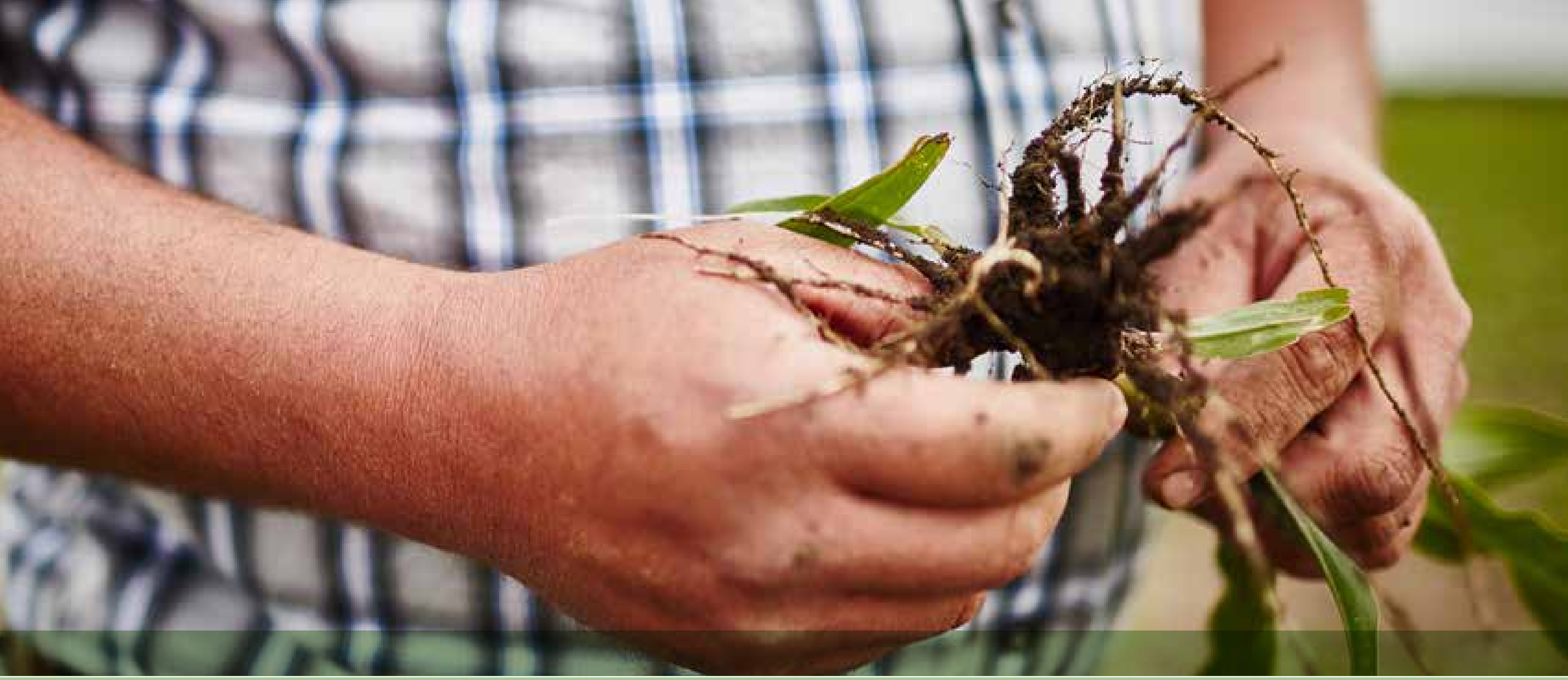

AGFIRST FARM CREDIT BANK & DISTRICT ASSOCIATIONS

FARM CREDIT

2017 ANNUAL REPORT

AgFirst Farm Credit Bank and District Associations

2017 ANNUAL REPORT

Contents

Management

Leon T. Amerson .... President and Chief Executive Officer
Charl L. Butler.... Executive Vice President and Chief Operating Officer
Isvara M. A. Wilson .... Executive Vice President and Chief Administrative Officer
William E. Brown .... Senior Vice President and Chief Credit Officer
Sam Esfahani.... Senior Vice President and Chief Information Officer
Stephen Gilbert.... Senior Vice President and Chief Financial Officer
Frances S. Griggs .... Senior Vice President and General Counsel
Daniel E. LaFreniere .... Senior Vice President and Chief Audit Executive

Board of Directors

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Ellis W. Taylor .... Vice Chairman
James C. Carter, Jr. .... Director
William J. Franklin, Jr.... Director
Bonnie V. Hancock .... Director
Dale R. Hershey. .... Director
Walter C. Hopkins, Sr. .... Director
William K. Jackson .... Director
S. Jerry Layman .... Director
J. Alvin Lyons .... Director
S. Alan Marsh.... Director
Fred R. Moore, Jr. .... Director
James M. Norsworthy, III .... Director
Katherine A. Pace.... Director
William T. Robinson.... Director
Michael T. Stone .... Director

Report of Management

The accompanying Combined Financial Statements and related financial information appearing throughout this Annual Report have been prepared by management of AgFirst Farm Credit Bank (Bank) 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 Combined 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 Combined Financial Statements, and that the assets of the Bank 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 Bank and each affiliated District Agricultural Credit Association (District Association) maintain 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 Audit Committee of the Board of Directors and to the Chief Executive Officer.

