a business more operable. The ASU was effective January 1, 2018 for the Association. The amendments were applied prospectively. Adoption of the guidance in 2018 had no impact on the statements of financial condition and results of operations of the Association.

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 better 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 15, 2018. The Association is in the process of evaluating what effects the guidance may have 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. The amendments will be effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years for public business entities. The Association will implement the guidance in first quarter 2019 using the practical expedients and does not expect a material impact to the financial statements.

In January 2016, the FASB issued ASU 2016-01 Financial Instruments—Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities. The Update, and subsequent clarifying guidance issued, was intended to improve the recognition and measurement of financial instruments. The new guidance makes targeted improvements to existing GAAP.

Transition Information

- The Association identified investment securities affected by this Update and adopted the guidance on January 1, 2018.
- The amendments related to equity securities without readily determinable fair values were applied prospectively to equity investments that existed as of the date of adoption.
- Application of the amendments did not require a cumulative effect adjustment.
- Adoption did not have an impact on the Association's financial condition or results of operations.
- The new standard did result in changes to certain disclosures.

**Note 3 — Loans and Allowance for Loan Losses**

For a description of the Association's accounting for loans, including impaired loans, and the allowance for loan losses, see Note 2 subsection B above.

Credit risk arises from the potential inability of an obligor to meet its repayment obligation which exists in outstanding loans. 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.

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

The credit risk rating process for loans uses a two-dimensional structure, incorporating a 14-point probability of default scale see further discussion in Note 2 subsection B above) and a separate scale addressing estimated percentage loss in the event of default. The loan rating structure incorporates borrower risk and transaction risk. Borrower risk is the risk of loss driven by factors intrinsic to the borrower. The transaction risk or facility risk is related to the structure of a credit (tenor, terms, and collateral).

The Association's loan portfolio, which includes purchased interests in loans, has been segmented by the following loan types as defined by the FCA:

- Real estate mortgage loans — loans made to full-time or part-time farmers secured by first lien real estate mortgages with maturities from five to thirty years. These loans may be made only in amounts up to 85 percent of the appraised value of the property taken as security or up to 97 percent of the appraised value if guaranteed by a federal, state, or other governmental agency. The actual percentage of loan-to-appraised value when loans are made is generally lower than the statutory required percentage.
- Production and intermediate-term loans — loans to full-time or part-time farmers that are not real estate mortgage loans. These loans fund eligible financing needs including operating inputs (such as labor, feed, fertilizer, and repairs), livestock, living expenses, income taxes, machinery or equipment, farm buildings, and other business-related expenses. Production loans may be made on a secured or unsecured basis and are most often made for a period of time that matches the borrower's normal production and marketing cycle, which is typically one year or less. Intermediate-term loans are made for a specific term, generally greater than one year and less than or equal to ten years.
- Loans to cooperatives — loans for any cooperative purpose other than for communication, power, and water and waste disposal.
- Processing and marketing loans — loans for operations to process or market the products produced by a farmer, rancher, or producer or harvester of aquatic products, or by a cooperative.
- Farm-related business loans — loans to eligible borrowers that furnish certain farm-related business services to farmers or ranchers that are directly related to their agricultural production.
- Rural residential real estate loans — loans made to individuals, who are not farmers, to purchase a single-family dwelling that will be the primary residence in open country, which may include a town or village that has a population of not more than 2,500 persons. In addition, the loan may be to remodel, improve, or repair a rural home, or to refinance existing debt. These loans are generally secured by a first lien on the property.
- Communication loans — loans primarily to finance rural communication providers.

- Power loans — loans primarily to finance electric generation, transmission and distribution systems serving rural areas.
- Water and waste disposal loans — loans primarily to finance water and waste disposal systems serving rural areas.
- International loans — primarily loans or credit enhancements to other banks to support the export of U.S. agricultural commodities or supplies. The federal government guarantees a substantial portion of these loans.
- Lease receivables — the net investment for all finance leases such as direct financing leases, leveraged leases, and sales-type leases.
- Other (including Mission Related) — additional investments in rural America approved by the FCA on a program or a case-by-case basis. Examples of such investments include partnerships with agricultural and rural community lenders, investments in rural economic development and infrastructure, and investments in obligations and mortgage securities that increase the availability of affordable housing in rural America.

A summary of loans outstanding at period end follows:

| | December 31, 2018 | December 31, 2017 | December 31, 2016 |
|---|---|---|---|
| Real estate mortgage | $ 331,734 | $ 300,833 | $ 268,880 |
| Production and intermediate-term | 165,054 | 156,798 | 147,903 |
| Processing and marketing | 1,114 | 1,168 | 1,053 |
| Farm-related business | 6,593 | 4,820 | 421 |
| Rural residential real estate | 8,550 | 8,111 | 7,838 |
| Total loans | $ 513,045 | $ 471,730 | $ 426,095 |

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

The amount of collateral obtained, if deemed necessary upon extension of credit, is based on management's credit evaluation of the borrower. Collateral held varies, but typically includes farmland and income-producing property, such as crops and livestock, as well as receivables. Long-term real estate loans are collateralized by the first liens on the underlying real property. Federal regulations state that long-term real estate loans are not to exceed 85 percent (97 percent if guaranteed by a government agency) of the property's appraised value. However, a decline in a property's market value subsequent to loan origination or advances, or other actions necessary to protect the financial interest of the Association in the collateral, may result in loan to value ratios in excess of the regulatory maximum.

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

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 | $ – | $ 17,516 | $ – | $ – | $ – | $ 6,578 | $ – | $ 24,094 |
| Production and intermediate-term | – | 4,974 | – | – | – | 2,312 | – | 7,286 |
| Processing and marketing | 993 | – | – | – | – | 8 | 993 | 8 |
| Farm-related business | – | 7,997 | – | – | – | 946 | – | 8,943 |
| Total | $ 993 | $ 30,487 | $ – | $ – | $ – | $ 9,844 | $ 993 | $ 40,331 |

December 31, 2017

| | 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 | $ – | $ 13,789 | $ – | $ – | $ – | $ 5,934 | $ – | $ 19,723 |
| Production and intermediate-term | – | 4,897 | – | – | – | 1,439 | – | 6,336 |
| Processing and marketing | 1,010 | – | – | – | – | 16 | 1,010 | 16 |
| Farm-related business | – | 6,187 | – | – | – | 249 | – | 6,436 |
| Total | $ 1,010 | $ 24,873 | $ – | $ – | $ – | $ 7,638 | $ 1,010 | $ 32,511 |

December 31, 2016

| | 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 | $ – | $ 24,595 | $ – | $ – | $ – | $ 4,526 | $ – | $ 29,121 |
| Production and intermediate-term | – | 3,757 | – | – | – | 1,315 | – | 5,072 |
| Processing and marketing | 860 | – | – | – | – | 25 | 860 | 25 |
| Total | $ 860 | $ 28,352 | $ – | $ – | $ – | $ 5,866 | $ 860 | $ 34,218 |