The Bank has a Code of Ethics for its Chief Executive Officer, Senior Financial Officers, and other Senior Officers who are involved with preparation and distribution of financial statements and maintenance of the records supporting the financial statements. A copy of the Bank Code of Ethics may be viewed on the Bank's website at www.agfirst.com.

The Combined Financial Statements have been audited by independent auditors, whose report appears elsewhere in this Annual Report. The Bank and each District Association are also subject to examination by the Farm Credit Administration.

The Combined Financial Statements, in the opinion of management, fairly present the combined financial condition of the Bank and District Associations. The undersigned certify that we have reviewed the 2017 Annual Report of the Bank and District Associations, 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.

Curtis R. Hancock, Jr.
Chairman of the Board

Leon T. Amerson
President and Chief Executive Officer

Stephen Gilbert
Senior Vice President and Chief Financial Officer

March 13, 2018

Report on Internal Control Over Financial Reporting

AgFirst Farm Credit Bank (Bank) and each affiliated District Agricultural Credit Association's (District Association) 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 Bank and each District Association's respective 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 Bank and each District Association's principal executives and principal financial officers, or persons performing similar functions, and effected by its Board of Directors, management and other personnel. This process provides reasonable assurance regarding the reliability of financial reporting information and the preparation of the respective Consolidated Financial Statements for external purposes in accordance with accounting principles generally accepted in the United States of America.

Internal control over financial reporting includes those policies and procedures that: (1) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the Bank and each District 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 Bank and each District Association, and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Bank's and each District Association's assets that could have a material effect on its Consolidated Financial Statements.

The Bank's and each District Association's management has completed an assessment of the effectiveness of internal control over financial reporting as of December 31, 2017. 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 Bank's and each District Association's management concluded that as of December 31, 2017, the internal control over financial reporting was effective based upon the COSO criteria. Additionally, based on this assessment, the Bank's and each District Association's management determined that there were no material weaknesses in the internal control over financial reporting as of December 31, 2017.

Leon T. Amerson
President and Chief Executive Officer

Stephen Gilbert
Senior Vice President and Chief Financial Officer

March 13, 2018

Five-Year Summary of Selected Combined Financial Data

(dollars in thousands)	**2017**	2016	2015	2014	2013
	As of or for the year ended December 31,				
Combined Balance Sheet Data					
Cash and cash equivalents	**$ 771,970**	$ 854,115	$ 718,010	$ 896,189	$ 1,230,374
Investment securities	**8,185,753**	8,111,523	7,621,784	7,543,358	7,295,481
Loans	**28,451,807**	27,457,966	26,152,756	24,415,969	23,270,508
Allowance for loan losses	**(193,067)**	(182,600)	(178,617)	(174,853)	(187,437)
Net loans	**28,258,740**	27,275,366	25,974,139	24,241,116	23,083,071
Other property owned	**14,655**	30,281	48,462	45,986	68,801
Other assets	**579,450**	549,834	517,129	525,042	559,942
Total assets	**$ 37,810,568**	$ 36,821,119	$ 34,879,524	$ 33,251,691	$ 32,237,669
Obligations with maturities of one year or less	**$ 13,561,116**	$ 13,507,897	$ 10,709,424	$ 11,184,458	$ 9,653,436
Obligations with maturities greater than one year	**18,000,328**	17,432,165	18,499,040	16,664,874	17,409,559
Total liabilities	**31,561,444**	30,940,062	29,208,464	27,849,332	27,062,995
Perpetual preferred stock	**49,250**	49,250	115,000	125,250	125,250
Protected borrower equity	**502**	513	606	655	901
At-risk equity:					
Capital stock and participation certificates	**169,716**	174,877	160,456	154,471	156,382
Additional paid in capital	**82,573**	82,573	63,678	60,270	60,270
Retained earnings					
Allocated	**2,097,179**	1,971,423	1,893,930	1,818,123	1,693,689
Unallocated	**4,231,956**	3,976,744	3,762,253	3,540,901	3,313,471
Accumulated other comprehensive income (loss)	**(382,052)**	(374,323)	(324,863)	(297,311)	(175,289)
Total shareholders' equity	**6,249,124**	5,881,057	5,671,060	5,402,359	5,174,674
Total liabilities and shareholders' equity	**37,810,568**	36,821,119	34,879,524	33,251,691	32,237,669
Combined Statement of Income Data					
Net interest income	**$ 1,038,806**	$ 1,036,187	$ 1,004,225	$ 1,033,054	$ 1,064,422
Provision for (reversal of) loan losses	**13,371**	(191)	5	(12,167)	14,687
Noninterest income (expense), net	**(319,108)**	(475,227)	(454,641)	(417,582)	(416,999)
Net income	**$ 706,327**	$ 561,151	$ 549,579	$ 627,639	$ 632,736
Combined Key Financial Ratios					
Rate of return on average:					
Total assets	**1.92%**	1.55%	1.63%	1.96%	1.99%
Total shareholders' equity	**11.39%**	9.44%	9.63%	11.38%	12.42%
Net interest income as a percentage of average earning assets	**2.88%**	2.96%	3.08%	3.32%	3.47%
Net (chargeoffs) recoveries to average loans	**(0.01)%**	0.02%	0.02%	0.00%	(0.18)%
Total shareholders' equity to total assets	**16.53%**	15.97%	16.26%	16.25%	16.05%
Debt to shareholders' equity (:1)	**5.05**	5.26	5.15	5.16	5.23
Allowance for loan losses to loans	**0.68%**	0.67%	0.68%	0.72%	0.81%
Net Income Distribution					
Estimated patronage refunds and dividends:					
Cash	**$ 237,411**	$ 176,843	$ 167,102	$ 170,906	$ 145,873
Qualified allocated retained earnings	**9,925**	10,005	9,819	17,309	20,103
Nonqualified allocated retained earnings	**48,960**	34,007	30,599	55,600	80,566
Nonqualified retained earnings	**153,990**	123,767	109,967	153,907	143,228
Dividends	**3,417**	3,318	2,449	1,972	1,565
Perpetual preferred stock dividend	**1,146**	1,548	1,743	1,729	6,347

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

The following commentary reviews the Combined Financial Statements of condition and results of operations of AgFirst Farm Credit Bank (AgFirst or the Bank) and the District Agricultural Credit Associations (Associations or District Associations), collectively referred to as the AgFirst District (District), for the years ended December 31, 2017, 2016, and 2015. This information should be read in conjunction with the accompanying Combined Financial Statements, the Notes to the Combined Financial Statements, and other sections of this Annual Report. The accompanying Combined Financial Statements were prepared under the oversight of the Audit Committee of the Bank's Board of Directors. For a list of the Audit Committee members, refer to the "Report of the Audit Committee" included in this Annual Report. See Note 1, *Organization and Operations*, in the Notes to the Combined Financial Statements for a discussion of the operations of the District.

AgFirst and the District Associations are part of the Farm Credit System (the System), a federally chartered network of borrower-owned lending institutions comprised of cooperatives and related service organizations. Cooperatives are organizations that are owned and controlled by their members who use the cooperatives' products or services. The U.S. Congress authorized the creation of the first System institutions in 1916. The System was created to provide support for the agricultural sector because of its significance to the well-being of the U.S. economy and the U.S. consumer. The mission of the System is to provide sound and dependable credit to American farmers, ranchers, producers or harvesters of aquatic products, their cooperatives, and certain farm-related businesses. The System does this by making appropriately structured loans to qualified individuals and businesses at competitive rates and providing financial services and advice to those persons and businesses. AgFirst and each District Association are individually regulated by the Farm Credit Administration (FCA).

The Associations are structured as cooperatives, and each Association is owned by its borrowers. AgFirst also operates as a cooperative. The District Associations, certain Other Financing Institutions (OFIs), other System institutions, and preferred stockholders jointly own AgFirst. As such, the benefits of ownership flow to the same farmer/rancher-borrowers that the System was created to serve. Additional information related to the District's structure is discussed in Note 1, *Organization and Operations,* in the Notes to the Combined Financial Statements in this Annual Report to shareholders.

As of December 31, 2017, the District consisted of the Bank and nineteen District Associations. All nineteen were structured as Agricultural Credit Association (ACA) holding companies, with Federal Land Credit Association (FLCA) and Production Credit Association (PCA) subsidiaries. PCAs originate and service short- and intermediate-term loans; FLCAs originate and service long-term real estate mortgage loans; and ACAs originate both long-term and short- and intermediate-term loans.

AgFirst provides funding and related services to the District Associations, which, in turn, provide loans and related services to agricultural and rural borrowers. AgFirst has in place with each of the District Associations, a revolving line of credit, referred to as a "Direct Note." Each Association primarily funds its lending and general corporate activities by borrowing through its Direct Note. Virtually all assets of the Associations secure the Direct Notes. Lending terms are specified in a separate General Financing Agreement (GFA) between AgFirst and each Association, including the subsidiaries of the Associations.

AgFirst and the Associations are chartered to serve eligible borrowers in Alabama, Delaware, Florida, Georgia, Maryland, Mississippi, North Carolina, Pennsylvania, South Carolina, Virginia, West Virginia, Puerto Rico, and portions of Kentucky, Louisiana, Ohio, and Tennessee. As of December 31, 2017, two other Farm Credit Banks (FCBs) and an Agricultural Credit Bank (ACB), through a number of associations, provided loans and related services to eligible borrowers in the remaining portion of the United States. While owned by its related associations, each FCB manages and controls its own business activities and operations. The ACB is owned by its related associations as well as other agricultural and rural institutions, including agricultural cooperatives. Associations are not commonly owned or controlled and each manages and controls its own business activities and operations. Nevertheless, each FCB and its related associations operate in such an interdependent manner that the financial results of each bank are generally viewed on a combined basis with its related associations.

While combined District statements reflect the financial and operational interdependence of AgFirst and its Associations, AgFirst does not own or control the Associations. Therefore, Bank-only financial information (e.g. not combined with the Associations) has been set forth in Note 13, *Additional Financial Information,* in the Notes to the Combined Financial Statements for the purposes of additional analysis. In addition, AgFirst publishes a Bank-only financial report (electronic version of which is available on AgFirst's website at **www.agfirst.com**) that may be referred to for a more complete analysis of AgFirst's financial condition and results of operations.