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:

| | December 31, 2018 | | | |
|---|---|---|---|---|
| | Due less than 1 year | Due 1 through 5 years | Due after 5 years | Total |
| Real estate mortgage | $ 5,232 | $ 32,665 | $ 293,837 | $ 331,734 |
| Production and intermediate-term | 58,537 | 84,676 | 21,841 | 165,054 |
| Processing and marketing | – | 987 | 127 | 1,114 |
| Farm-related business | 624 | 1,270 | 4,699 | 6,593 |
| Rural residential real estate | 660 | 1,073 | 6,817 | 8,550 |
| Total loans | $ 65,053 | $ 120,671 | $ 327,321 | $ 513,045 |
| Percentage | 12.68% | 23.52% | 63.80% | 100.00% |

The recorded investment in a receivable is the face amount 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 shows loans and related accrued interest classified under the FCA Uniform Loan Classification System as a percentage of total loans and related accrued interest receivable by loan type as of:

| | December 31, | | |
|---|---|---|---|
| | 2018 | 2017 | 2016 |
| **Real estate mortgage:** | | | |
| Acceptable | 95.81% | 95.58% | 95.79% |
| OAEM | 2.81 | 1.94 | 2.25 |
| Substandard/doubtful/loss | 1.38 | 2.48 | 1.96 |
| | 100.00% | 100.00% | 100.00% |
| **Production and intermediate-term:** | | | |
| Acceptable | 95.65% | 95.42% | 96.73% |
| OAEM | 3.08 | 1.64 | 1.50 |
| Substandard/doubtful/loss | 1.27 | 2.94 | 1.77 |
| | 100.00% | 100.00% | 100.00% |
| **Processing and marketing:** | | | |
| Acceptable | 100.00% | 100.00% | 100.00% |
| OAEM | – | – | – |
| Substandard/doubtful/loss | – | – | – |
| | 100.00% | 100.00% | 100.00% |

| | December 31, | | |
|---|---|---|---|
| | 2018 | 2017 | 2016 |
| **Farm-related business:** | | | |
| Acceptable | 100.00% | 100.00% | 100.00% |
| OAEM | – | – | – |
| Substandard/doubtful/loss | – | – | – |
| | 100.00% | 100.00% | 100.00% |
| **Rural residential real estate:** | | | |
| Acceptable | 92.93% | 89.91% | 91.83% |
| OAEM | 2.69 | 2.94 | – |
| Substandard/doubtful/loss | 4.38 | 7.15 | 8.17 |
| | 100.00% | 100.00% | 100.00% |
| **Total loans:** | | | |
| Acceptable | 95.77% | 95.48% | 96.06% |
| OAEM | 2.86 | 1.84 | 1.94 |
| Substandard/doubtful/loss | 1.37 | 2.68 | 2.00 |
| | 100.00% | 100.00% | 100.00% |

The following tables provide an aging analysis of past due loans and related accrued interest as of:

| | 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 | $ 645 | $ 598 | $ 1,243 | $ 334,359 | $ 335,602 |
| Production and intermediate-term | 918 | 2,413 | 3,331 | 164,958 | 168,289 |
| Processing and marketing | – | – | – | 1,117 | 1,117 |
| Farm-related business | 3 | – | 3 | 6,618 | 6,621 |
| Rural residential real estate | 30 | – | 30 | 8,541 | 8,571 |
| Total | $ 1,596 | $ 3,011 | $ 4,607 | $ 515,593 | $ 520,200 |

| | December 31, 2017 | | | | |
|---|---|---|---|---|---|
| | 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 | $ 453 | $ 292 | $ 745 | $ 303,746 | $ 304,491 |
| Production and intermediate-term | 965 | 439 | 1,404 | 158,159 | 159,563 |
| Processing and marketing | – | – | – | 1,171 | 1,171 |
| Farm-related business | 7 | – | 7 | 4,832 | 4,839 |
| Rural residential real estate | 110 | – | 110 | 8,023 | 8,133 |
| Total | $ 1,535 | $ 731 | $ 2,266 | $ 475,931 | $ 478,197 |

| | December 31, 2016 | | | | |
|---|---|---|---|---|---|
| | 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 | $ 842 | $ 242 | $ 1,084 | $ 271,106 | $ 272,190 |
| Production and intermediate-term | 841 | 290 | 1,131 | 149,220 | 150,351 |
| Processing and marketing | – | – | – | 1,056 | 1,056 |
| Farm-related business | – | – | – | 423 | 423 |
| Rural residential real estate | – | 288 | 288 | 7,568 | 7,856 |
| Total | $ 1,683 | $ 820 | $ 2,503 | $ 429,373 | $ 431,876 |

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

| | December 31, | | |
|---|---|---|---|
| | 2018 | 2017 | 2016 |
| **Nonaccrual loans:** | | | |
| Real estate mortgage | $ 735 | $ 794 | $ 1,058 |
| Production and intermediate-term | 1,961 | 609 | 569 |
| Rural residential real estate | 271 | 300 | 418 |
| Total | $ 2,967 | $ 1,703 | $ 2,045 |
| **Accruing restructured loans:** | | | |
| Real estate mortgage | $ 1,093 | $ 1,242 | $ 1,280 |
| Production and intermediate-term | 43 | – | – |
| Total | $ 1,136 | $ 1,242 | $ 1,280 |
| **Accruing loans 90 days or more past due:** | | | |
| Real estate mortgage | $ 91 | $ – | $ – |
| Production and intermediate-term | 604 | 20 | – |
| Total | $ 695 | $ 20 | $ – |
| Total nonperforming loans | $ 4,798 | $ 2,965 | $ 3,325 |
| Other property owned | – | 8 | 8 |
| Total nonperforming assets | $ 4,798 | $ 2,973 | $ 3,333 |
| Nonaccrual loans as a percentage of total loans | 0.58% | 0.36% | 0.48% |
| Nonperforming assets as a percentage of total loans and other property owned | 0.94% | 0.63% | 0.78% |
| Nonperforming assets as a percentage of capital | 5.47% | 3.71% | 4.56% |

The following table presents information relating to impaired loans (including accrued interest) as defined in Note 2:

| | December 31, | | |
|---|---|---|---|
| | 2018 | 2017 | 2016 |
| **Impaired nonaccrual loans:** | | | |
| Current as to principal and interest | $ 511 | $ 701 | $ 935 |
| Past due | 2,456 | 1,002 | 1,110 |
| Total | $ 2,967 | $ 1,703 | $ 2,045 |
| **Impaired accrual loans:** | | | |
| Restructured | $ 1,136 | $ 1,242 | $ 1,280 |
| 90 days or more past due | 695 | 20 | – |
| Total | $ 1,831 | $ 1,262 | $ 1,280 |
| Total impaired loans | $ 4,798 | $ 2,965 | $ 3,325 |
| Additional commitments to lend | $ 57 | $ 193 | $ – |

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

| | December 31, 2018 | | | Year Ended December 31, 2018 | |
|---|---|---|---|---|---|
| **Impaired loans:** | **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 | $ – | $ – | $ – | $ – | $ – |
| Production and intermediate-term | 299 | 293 | 91 | 273 | 9 |
| Rural residential real estate | – | – | – | – | – |
| Total | $ 299 | $ 293 | $ 91 | $ 273 | $ 9 |
| **With no related allowance for credit losses:** | | | | | |
| Real estate mortgage | $ 1,919 | $ 2,127 | $ – | $ 1,752 | $ 55 |
| Production and intermediate-term | 2,309 | 2,322 | – | 2,106 | 66 |
| Rural residential real estate | 271 | 350 | – | 247 | 8 |
| Total | $ 4,499 | $ 4,799 | $ – | $ 4,105 | $ 129 |
| **Total impaired loans:** | | | | | |
| Real estate mortgage | $ 1,919 | $ 2,127 | $ – | $ 1,752 | $ 55 |
| Production and intermediate-term | 2,608 | 2,615 | 91 | 2,379 | 75 |
| Rural residential real estate | 271 | 350 | – | 247 | 8 |
| Total | $ 4,798 | $ 5,092 | $ 91 | $ 4,378 | $ 138 |

| | December 31, 2017 | | | Year Ended December 31, 2017 | |
|---|---|---|---|---|---|
| **Impaired loans:** | **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 | $ 131 | $ 151 | $ 6 | $ 156 | $ 4 |
| Production and intermediate-term | 376 | 376 | 199 | 449 | 12 |
| Rural residential real estate | – | – | – | – | – |
| Total | $ 507 | $ 527 | $ 205 | $ 605 | $ 16 |
| **With no related allowance for credit losses:** | | | | | |
| Real estate mortgage | $ 1,905 | $ 2,147 | $ – | $ 2,272 | $ 62 |
| Production and intermediate-term | 253 | 334 | – | 301 | 8 |
| Rural residential real estate | 300 | 360 | – | 358 | 10 |
| Total | $ 2,458 | $ 2,841 | $ – | $ 2,931 | $ 80 |
| **Total impaired loans:** | | | | | |
| Real estate mortgage | $ 2,036 | $ 2,298 | $ 6 | $ 2,428 | $ 66 |
| Production and intermediate-term | 629 | 710 | 199 | 750 | 20 |
| Rural residential real estate | 300 | 360 | – | 358 | 10 |
| Total | $ 2,965 | $ 3,368 | $ 205 | $ 3,536 | $ 96 |

| | December 31, 2016 | | | Year Ended December 31, 2016 | |
|---|---|---|---|---|---|
| **Impaired loans:** | **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 | $ 358 | $ 364 | $ 3 | $ 401 | $ 14 |
| Production and intermediate-term | 272 | 277 | 24 | 305 | 11 |
| Rural residential real estate | 15 | 14 | 15 | 16 | 1 |
| Total | $ 645 | $ 655 | $ 42 | $ 722 | $ 26 |
| **With no related allowance for credit losses:** | | | | | |
| Real estate mortgage | $ 1,980 | $ 2,226 | $ – | $ 2,215 | $ 80 |
| Production and intermediate-term | 297 | 414 | – | 332 | 12 |
| Rural residential real estate | 403 | 441 | – | 452 | 16 |
| Total | $ 2,680 | $ 3,081 | $ – | $ 2,999 | $ 108 |
| **Total impaired loans:** | | | | | |
| Real estate mortgage | $ 2,338 | $ 2,590 | $ 3 | $ 2,616 | $ 94 |
| Production and intermediate-term | 569 | 691 | 24 | 637 | 23 |
| Rural residential real estate | 418 | 455 | 15 | 468 | 17 |
| Total | $ 3,325 | $ 3,736 | $ 42 | $ 3,721 | $ 134 |

A summary of changes in the allowance for loan losses and period end recorded investment in loans is as follows:

| | Real Estate Mortgage | Production and Intermediate-term | Agribusiness* | Rural Residential Real Estate | Total |
|---|---|---|---|---|---|
| **Activity related to the allowance for credit losses:** | | | | | |
| Balance at December 31, 2017 | $ 2,466 | $ 1,460 | $ 48 | $ 63 | $ 4,037 |
| Charge-offs | – | 263) | – | – | 263) |
| Recoveries | – | 3 | – | – | 3 |
| Provision for loan losses | 648 | 132) | 3) | 13) | 500 |
| Balance at December 31, 2018 | $ 3,114 | $ 1,068 | $ 45 | $ 50 | $ 4,277 |
| Balance at December 31, 2016 | $ 2,308 | $ 1,296 | $ 13 | $ 78 | $ 3,695 |
| Charge-offs | – | – | – | 14) | 14) |
| Recoveries | – | 6 | – | – | 6 |
| Provision for loan losses | 158 | 158 | 35 | 1) | 350 |
| Balance at December 31, 2017 | $ 2,466 | $ 1,460 | $ 48 | $ 63 | $ 4,037 |
| Balance at December 31, 2015 | $ 2,204 | $ 1,486 | $ 18 | $ 63 | $ 3,771 |
| Charge-offs | – | 26) | – | – | 26) |
| Recoveries | – | – | – | – | – |
| Provision for loan losses | 104 | 164) | 5) | 15 | 50) |
| Balance at December 31, 2016 | $ 2,308 | $ 1,296 | $ 13 | $ 78 | $ 3,695 |
| **Allowance on loans evaluated for impairment:** | | | | | |
| Individually | $ – | $ 91 | $ – | $ – | $ 91 |
| Collectively | 3,114 | 977 | 45 | 50 | 4,186 |
| Balance at December 31, 2018 | $ 3,114 | $ 1,068 | $ 45 | $ 50 | $ 4,277 |
| Individually | $ 6 | $ 199 | $ – | $ – | $ 205 |
| Collectively | 2,460 | 1,261 | 48 | 63 | 3,832 |
| Balance at December 31, 2017 | $ 2,466 | $ 1,460 | $ 48 | $ 63 | $ 4,037 |
| Individually | $ 3 | $ 24 | $ – | $ 15 | $ 42 |
| Collectively | 2,305 | 1,272 | 13 | 63 | 3,653 |
| Balance at December 31, 2016 | $ 2,308 | $ 1,296 | $ 13 | $ 78 | $ 3,695 |
| **Recorded investment in loans evaluated for impairment:** | | | | | |
| Individually | $ 1,919 | $ 2,608 | $ – | $ 271 | $ 4,798 |
| Collectively | 333,683 | 165,681 | 7,738 | 8,300 | 515,402 |
| Balance at December 31, 2018 | $ 335,602 | $ 168,289 | $ 7,738 | $ 8,571 | $ 520,200 |
| Individually | $ 2,036 | $ 734 | $ – | $ 195 | $ 2,965 |
| Collectively | 302,455 | 158,829 | 6,010 | 7,938 | 475,232 |
| Balance at December 31, 2017 | $ 304,491 | $ 159,563 | $ 6,010 | $ 8,133 | $ 478,197 |
| Individually | $ 1,058 | $ 569 | $ – | $ 418 | $ 2,045 |
| Collectively | 271,132 | 149,782 | 1,479 | 7,438 | 429,831 |
| Balance at December 31, 2016 | $ 272,190 | $ 150,351 | $ 1,479 | $ 7,856 | $ 431,876 |

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

To mitigate risk of loan losses, the Association may enter into guarantee arrangements with certain GSEs, including the Federal Agricultural Mortgage Corporation (Farmer Mac), and state or federal agencies. These guarantees generally remain in place until the loans are paid in full or expire and give the Association the right to be reimbursed for losses incurred or to sell designated loans to the guarantor in the event of default (typically four months past due), subject to certain conditions. The guaranteed balance of designated loans under these agreements was $85,832, $78,263, and $70,999 at December 31, 2018, 2017, and 2016, respectively. Fees paid for such guarantee commitments totaled $200, $140, and $145 for 2018, 2017, and 2016, respectively. These amounts are classified as noninterest expense.