FORWARD-LOOKING INFORMATION

Certain sections of this Annual Report contain forward-looking statements concerning financial information and statements about future economic performance and events, plans and objectives and assumptions underlying these projections and statements. These projections and statements are not based on historical facts but instead represent the District's current assumptions and expectations regarding the District's business, the economy and other future conditions. However, actual results and developments may differ materially from the District's expectations and predictions due to a number of risks and uncertainties, many of which are beyond the District's control. Forward-looking statements can be identified by words such as "anticipates," "believes," "could," "estimates," "may," "should," "will," or other variations of these terms that are intended to reference future periods.

These statements are not guarantees of future performance and involve certain risks and uncertainties and actual results may differ from those in the forward-looking statements as a result of various factors. These risks and uncertainties include, but are not limited to:

- political (including trade policies), legal, regulatory, financial markets, and economic conditions and developments in the United States and abroad;
- economic fluctuations in the agricultural, rural infrastructure, international, and farm-related business sectors, as well as in the general economy;
- weather-related, disease, and other adverse climatic or biological conditions that periodically occur that impact agricultural productivity and income of District borrowers;
- changes in United States (U.S.) government support of the agricultural industry and the System as a government-sponsored enterprise (GSE), as well as investor and rating agency reactions to

events involving the U.S. government, other GSEs and other financial institutions;

- actions taken by the Federal Reserve System in implementing monetary and fiscal policy, as well as other policies and actions of the federal government that impact the financial services industry and the debt markets;
- credit, interest rate and liquidity risk inherent in lending activities; and
- changes in assumptions for determining the allowance for loan losses, other than temporary impairment and fair value measurements.

AGRICULTURAL OUTLOOK

The following United States Department of Agriculture (USDA) analysis provides a general understanding of the U.S. agricultural economic outlook. However, this outlook does not take into account all aspects of AgFirst's business. References to USDA information in this section refer to the U.S. agricultural market data and are not limited to information/data in the AgFirst District.

The February 2018 USDA forecast estimates 2017 farmers' net cash income, which is a measure of the cash income after payment of business expenses, at $96.9 billion, up $2.9 billion from 2016 and down $9.0 billion from its 10-year average of $105.9 billion. The increase in net cash income in 2017 was primarily due to increases in livestock receipts of $12.5 billion and cash farm-related income of $1.8 billion, partially offset by a decrease in crop cash receipts of $4.7 billion and an increase in cash expenses of $5.1 billion.

The February 2018 USDA outlook for the farm economy, as a whole, forecasts 2018 farmers' net cash income to decrease to $91.9 billion, a $5.0 billion decrease from 2017, and $14.0 billion below the 10-year average. The forecasted decrease in farmers' net cash income for 2018 is primarily due to an expected increase in cash expenses of $3.0 billion and decrease in crop and livestock receipts of $2.0 billion.

The following table sets forth the commodity prices per bushel for certain crops, by hundredweight for hogs, milk, and beef cattle, and by pound for broilers and turkeys from December 31, 2014 to December 31, 2017:

Commodity	12/31/17	12/31/16	12/31/15	12/31/14
Hogs	$48.60	$43.10	$42.80	$64.30
Milk	$17.20	$18.90	$17.30	$20.40
Broilers	$0.50	$0.48	$0.47	$0.58
Turkeys	$0.53	$0.74	$0.89	$0.73
Corn	$3.23	$3.32	$3.65	$3.79
Soybeans	$9.30	$9.64	$8.76	$10.30
Wheat	$4.51	$3.90	$4.75	$6.14
Beef Cattle	$118.00	$111.00	$122.00	$164.00

The USDA's income outlook varies depending on farm size and commodity specialties. The USDA classifies all farms into four primary categories: small family farms (gross cash farm income (GCFI) less than $350 thousand), midsize family farms (GCFI between $350 thousand and under $1 million), large-scale family farms (GCFI of $1 million or more), and nonfamily farms (principal operator or individuals related to the operator do not own a majority of the business). Approximately 99 percent of U.S. farms are family farms and the remaining 1 percent is nonfamily farms. The family farms produce 90 percent of the value of agricultural output and the nonfamily farms produce the remaining 10 percent of agricultural output. The small family farms represent about 90 percent of all U.S. farms, hold 51 percent of farm land operated by farms and account for 23 percent of the value of production. Approximately 68 percent of production occurs on 9 percent of family farms classified as midsize or large-scale.

According to the USDA February 2018 forecast, farm sector equity (assets minus debt) is expected to rise 1.6 percent in 2018 to nearly $2.7 trillion. Farm sector assets are expected to rise 1.6 percent to $3.1 trillion in 2018, while farm sector debt is expected to rise 1.0 percent to $388.6 billion. Farm real estate accounts for about 84 percent of farm sector assets and the 2018 forecast anticipates a 2.1 percent increase in real estate values, continuing its long-term upward trend since the late 1980s.

Two measures of the financial health of the agricultural sector used by the USDA are the farm sector's debt-to-asset and debt-to-equity ratios. These ratios are forecast to move slightly downward in 2018 to 12.6 percent and 14.4 percent from 12.7 percent and 14.5 percent in 2017. These ratios remain well below the all-time highs of over 20 percent experienced during the 1980s.

As estimated by the USDA in February 2018, the System's market share of farm business debt (defined as debt incurred by those involved in on-farm agricultural production) increased slightly to 40.9 percent at December 31, 2016 (the latest available data), as compared with 40.6 percent at December 31, 2015.