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. The following tables present additional information about pre-modification and post-modification outstanding recorded investment and the effects of the modifications that occurred during the periods presented. There were no new TDRs that occurred during 2017.

| | Year Ended December 31, 2018 | | | | |
|---|---|---|---|---|---|
| **Outstanding Recorded Investment** | **Interest Concessions** | **Principal Concessions** | **Other Concessions** | **Total** | **Charge-offs** |
| **Pre-modification:** | | | | | |
| Production and intermediate-term | $ – | $ 45 | $ – | $ 45 | |
| Total | $ – | $ 45 | $ – | $ 45 | |
| **Post-modification:** | | | | | |
| Production and intermediate-term | $ – | $ 45 | $ – | $ 45 | $ – |
| Total | $ – | $ 45 | $ – | $ 45 | $ – |

| Outstanding Recorded Investment | Interest Concessions | Principal Concessions | Other Concessions | Total | Charge-offs |
|---|---|---|---|---|---|
| | Year Ended December 31, 2016 | | | | |
| **Pre-modification:** | | | | | |
| Real estate mortgage | $ – | $ 1,219 | $ – | $ 1,219 | |
| Total | $ – | $ 1,219 | $ – | $ 1,219 | |
| **Post-modification:** | | | | | |
| Real estate mortgage | $ – | $ 1,219 | $ – | $ 1,219 | $ – |
| Total | $ – | $ 1,219 | $ – | $ 1,219 | $ – |

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 each 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 | | |
|---|---|---|---|---|---|---|
| | December 31, | | | December 31, | | |
| | 2018 | 2017 | 2016 | 2018 | 2017 | 2016 |
| Real estate mortgage | $ 1,093 | $ 1,242 | $ 1,320 | $ – | $ – | $ 40 |
| Production and intermediate-term | 43 | – | – | – | – | – |
| Total loans | $ 1,136 | $ 1,242 | $ 1,320 | $ – | $ – | $ 40 |
| Additional commitments to lend | $ – | $ – | $ – | | | |

The following table presents information as of period end:

| | December 31, 2018 |
|---|---|
| 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 | $ 66 |

## Note 4 — Investments

***Equity Investments in Other Farm Credit 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.

The Association is required to maintain ownership in the Bank in the form of Class B or Class C stock as required by the Bank. The Bank may require additional capital contributions to maintain its capital requirements. The Association's investment in the Bank totaled $6,908 for 2018. In addition, the Bank had a reciprocal investment in the Association of $1,209 at December 31, 2018. The Association's resulting net investment in the Bank was $5,699 for 2018, $5,159 for 2017 and $4,933 for 2016. The Association owns 2.08 percent of the issued stock of the Bank as of December 31, 2018 net of any reciprocal investment. As of that date, the Bank's assets totaled $33.1 billion and shareholders' equity totaled $2.2 billion. The Bank's earnings were $306 million for 2018. In addition, the Association had an investment of $191 related to other Farm Credit institutions at December 31, 2018.

## Note 5 — Real Estate and Other Property

***Premises and Equipment***
Premises and equipment consists of the following:

| | December 31, | | |
|---|---|---|---|
| | 2018 | 2017 | 2016 |
| Land | $ 756 | $ 753 | $ 725 |
| Buildings and improvements | 3,449 | 3,440 | 3,440 |
| Furniture and equipment | 1,283 | 1,432 | 1,435 |
| | 5,488 | 5,625 | 5,600 |
| Less: accumulated depreciation | 2,561 | 2,665 | 2,586 |
| Total | $ 2,927 | $ 2,960 | $ 3,014 |

***Other Property Owned***
Net (gains) losses on other property owned consist of the following:

| | December 31, | | |
|---|---|---|---|
| | 2018 | 2017 | 2016 |
| (Gains) losses on sale, net | $ – | $ – | $ – |
| Carrying value unrealized (gains) losses | – | – | – |
| Operating (income) expense, net | 1) | – | 1 |
| Gains) losses on other property owned, net | $ 1) | $ – | $ 1 |

Gains on sales of other property owned were deferred if the sales involved financing from the Association and did not meet the criteria for immediate recognition. There were no deferred gains at December 31, 2018, 2017, and 2016.

**Note 6 — Debt**

***Notes Payable to AgFirst Farm Credit Bank***

Under the Farm Credit Act, the Association is obligated to borrow only from the Bank, unless the Bank approves borrowing from other funding sources. The borrowing relationship is established with the Bank through a General Financing Agreement (GFA). The GFA utilizes the Association's credit and fiscal performance as criteria for establishing a line of credit on which the Association may draw funds. The GFA has a one year term which expires on December 31 and is renewable each year. The Association has no reason to believe the GFA will not be renewed upon expiration. The Bank, consistent with FCA regulations, has established limitations on the Association's ability to borrow funds based on specified factors or formulas relating primarily to credit quality and financial condition. At December 31, 2018, the Association's notes payable were within the specified limitations.

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 and the terms of the revolving lines of credit are governed by the GFA. Interest rates on both variable and fixed rate advances are generally established loan-by-loan based on the Bank's marginal cost of funds, capital position, operating costs and return objectives. In the event of prepayment of any portion of a fixed rate advance, the Association may incur a prepayment penalty in accordance with the terms of the GFA, which will be included in interest expense. The interest rate is periodically adjusted by the Bank based upon an agreement between the Bank and the Association.

The weighted average interest rates on the variable rate advances were 3.40 percent for LIBOR-based loans and 3.49 percent for Prime-based loans, and the weighted average remaining maturities were 1.7 years and 1.7 years, respectively, at December 31, 2018. The weighted-average interest rate on the fixed rate and adjustable rate mortgage (ARM) loans which are match funded by the Bank was 3.36 percent, and the weighted average remaining maturity was 13.0 years at December 31, 2018. The weighted-average interest rate on all interest-bearing notes payable was 3.37 percent and the weighted-average remaining maturity was 11.2 years at December 31, 2018. Variable rate and fixed rate notes payable represent approximately 2.16 percent and 97.84 percent, respectively, of total notes payable at December 31, 2018. The weighted average maturities described above are related to matched-funded loans. The direct note itself has an annual maturity as prescribed in the GFA.