Production agriculture is a cyclical business that is heavily influenced by commodity prices, weather, tax and trade policies, interest rates and various other factors. From 2010 through 2014, agriculture generally experienced favorable economic conditions driven by high commodity and livestock prices and increasing farmland values. However, since 2014, the agricultural environment has been more challenging with lower commodity prices, which slowed, or in some cases, reversed the growth in farmland values and compressed producer margins. Currency fluctuations and ambiguity surrounding future U.S. trade policies have created heightened uncertainty around demand for agricultural exports. While U.S. agriculture faces realignments in commodity prices and farmland values, the generally strong financial positions of U.S. crop producers is affording them time to transition their operations to the lower price and margin environment. Producers who are able to realize cost of production efficiencies and market their farm products effectively are most likely to adapt to the current price environment. Optimal input usage, adoption of cost-saving technologies, negotiation of adjustments to various business arrangements, such as rental cost of agriculture real estate, and effective use of hedging and other price risk management strategies are all critical in yielding positive net cash income for producers. Certain producers who have been unable to sufficiently adjust their operations to the current environment have experienced loan repayment challenges.

Crop producers have benefited from payments under the government support programs included in the 2014 Farm Bill, which has lessened the impact of the lower price environment. Meanwhile, the livestock and dairy sectors have benefitted from lower feed costs but are experiencing compressed margins due to lower prices for their farm production resulting from supply/demand changes.

In a prolonged period of less favorable conditions in agriculture, AgFirst's financial performance and credit quality measures would likely be negatively impacted. Any negative impact from these less favorable conditions should be lessened by geographic and commodity diversification across the District and the influence of off-farm income sources supporting agricultural-related debt. However, agricultural borrowers who are more reliant on off-farm income sources may be more adversely impacted by a weakened general economy.

CRITICAL ACCOUNTING POLICIES

The District's financial statements are reported in conformity with accounting principles generally accepted in the United States of America. Consideration of the District's significant accounting policies is critical to the understanding of the District's results of operations and financial position because some accounting policies require complex or subjective judgments and estimates that may affect the reported amount of certain assets or liabilities as well as the recognition of certain income and expense items. In many instances, management has to make judgments about matters that are inherently uncertain. For a complete discussion of significant accounting policies, see Note 2, *Summary of Significant Accounting Policies*, in the Notes to the

Combined Financial Statements. The following is a summary of the District's most critical accounting policies:

- *Allowance for loan losses* — The allowance for loan losses is management's best estimate of the amount of probable losses existing in and inherent in the District's 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.

  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 attributable to these loans is established by a process that estimates the probable loss inherent in the loans, taking into account various historical and current factors, internal risk ratings, regulatory oversight, and geographic, industry, and other factors.

  In addition to the allowance for loan losses attributable to specific loans, the District may also establish a general allowance for loan losses based on management's assessment of risk inherent in the loans in the District's portfolio that were not specifically evaluated. In establishing general reserves, factors affecting certain commodity types or industries may be taken into consideration, as well as other factors previously discussed. Certain loan pools purchased by the Bank from various Associations are analyzed in accordance with the selling Associations' allowance methodologies for assigning general and specific allowances. Allowances are established on these pools based on that analysis after Bank management's determination that the methodologies employed are appropriate.

  Assessing the appropriateness of the allowance for loan losses is a dynamic process. Changes in the factors considered by management in the evaluation of losses in the loan portfolios could result in a change in the level of the allowance for loan losses and have a direct impact on the provision for loan losses and the results of operations.

  The overall adequacy of the allowance for loan losses is validated further through periodic evaluations of the loan portfolio, which generally consider historical charge-off experiences adjusted for relevant factors. These factors include types of loans, credit quality, specific industry conditions, collateral value, general economic and political conditions, and changes in the character, composition, and performance of the portfolio, among other factors.

- *Valuation methodologies* — Management applies various valuation methodologies to assets and liabilities that often involve a significant degree of judgment, particularly when active 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 active market exists. Management utilizes third party valuation services to obtain fair value prices for the majority of the District's investment securities. Management also utilizes significant estimates and assumptions to value items for which an observable active market does not exist. Examples of these items include: impaired loans, other property owned, pension and other postretirement benefit obligations, certain derivatives, certain investment securities and 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 asset or liability values, which could have material positive or negative effects on the District's results of operations.

- *Pensions* — The Bank and its related Associations participate in defined benefit retirement plans. These plans are noncontributory and benefits are based on salary and years of service. The Bank and its related Associations also participate in defined contribution retirement savings plans. Pension expense for all plans is recorded as part of postretirement benefits. Pension expense for the defined benefit retirement plans is determined by actuarial valuations based on certain assumptions, including the expected long-term rate of return on plan assets and a discount rate. The expected return on plan assets for the year is calculated based on the composition of assets at the beginning of the year and the expected long-term rate of return on that portfolio of assets. The discount rate is used to determine the present value of future benefit obligations. The discount rate for 2017 was selected by reference to analysis and yield curves developed by the plans' actuary and industry norms. The yield curve selected follows the accounting guidance that the basis for discount rates should be higher-quality zero-coupon bonds with durations that match the expected cash flows of the plans that underlie the obligation.