**Note 7 — Members' Equity**

A description of the Association's capitalization requirements, protection mechanisms, regulatory capitalization requirements and restrictions, and equities are provided below:

A. **Capital Stock and Participation Certificates:** In accordance with the Farm Credit Act and the Association's capitalization bylaws, each borrower is required to invest in Common stock for agricultural loans, or participation certificates in the case of rural home and farm-related business loans, as a condition of borrowing. The initial borrower investment, through either purchase or transfer, must be in an amount equal to two percent of the loan amount or $1 thousand, whichever is less. The Association bylaws permit the Board of Directors, at their discretion, to establish an investment range between a minimum of two percent of the loan amount or $1 thousand, whichever is less, and a maximum not to exceed ten percent of the loan amount. The Board of Directors may increase the amount of investment if necessary to meet the Association's capital needs. Loans designated for sale or sold into the Secondary Market on or after April 16, 1996 will have no voting stock or participation certificate purchase requirement if sold within 180 days following the date of designation.

   The borrower acquires ownership of the capital stock or participation certificates at the time the loan is made, but usually does not make a cash investment. The aggregate par value is generally added to the principal amount of the related loan obligation. The Association retains a first lien on the stock or participation certificates owned by borrowers. Retirement of such equities will generally be at the lower of par or book value, and repayment of a loan does not automatically result in retirement of the corresponding stock or participation certificates.

B. **Regulatory Capitalization Requirements and Restrictions:** An FCA regulation empowers it to direct a transfer of funds or equities by one or more System institutions to another System institution under specified circumstances. The Association has not been called upon to initiate any transfers and is not aware of any proposed action under this regulation.

   There are currently no prohibitions in place that would prevent the Association from retiring stock, distributing earnings, or paying dividends per the statutory and regulatory restrictions, and the Association has no reason to believe any such restrictions may apply in the future.

   Effective January 1, 2017, the regulatory capital requirements for System Banks and associations were modified. The new regulations ensure that the System's capital requirements are comparable to the Basel III framework and the standardized approach that the federal banking regulatory agencies have adopted. New regulations replaced core surplus and total surplus ratios with common equity tier 1 (CET1) capital, tier 1 capital, and total capital risk-based ratios. The new regulations also include a tier 1 leverage ratio and an unallocated retained earnings (URE)

and URE equivalents (UREE) leverage ratio. The permanent capital ratio (PCR) remains in effect.

The ratios are calculated using three-month average daily balances, in accordance with FCA regulations, as follows:

- The CET1 capital ratio is the sum of 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 investments in other System institutions, divided by average risk-adjusted assets.
- The tier 1 capital ratio is CET1 capital plus non-cumulative perpetual preferred stock, divided by average risk-adjusted assets.
- The total capital ratio is tier 1 capital plus other required borrower stock 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 loan losses and reserve for unfunded commitments under certain limitations less certain investments in other System institutions under the corresponding deduction approach, divided by average risk-adjusted assets.
- The permanent capital ratio 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 investments in other System institutions, divided by PCR risk-adjusted assets.
- The tier 1 leverage ratio is tier 1 capital, divided by average assets less regulatory deductions to tier 1 capital.
- The URE and UREE leverage ratio is unallocated retained earnings, paid-in capital, and 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 to tier 1 capital.

The following sets forth the regulatory capital ratios which were effective January 1, 2017:

| Ratio | Minimum Requirement | Capital Conservation Buffer* | Minimum Requirement with Capital Conservation Buffer | Capital Ratios as of December 31, 2018 | 2017 |
|---|---|---|---|---|---|
| Risk-adjusted ratios: | | | | | |
| CET1 Capital | 4.5% | 1.25% | 5.75% | 17.23% | 16.66% |
| Tier 1 Capital | 6.0% | 1.25% | 7.25% | 17.23% | 16.66% |
| Total Capital | 8.0% | 1.25% | 9.25% | 18.12% | 17.54% |
| Permanent Capital | 7.0% | 0.0% | 7.0% | 17.45% | 16.91% |
| Non-risk-adjusted ratios: | | | | | |
| Tier 1 Leverage | 4.0% | 1.0% | 5.0% | 15.08% | 14.63% |
| URE and UREE Leverage | 1.5% | 0.0% | 1.5% | 14.73% | 14.29% |

** The capital conservation buffers have a 3 year phase-in period and will become fully effective January 1, 2020. Risk-adjusted ratio minimums will increase 0.625% each year until fully phased in. There is no phase-in period for the tier 1 leverage ratio.*

If the capital ratios fall below the minimum regulatory requirements, including the buffer amounts, capital distributions (equity redemptions, dividends, and patronage) and discretionary senior executive bonuses are restricted or prohibited without prior FCA approval.

C. **Description of Equities:** The Association is authorized to issue or have outstanding nonvoting Class A Preferred Stock, nonvoting Class B Common Stock, voting Class C Common Stock, nonvoting Class C Participation Certificates and such other classes of equity as may be provided for in amendments to the bylaws in such amounts as may be necessary to conduct the Association's business. All stock and participation certificates have a par or face value of five dollars ($5.00) per share.

The Board, at its sole discretion, may declare dividends on either the Class A Preferred Stock alone, or on all classes of Stock and Participation certificates during any fiscal year. However, dividends shall not be paid on common stock or participation certificates in any year with respect to which the Association has obligated itself to distribute patronage refunds.

The Association had the following shares outstanding at December 31, 2018:

| Class | Protected | Shares Outstanding: Number | Aggregate Par Value |
|---|---|---|---|
| B Common/Nonvoting | No | 218 | 1 |
| C Common/Voting | No | 578,945 | 2,894 |
| Common Issued to Bank/Nonvoting | No | 241,705 | 1,209 |
| C Participation Certificates/Nonvoting | No | 24,171 | 121 |
| Total Capital Stock and Participation Certificates | | 845,039 | $ 4,225 |

At-risk common stock and participation certificates are retired at the sole discretion of the Board at book value not to exceed par or face amounts, provided the minimum capital adequacy standards established by the Board are met.

*Retained Earnings*

The Association maintains an unallocated retained earnings account and an allocated retained earnings account. The minimum aggregate amount of these two accounts is determined by the Board. At the end of any fiscal year, if

the retained earnings accounts otherwise would be less than the minimum amount determined by the Board as necessary to maintain adequate capital reserves to meet the commitments of the Association, the Association shall apply earnings for the year to the unallocated retained earnings account in such amounts as may be determined necessary by the Board. Unallocated retained earnings are maintained for each borrower to permit liquidation on a patronage basis.

The Association maintains an allocated retained earnings account consisting of earnings held and allocated to borrowers on a patronage basis. In the event of a net loss for any fiscal year, such allocated retained earnings account will be subject to full impairment in the order specified in the bylaws beginning with the most recent allocation.

The Association has a first lien and security interest on all retained earnings account allocations owned by any borrowers, and all distributions thereof, as additional collateral for their indebtedness to the Association. When the debt of a borrower is in default or is in the process of final liquidation by payment or otherwise, the Association, upon approval of the Board, may order any and all retained earnings account allocations owned by such borrower to be applied on the indebtedness.

Allocated equities shall be retired solely at the discretion of the Board, provided that minimum capital standards established by the FCA and the Board are met. Nonqualified retained surplus is considered to be permanently invested in the Association and as such, there is no plan to revolve or retire this surplus. All nonqualified distributions are tax deductible only when redeemed.

At December 31, 2018, allocated members' equity consisted of $61,064 of nonqualified retained surplus.

*Patronage Distributions*

Prior to the beginning of any fiscal year, the Board, by adoption of a resolution, may obligate the Association to distribute to Patrons, on a patronage basis, all or any portion of available net earnings for such fiscal year or for that and subsequent fiscal years. Patrons are defined as Members, Equity holders, and other customers, borrowers and financial institutions with which the Association shall conduct business as identified by the Board in the obligation resolution. Patronage distributions are based on the proportion of the Patron's interest to the amount of interest earned by the Association on its total loans unless another proportionate patronage basis is approved by the Board.

If the Association meets its capital adequacy standards after making the patronage distributions, the patronage distributions may be in cash, authorized stock of the Association, allocations of earnings retained in an allocated members' equity account, or any one or more of such forms of distribution. Patronage distributions of the Association's earnings may be paid on either a qualified or nonqualified basis, or a combination of both, as determined by the Board. A minimum of 20 percent of the total qualified patronage distribution to any borrower for any fiscal year shall always be paid in cash. Amounts not distributed are retained as unallocated members' equity.

*Transfer*

Classes B and C Common Stock and Participation Certificates may be transferred to persons or entities eligible to purchase or hold such equities as provided in the Association's bylaws. Class A Preferred Stock may be transferred in the manner set forth in the resolution authorizing the issuance of such Stock.

*Impairment*

Any net losses recorded by the Association shall first be applied against unallocated members' equity. To the extent that such losses would exceed unallocated members' equity, such losses would be applied consistent with the Association's bylaws and distributed pro rata to each share and/or unit outstanding in the class, in the following order: Class B Common Stock, Class C Common Stock and unit of Participation Certificates.

1. Class B Common Stock, Class C Common Stock and unit of Participation Certificates
2. Class A Preferred Stock

*Liquidation*

In the event of liquidation or dissolution of the Association, any assets of the Association remaining after payment or retirement of all liabilities should be distributed to the holders of the outstanding stock and participation certificates in the following order:

1. Class A Preferred Stock
2. Classes B and C Common Stock and Participation Certificates
3. Allocated retained earnings evidenced by qualified written notices of allocation, in the order of the year of issuance and pro-rata by year of issuance
4 Allocated retained earnings evidenced by nonqualified written notices of allocation, in the year of issuance and pro-rata by year of issuance
5 All unallocated retained earnings earned after April 1, 1995, shall be distributed to all Patrons from April 1, 1995, through the date of liquidation on a patronage basis
6. Any remaining assets of the Association after such distribution shall be distributed ratably to the holders of all classes of stock and participation certificates in proportion to their ownership

**Note 8 — 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.

Estimating the fair value of the Association's equity investments in the Bank and Other Farm Credit Institutions is not practicable because the stock is not traded. The net investment is a requirement of borrowing from the Bank and is carried at cost.

The classifications within the fair value hierarchy (See Note 2 are as follows:

**Level 1**
The Association has no Level 1 assets or liabilities measured at fair value on a recurring basis at December 31, 2018. For cash, the carrying value is primarily utilized as a reasonable estimate of fair value.

**Level 2**
The Association had no Level 2 assets or liabilities measured at fair value on a recurring basis at December 31, 2018.

**Level 3**
Because no active market exists for the Association's accruing loans, fair value is estimated by discounting the expected future cash flows using the Association's current interest rates at which similar loans currently would be made to borrowers with similar credit risk. The loan portfolio is segregated into pools of loans with homogeneous characteristics based upon repricing and credit risk. Expected future cash flows and interest rates reflecting appropriate credit risk are separately determined for each individual pool.

Fair values of loans in a nonaccrual status are estimated to be the carrying amount of the loan less specific reserves. Certain loans evaluated for impairment under FASB guidance have fair values based upon the underlying collateral, as the loans were collateral-dependent. Specific reserves were established for these loans when the value of the collateral, less estimated cost to sell, was less than the principal balance of the loan. 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.

Notes payable are segregated into pricing pools according to the types and terms of the loans (or other assets) which they fund. Fair value of the notes payable is estimated by discounting the anticipated cash flows of each pricing pool using the current rate that would be charged for additional borrowings. For purposes of this estimate it is assumed the cash flow on the notes is equal to the principal payments on the Association's loan receivables. This assumption implies that earnings on the Association's interest margin are used to fund operating expenses and capital expenditures.

Other property owned is classified as a Level 3 asset. The fair value is generally determined using formal appraisals of each individual property. These assets are held for sale. Costs to sell represent transaction costs and are not included as a component of the fair value of other property owned. Other property owned consists of real and personal property acquired through foreclosure or deed in lieu of foreclosure and is carried as an asset held for sale, which is generally not its highest and best use. These properties are part of the Association's credit risk mitigation efforts, not its ongoing business. In addition, FCA regulations require that these types of property be disposed of within a reasonable period of time.

For commitments to extend credit, the estimated market value of off-balance-sheet commitments is minimal since the committed rate approximates current rates offered for commitments with similar rate and maturity characteristics; therefore, the related credit risk is not significant.

There were no Level 3 assets and 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.

| | December 31, 2018 | | | | |
|---|---|---|---|---|---|
| | **Total Carrying Amount** | **Level 1** | **Level 2** | **Level 3** | **Total Fair Value** |
| **Recurring Measurements** | | | | | |
| **Assets:** | | | | | |
| Recurring Assets | $ – | $ – | $ – | $ – | $ – |
| **Liabilities:** | | | | | |
| Recurring Liabilities | $ – | $ – | $ – | $ – | $ – |
| **Nonrecurring Measurements** | | | | | |
| **Assets:** | | | | | |
| Impaired loans | $ 208 | $ – | $ – | $ 208 | $ 208 |
| Other property owned | – | – | – | – | – |
| Nonrecurring Assets | $ 208 | $ – | $ – | $ 208 | $ 208 |
| **Other Financial Instruments** | | | | | |
| **Assets:** | | | | | |
| Cash | $ 3,046 | $ 3,046 | $ – | $ – | $ 3,046 |
| Loans | 508,560 | – | – | 493,247 | 493,247 |
| Other Financial Assets | $ 511,606 | $ 3,046 | $ – | $ 493,247 | $ 496,293 |
| **Liabilities:** | | | | | |
| Notes payable to AgFirst Farm Credit Bank | $ 441,115 | $ – | $ – | $ 431,598 | $ 431,598 |
| Other Financial Liabilities | $ 441,115 | $ – | $ – | $ 431,598 | $ 431,598 |