LOAN PORTFOLIO

The District's aggregate loan portfolio consists primarily of loans made by the Associations to eligible borrowers located within their chartered territories. Diversification of the loan volume by FCA loan type for each of the past three years at December 31 is illustrated in the following table:

Loan Types *(dollars in thousands)*	**2017**		**2016**		**2015**	
Real Estate Mortgage	$ 14,092,944	49.54%	$ 13,238,788	48.21%	$ 12,524,416	47.89%
Production and Intermediate-term	7,044,930	24.76	7,248,346	26.40	6,947,773	26.57
Rural Residential Real Estate	3,431,905	12.06	3,228,215	11.76	3,076,692	11.76
Processing and Marketing	1,442,935	5.07	1,450,352	5.28	1,693,055	6.47
Loans to Cooperatives	662,604	2.33	625,642	2.28	256,774	0.98
Power and Water/Waste Disposal	629,317	2.21	581,249	2.12	504,714	1.93
Communication	466,975	1.64	473,352	1.72	451,028	1.73
Farm-Related Business	363,137	1.28	321,956	1.17	441,461	1.69
Loans to OFIs	131,572	0.46	122,573	0.45	108,020	0.41
International	98,625	0.35	100,860	0.37	70,317	0.27
Lease Receivables	12,358	0.04	13,595	0.05	3,189	0.01
Other (including Mission Related)	74,505	0.26	53,038	0.19	75,317	0.29
Total	$ 28,451,807	100.00%	$ 27,457,966	100.00%	$ 26,152,756	100.00%

Total loans outstanding were $28.452 billion at December 31, 2017, an increase of $993.8 million, or 3.62 percent, compared to total loans outstanding at December 31, 2016. Loans outstanding at the end of 2016 had increased $1.305 billion, or 4.99 percent, compared to December 31, 2015.

District loan demand in 2017 and 2016 increased due to improving economic conditions positively impacting borrowers in economically sensitive segments. Moderate demand in rural home loans, poultry, grains, beef, and timber contributed to the loan growth in 2017. In 2016, loan demand benefitted from capacity expansion in the poultry and swine sectors. Future District loan demand is difficult to predict; however, moderate growth is expected in 2018.

Each loan in the District's portfolio is classified according to a Uniform Classification System, which is used by all System institutions. Below are the classification definitions:

- *Acceptable* – Assets are expected to be fully collectible and represent the highest quality. In addition, these assets may include loans with properly executed and structured guarantees that might otherwise be classified as Other Assets Especially Mentioned (OAEM) or adverse.
- *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 District loans including accrued interest at December 31:

Credit Quality	2017	2016	2015
Acceptable	95.27%	95.00%	94.99%
OAEM	2.62	2.87	2.65
Adverse*	2.11	2.13	2.36
Total	100.00%	100.00%	100.00%

* *Adverse loans include substandard, doubtful, and loss loans.*

Continued improvement in the general economy has resulted in sustained strong credit quality for the District. Credit quality is expected to slightly deteriorate in 2018 given expected reduced farm income in certain sectors of the portfolio.

Delinquencies (loans 90 days or more past due) were 0.38 percent of total loan assets at year-end 2017 compared to 0.40 percent and 0.37 percent at year-end 2016 and 2015, respectively.

Nonperforming assets for the District represented 1.33 percent of total loans and other property owned, or $377.3 million, compared to 1.48 percent or $407.0 million for 2016, and 1.59 percent or $416.4 million for 2015. Nonperforming assets consist of nonaccrual loans, accruing restructured loans, accruing loans 90 days or more past due, and other property owned.

The District recognized net loan charge-offs of $2.9 million in 2017 and net loan recoveries of $4.2 million and $3.8 million in 2016 and 2015, respectively. As a percentage of total average loans, net charge-offs for the District were 0.01 percent for 2017 compared to net recoveries of 0.02 percent in both 2016 and 2015. The Bank as well as each Association maintains an allowance for loan losses, determined by its management based upon its unique situation.

The District employs a number of risk management techniques to limit credit exposures. The District has adopted underwriting standards, individual borrower exposure limits, commodity exposure limits, and other risk management techniques. AgFirst and the Associations actively purchase and sell loan participations to enhance the diversification of their portfolios. The District utilizes guarantees from U.S. government agencies/departments, including the Federal Agricultural Mortgage Corporation (Farmer Mac), the Farm Service Agency, and the Small Business Administration to further limit credit exposures. At December 31, 2017, the District collectively had $3.201 billion (11.25 percent of the total loan portfolio) under such government or GSE guarantees, compared to $3.245 billion (11.82 percent) and $3.479 billion (13.30 percent) at December 31, 2016 and 2015, respectively.

The Associations serve primarily all or a portion of fifteen states and Puerto Rico. Additionally, AgFirst and the Associations actively purchase and sell loans and loan participations with non-District institutions. The resulting geographic diversity is a natural credit risk-reducing factor. The following table illustrates the geographic distribution of the District's loan volume outstanding by state for the past three years at December 31:

District Loan Volume by State

State	2017	2016	2015
North Carolina	17%	16%	16%
Georgia	11	11	11
Virginia	10	10	10
Pennsylvania	8	8	8
Florida	8	8	8
Ohio	7	7	7
Maryland	6	6	6
South Carolina	6	5	5
Alabama	4	3	3
Kentucky	3	3	4
Mississippi	2	2	2
Louisiana	2	2	2
Texas	2	2	2
Delaware	2	2	2
Other	12	15	14
Total	100%	100%	100%

Only three states have loan volume representing 10.00 percent or more of the total. Commodity diversification, guarantees, and borrowers with significant reliance on non-farm income further mitigate the geographic concentration risk in these states.