| | December 31, 2017 | | | | |
|---|---|---|---|---|---|
| | **Total Carrying Amount** | **Level 1** | **Level 2** | **Level 3** | **Total Fair Value** |
| **Recurring Measurements** | | | | | |
| **Assets:** | | | | | |
| Recurring Assets | $ – | $ – | $ – | $ – | $ – |
| **Liabilities:** | | | | | |
| Recurring Liabilities | $ – | $ – | $ – | $ – | $ – |
| **Nonrecurring Measurements** | | | | | |
| **Assets:** | | | | | |
| Impaired loans | $ 302 | $ – | $ – | $ 302 | $ 302 |
| Other property owned | 8 | – | – | 9 | 9 |
| Nonrecurring Assets | $ 310 | $ – | $ – | $ 311 | $ 311 |
| **Other Financial Instruments** | | | | | |
| **Assets:** | | | | | |
| Cash | $ 2,028 | $ 2,028 | $ – | $ – | $ 2,028 |
| Loans | 467,524 | – | – | 455,704 | 455,704 |
| Other Financial Assets | $ 469,552 | $ 2,028 | $ – | $ 455,704 | $ 457,732 |
| **Liabilities:** | | | | | |
| Notes payable to AgFirst Farm Credit Bank | $ 406,457 | $ – | $ – | $ 399,924 | $ 399,924 |
| Other Financial Liabilities | $ 406,457 | $ – | $ – | $ 399,924 | $ 399,924 |

| | December 31, 2016 | | | | |
|---|---|---|---|---|---|
| | Total Carrying Amount | Level 1 | Level 2 | Level 3 | Total Fair Value |
| **Recurring Measurements** | | | | | |
| **Assets:** | | | | | |
| Recurring Assets | $ – | $ – | $ – | $ – | $ – |
| **Liabilities:** | | | | | |
| Recurring Liabilities | $ – | $ – | $ – | $ – | $ – |
| **Nonrecurring Measurements** | | | | | |
| **Assets:** | | | | | |
| Impaired loans | $ 603 | $ – | $ – | $ 603 | $ 603 |
| Other property owned | 8 | – | – | 9 | 9 |
| Nonrecurring Assets | $ 611 | $ – | $ – | $ 612 | $ 612 |
| **Other Financial Instruments** | | | | | |
| **Assets:** | | | | | |
| Cash | $ 1,605 | $ 1,605 | $ – | $ – | $ 1,605 |
| Loans | 423,225 | – | – | 412,214 | 412,214 |
| Other Financial Assets | $ 424,830 | $ 1,605 | $ – | $ 412,214 | $ 413,819 |
| **Liabilities:** | | | | | |
| Notes payable to AgFirst Farm Credit Bank | $ 368,038 | $ – | $ – | $ 360,085 | $ 360,085 |
| Other Financial Liabilities | $ 368,038 | $ – | $ – | $ 360,085 | $ 360,085 |

## 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.

***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 certain System financial instruments, as described below. 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 | $ 208 | Appraisal | Income and expense<br>Comparable sales<br>Replacement costs<br>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<br>Probability of default<br>Loss severity |
| Notes payable to AgFirst Farm Credit Bank | Discounted cash flow | Prepayment forecasts<br>Probability of default<br>Loss severity |

**Note 9 — Employee Benefit Plans**

The Association participates in three District sponsored benefit plans. These plans include a multi-employer defined benefit pension plan, the Independent Associations Retirement Plan, which is a final average pay plan (IAR Plan). In addition, the Association participates in a multi-employer defined benefit other postretirement benefits plan (OPEB Plan), the Farm Credit Benefits Alliance Retiree and Disabled Medical and Dental Plan, and a defined contribution 401(k) plan. The risks of participating in these multi-employer plans are different from single-employer plans in the following aspects:

1. Assets contributed to multi-employer plans by one employer may be used to provide benefits to employees of other participating employers.
2. If a participating employer stops contributing to the plan, the unfunded obligations of the plan may be borne by the remaining participating employers.
3. If the Association chooses to stop participating in some of its multi-employer plans, the Association may be required to contribute to eliminate the underfunded status of the plan.

The District's multi-employer plans are not subject to ERISA and no Form 5500 is required. As such, the following information is neither available for nor applicable to the plans:

1. The Employee Identification Number (EIN) and three-digit Pension Plan Number
2. The most recent Pension Protection Act (PPA) zone status. Among other factors, plans in the red zone are generally less than 65 percent funded, plans in the yellow zone are less than 80 percent funded, and plans in the green zone are at least 80 percent funded.
3. The "FIP/RP Status" indicating whether a financial improvement plan (FIP) or a rehabilitation plan (RP) is either pending or has been implemented.
4. The expiration date(s) of collective-bargaining agreement(s).

The IAR Plan covers employees hired prior to January 1, 2009 and includes other District employees that are not employees of the Association. It is accounted for as a multiemployer plan. The related net benefit plan obligations are not included in the Association's Balance Sheets but are included in the Combined Balance Sheets for the AgFirst District. IAR Plan expenses included in employee benefit costs on the Association's Statements of Income were $953 for 2018, $848 for 2017, and $821 for 2016. At December 31, 2018, 2017, and 2016, the total liability balance for the IAR Plan presented in the District Combined Balance Sheets is $8,626, $15,078, and $11,528, respectively. The IAR Plan is 88.42 percent, 81.82 percent, and 83.70 percent funded to the projected benefit obligation as of December 31, 2018, 2017, and 2016, respectively.

In addition to providing pension benefits, the Association provides certain medical and dental benefits for eligible retired employees through the OPEB Plan. Substantially all of the Association employees may become eligible for the benefits if they reach early retirement age while working for the Association. Early retirement age is defined as a minimum of age 55 and 10 years of service. Employees hired after December 31, 2002, and employees who separate from service between age 50 and age 55, are required to pay the full cost of their retiree health insurance coverage. Employees who retire subsequent to December 1, 2007 are no longer provided retiree life insurance benefits. The OPEB Plan includes other Farm Credit System employees that are not employees of the Association or District and is accounted for as a multiemployer plan. The related net benefit plan obligations are not included in the Association's Balance Sheets but are included in the Combined Statement of Condition for the Farm Credit System. The OPEB Plan is unfunded with expenses paid as incurred. Postretirement benefits other than pensions included in employee benefit costs on the Association's Statements of Income were $76 for 2018, $72 for 2017, and $154 for 2016. At December 31, 2018, the total AgFirst District liability balance for the OPEB Plan presented in the Farm Credit System Combined Statement of Condition is $181,820.

During 2017, the method of recording expenses at participating District entities for the IAR and OPEB Plans was modified. Prior to 2017, expense was recorded based on allocations of actuarially-determined costs and any differences between recorded expense and actual contributions were recorded in Other Assets or Other Liabilities on the Consolidated Balance Sheets. For 2017 and future years, participating entities will record employee benefit costs based on the actual contributions to the Plans. This change caused the Association to modify its accounting estimates recorded in Other Assets and Other Liabilities since the assets and liabilities do not impact future contributions to the Plans. The change in estimate resulted in the reduction of Other Assets by $1,762 and the reduction of Other Liabilities by $1,467 on the Association's Balance Sheets, and a total addition of noninterest expenses on the Association's Statements of Income of $295 during 2017.

The Association also participates in a defined contribution Farm Credit Benefits Alliance (FCBA) 401(k) Plan (401(k) Plan), which qualifies as a 401(k) plan as defined by the Internal Revenue Code. This 401(k) plan requires the Association to match 100 percent of employee optional contributions up to a maximum employee contribution of 6.00 percent of total compensation. Employee deferrals are not to exceed the maximum deferral as determined and adjusted by the Internal Revenue Service. The 401(k) Plan costs are expensed as funded. Employer contributions to this plan included in salaries and employee benefit costs were $238, $217, and $194 for the years ended December 31, 2018, 2017, and 2016, respectively. Beginning in 2015, contributions include an additional 3.00 percent of eligible compensation for employees hired after December 31, 2008.