The diversity of commodity types mitigates credit risk to the District. The District's credit portfolios are comprised of a number of segments having varying, and in some cases complementary, agricultural characteristics. Commodity and industry categories are based on the Standard Industrial Classification system published by the federal government. This system is used to assign commodity or industry categories based on the largest agricultural commodity of the customer. The following table illustrates the aggregate credit portfolio of the District by major commodity segments based on borrower eligibility at December 31:

	Percent of Portfolio		
Commodity Group	**2017**	**2016**	**2015**
Forestry	14%	14%	14%
Rural Home	12	12	12
Poultry	10	10	10
Field Crops	10	9	9
Cattle	7	7	7
Grain	6	6	7
Other Real Estate	5	5	5
Corn	5	5	5
Dairy	4	4	4
Processing	4	4	4
Utilities	3	4	4
Tree Fruits and Nuts	3	3	3
Nursery/Greenhouse	3	3	3
Swine	2	3	3
Cotton	2	2	2
Other	10	9	8
Total	100%	100%	100%

As illustrated in the above chart, the District had concentrations of 10.00 percent or greater in only four commodities: forestry, rural home, poultry, and field crops. All four commodities have geographic dispersion over the entire AgFirst footprint.

Forestry is divided principally into hardwood and softwood production and value-added processing. The timber from hardwood production is further processed into furniture, flooring, and high-grade paper and is generally located at the more northern latitudes and higher elevations of the District. Softwood timber production is typically located in the coastal plains of the AgFirst footprint and is used for building materials for the housing market and pulp to make paper and hygiene products. Timber producers at the Associations range in size from less than fifty acres to thousands of acres, with value-added processing being conducted at sawmills, planer mills, and paper mills.

The District's rural home loans consist primarily of first lien residential mortgages purchased by the Bank's Correspondent Lending Unit. At December 31, 2017, 46.79 percent of these loans were guaranteed by the

Federal National Mortgage Association (Fannie Mae) and/or Farmer Mac, thereby limiting credit risk to AgFirst. The guarantees are in the form of Long-Term Standby Commitments to Purchase, which give AgFirst the right to deliver delinquent loans to the guarantor at par. The Fannie Mae guarantee program ended on July 31, 2013. Subsequent to this date, new loans in this portfolio purchased by the Bank are held without a Fannie Mae guarantee. The Bank has adjusted its methodology of establishing and maintaining the allowance for loan losses related to this portfolio to reflect the discontinuation of the Fannie Mae guarantee program.

Poultry concentrations within the District are further limited through the number of farm units producing poultry. Poultry concentration is further dispersed as production is segregated among chicken, turkey, and egg production.

The field crops commodity group represents a diverse group of commodities, including fruits, vegetables, and other non-grain crops, which are grown throughout the AgFirst District.

The diversity of income sources supporting District loan repayments, including a prevalence of non-farm income among the borrowers, further mitigates credit risk to AgFirst as demonstrated by the following table as of December 31 of each year:

	Percent of Portfolio		
Commodity Group	**2017**	**2016**	**2015**
Non-Farm Income	35%	34%	34%
Grains	12	12	12
Poultry	10	10	9
Timber	7	7	7
Dairy	4	5	5
Fruit & Vegetables	4	4	4
Beef	4	4	4
Rural Utilities	3	4	4
Swine	3	3	2
Farm Related Business	3	2	3
Cotton	2	2	2
Processing and Marketing	2	2	2
Tobacco	2	2	2
Nursery	2	2	2
Other	7	7	8
Total	100%	100%	100%

MISSION RELATED INVESTMENTS

The FCA initiated a program in 2004 to allow System institutions to make and hold investments that stimulate economic growth and development in rural areas. Beginning in 2015, investments are subject to approval by the FCA on a case-by-case basis.

The FCA approved the Rural Housing Mortgage-Backed Securities (RHMS) and Rural America Bonds pilot programs as described below. Effective December 31, 2014, the FCA ended these pilot programs approved as part of the Investment in Rural America program. Each institution participating in such programs may continue to hold its investment through the maturity dates for the investments, provided the institution continues to meet all approval conditions. The Bank has subsequently received permission from the FCA to continue to acquire RHMS.

Rural Housing Mortgage-Backed Securities

RHMS must be fully guaranteed by a government agency or GSE. The rural housing loans backing the RHMS must be conforming first-lien residential mortgage loans originated by non-System lenders in "rural areas" as defined by the Farm Security and Rural Investment Act of 2002, or eligible rural housing loans originated by System lenders under FCA regulations. Investment securities at December 31, 2017 included $399.5 million in RHMS classified as held-to-maturity and $94.5 million classified as available-for-sale compared to $460.2 million held-to-maturity and $100.3 million available-for-sale at December 31, 2016, and $462.0 million held-to-maturity at December 31, 2015.

Rural home loans, combined with Rural Home Mortgage-backed Securities, are limited to 15.00 percent of total loans outstanding as defined by the FCA. At December 31, 2017, the Bank and District were under this limit.

Rural America Bonds

In recognition of the economic interdependence between agricultural and rural communities, AgFirst and the Associations invest in debt obligations that support farmers, ranchers, agribusinesses, and their rural communities and businesses. In doing so, AgFirst and the Associations hope to increase the well-being and prosperity of American farmers, ranchers, and rural residents.