Additional information for the above may be found in the Notes to the Annual Information Statement of the Farm Credit System.

**Note 10 — Related Party Transactions**

In the ordinary course of business, the Association enters into loan transactions with officers and directors of the Association, their immediate families and other organizations with which such persons may be associated. Such loans are subject to special approval requirements contained in the FCA regulations and are made on the same terms, including

interest rates and collateral, as those prevailing at the time for comparable transactions with unrelated borrowers.

Total loans to such persons at December 31, 2018 amounted to $3,645. During 2018, $2,447 of new loans were made and repayments totaled $2,210. In the opinion of management, none of these loans outstanding at December 31, 2018 involved more than a normal risk of collectibility.

**Note 11 — Commitments and Contingencies**

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.

In the normal course of business, the Association may participate in financial instruments with off-balance-sheet risk to satisfy the financing needs of its borrowers. These financial instruments may include commitments to extend credit or 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.

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 Consolidated Balance Sheets until funded or drawn upon. The credit risk associated with issuing commitments and letters of credit is substantially the same as that involved in extending loans to borrowers and management applies the same credit policies to these commitments. Upon fully funding a commitment, the credit risk amounts are equal to the contract amounts, assuming that borrowers 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 borrower. At December 31, 2018, $51,568 of commitments to extend credit and no commercial letters of credit were outstanding with no related reserve for unfunded commitments included in Other Liabilities in the Consolidated Balance Sheets at December 31, 2018.

The Association also participates in standby letters of credit to satisfy the financing needs of its borrowers. These letters of credit are irrevocable agreements to guarantee payments of specified financial obligations. At December 31, 2018, standby letters of credit outstanding totaled $10 with expiration dates ranging from January 2, 2019 to December 31, 2019. The maximum potential amount of future payments that may be required under these guarantees was $10.

**Note 12 — Income Taxes**

The provision (benefit) for income taxes follows:

| | Year Ended December 31, | | |
|---|---|---|---|
| | 2018 | 2017 | 2016 |
| Current: | | | |
| Federal | $ 4 | $ 12 | $ 53) |
| State | – | – | – |
| | $ 4 | $ 12 | $ 53) |
| Deferred: | | | |
| Federal | – | – | – |
| State | – | – | – |
| Total provision  benefit) for income taxes | $ 4 | $ 12 | $ 53) |

The provision (benefit) for income tax differs from the amount of income tax determined by applying the applicable U.S. statutory federal income tax rate to pretax income as follows:

| | December 31, | | |
|---|---|---|---|
| | 2018 | 2017 | 2016 |
| Federal tax at statutory rate | $ 2,564 | $ 3,817 | $ 3,424 |
| Patronage distributions | 848) | 1,257) | 1,086) |
| Tax-exempt FLCA earnings | 1,749) | 2,685) | 2,388) |
| Change in deferred tax asset valuation allowance | 38 | 121) | 61 |
| Deferred tax rate change | – | 260 | – |
| Other | 1) | 2) | 64) |
| Provision  benefit) for income taxes | $ 4 | $ 12 | $ 53) |

In late December 2017, federal tax legislation was enacted which, among other things, lowered the federal corporate tax rate from 35% to 21% beginning on January 1, 2018. The change to the lower corporate tax rate led to an insignificant remeasurement of the deferred tax liabilities and deferred tax assets in 2017, the period of enactment. Deferred tax assets and liabilities are comprised of the following at:

| | December 31, | | |
|---|---|---|---|
| | 2018 | 2017 | 2016 |
| Deferred income tax assets: | | | |
| Allowance for loan losses | $ 296 | $ 301 | $ 467 |
| Annual leave | 69 | 65 | 101 |
| Nonaccrual loan interest | 82 | 45 | 71 |
| Pensions and other postretirement benefits | – | – | 514 |
| Other | – | – | – |
| Gross deferred tax assets | 447 | 411 | 1,153 |
| Less: valuation allowance | 428 | 390 | 511) |
| Gross deferred tax assets, net of valuation allowance | 19 | 21 | 642 |
| Deferred income tax liabilities: | | | |
| Pensions and other postretirement benefits | – | – | 617) |
| Depreciation | 19 | 21 | 25) |
| Other | – | – | – |
| Gross deferred tax liability | 19 | 21 | 642) |
| Net deferred tax asset (liability | $ – | $ – | $ – |

At December 31, 2018, deferred income taxes have not been provided by the Association on approximately $6 million of its investment in the Bank. Management expects that these earnings will not be converted to cash.

The Association recorded a valuation allowance of $428, $390 and $511 as of December 31, 2018, 2017 and 2016, respectively. The Association will continue to evaluate the realizability of these deferred tax assets and adjust the valuation allowance accordingly.

There were no uncertain tax positions identified related to the current year and the Association has no unrecognized tax benefits at December 31, 2018 for which liabilities have been established. The Association recognizes interest and penalties, if any, related to unrecognized tax benefits as a component of income tax expense.

The tax years that remain open for federal and major state income tax jurisdictions are 2015 and forward.

**Note 13 — Additional Financial Information**

***Quarterly Financial Information (Unaudited)***

| | 2018 | | | | |
|---|---|---|---|---|---|
| | First | Second | Third | Fourth | Total |
| Net interest income | $ 3,024 | $ 3,117 | $ 3,177 | $ 3,282 | $ 12,600 |
| Provision for (reversal of allowance for) loan losses | – | – | 200 | 300 | 500 |
| Noninterest income (expense), net | (520) | (834) | (855) | 2,317 | 108 |
| Net income | $ 2,504 | $ 2,283 | $ 2,122 | $ 5,299 | $ 12,208 |

| | 2017 | | | | |
|---|---|---|---|---|---|
| | First | Second | Third | Fourth | Total |
| Net interest income | $ 2,807 | $ 2,800 | $ 2,939 | $ 3,014 | $ 11,560 |
| Provision for (reversal of allowance for) loan losses | – | – | – | 350 | 350 |
| Noninterest income (expense), net | (886) | (834) | (701) | 2,104 | 317) |
| Net income | $ 1,921 | $ 1,966 | $ 2,238 | $ 4,768 | $ 10,893 |

| | 2016 | | | | |
|---|---|---|---|---|---|
| | First | Second | Third | Fourth | Total |
| Net interest income | $ 2,717 | $ 2,744 | $ 2,805 | $ 2,830 | $ 11,096 |
| Provision for (reversal of allowance for) loan losses | – | – | – | (50) | 50) |
| Noninterest income (expense), net | (910) | (911) | (799) | 1,311 | (1,309) |
| Net income | $ 1,807 | $ 1,833 | $ 2,006 | $ 4,191 | $ 9,837 |

**Note 14 — Subsequent Events**

The Association evaluated subsequent events and determined that there were none requiring disclosure through March 13, 2019, which was the date the financial statements were issued.

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