As of December 31, 2017, the District had $128.5 million in the Rural America Bond program, compared to $155.0 million at December 31, 2016 and $203.9 million at December 31, 2015. Of the $128.5 million, the District had $104.6 million reflected in investment securities and $23.9 million reflected as loans on the Combined Balance Sheets at December 31, 2017.

RISK MANAGEMENT

Overview

The District is in the business of making agricultural and other loans that requires accepting certain risks in exchange for compensation for the risks undertaken. Proper management of the risks inherent in the District's business is essential for current and long-term financial performance. Prudent and disciplined risk management includes an enterprise risk management structure to identify emerging risks and evaluate risk implications of decisions and actions taken. The objectives of risk management are to identify and assess risks, and to properly and effectively mitigate, measure, price, monitor, and report risks in the District's business activities. Stress testing represents a critical component of the District's risk management process. Stress testing is primarily an analysis performed under a wide range of economic scenarios, including unlikely but plausible economic scenarios, and is designed to determine whether the District has enough capital to withstand the impact of adverse developments. District entities are required by regulation to perform stress tests with a level of sophistication appropriate to their size and complexity.

Types of risk to which the District has exposure include:

- *structural risk* — risk inherent in the business and related to the System structures comprised of interdependent networks of cooperative lending institutions;
- *credit risk* — risk of loss arising from an obligor's failure to meet the terms of its contract or failure to perform as agreed;
- *interest rate risk* — risk that changes in interest rates may adversely affect the District's operating results and financial condition;
- *liquidity risk* — risk arising from the inability to meet obligations when they come due without incurring unacceptable losses, including the ability to access the debt market;
- *operational risk* — risk of loss resulting from inadequate or failed internal processes, systems, or controls; errors by employees; fraud; or external events;
- *reputational risk* — risk of loss resulting from events, real or perceived, that shape the image of the District, the System, or any of its entities, including the impact of investors' perceptions about agriculture and rural financing, the reliability of District or System financial information, or the actions of any System institution; and
- *political risk* — risk of loss of support for the System and agriculture by federal and state governments.

Structural Risk Management

Structural risk results from the fact that AgFirst, along with its related Associations, is part of the System, which is comprised of banks and associations that are cooperatively owned, directly or indirectly, by their borrowers. Because System institutions are financially and operationally interdependent, this structure at times requires action by consensus or contractual agreement. The Federal Farm Credit Banks Funding Corporation (Funding Corporation) provides for the issuance, marketing, and processing of Systemwide Debt Securities using a network of investment dealers and dealer banks. The System banks fund association loans with Systemwide debt. Refer to Note 6, *Debt*, in the Notes to the Combined Financial Statements for further discussion. The banks are jointly and severally liable for the repayment of Systemwide Debt Securities, exposing each bank to the risk of default of the others. Although capital at the association level reduces the banks' credit exposures with respect to their related associations, that capital may not be available to support the payment of principal and interest on Systemwide Debt Securities.

In order to mitigate this risk, the System utilizes two integrated contractual agreements executed by and among the banks— the Amended and Restated Contractual Interbank Performance Agreement (CIPA) and the Third Amended and Restated Market Access Agreement (MAA). As a result of the changes to regulatory capital ratio requirements, the System banks and the Funding Corporation executed the Third Amended and Restated MAA, effective January 1, 2017. Under provisions of the CIPA, a score is calculated quarterly that measures the financial condition and performance of each district using various ratios that take into account each district's and bank's capital, asset quality, earnings, interest-rate risk, and liquidity. Based on these measures, the CIPA establishes an agreed-upon standard of financial condition and performance that each district must achieve and maintain. The CIPA also establishes monetary penalties if the performance standard is not met. These penalties will occur at the same point at which a bank would be required to provide additional monitoring information under the MAA.

The MAA establishes criteria and procedures for the banks that provide operational oversight and control over a bank's access to System funding if the creditworthiness of the bank declines below certain agreed-upon levels. The MAA provides for the identification and resolution of individual bank financial problems in a timely manner and discharges the Funding Corporation's statutory responsibility for determining conditions for each bank's participation in each issuance of Systemwide Debt Securities.

Credit Risk Management

Credit risk arises from the potential inability of an obligor to meet its repayment obligation and exists in outstanding loans, leases, letters of credit, unfunded loan commitments, the investment portfolio and derivative counterparty credit exposures. The District manages credit risk associated with lending activities through an assessment of the credit risk profile of individual obligors. The Associations set underwriting standards and lending policies consistent with FCA regulations and Bank underwriting standards, which provide direction to loan officers and are approved by the respective boards of directors.

The credit risk management process begins with an analysis of a potential 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. 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 loan rating structure, incorporating a 14-point risk-rating scale to identify and track a borrower's probability of default and a separate scale addressing loss given default. The loan rating structure reflects estimates of loss through two components, 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).

Through their participation in loans or interests in loans to/from other institutions within the System and outside the System, the Bank and District Associations limit their exposure to both borrower and commodity concentrations. This also allows the Bank and District Associations to manage growth and capital, and to improve geographic diversification. Concentration risk is reviewed and measured by industry, product, geography and customer limits.

Although neither the Bank nor any other System institution receives any direct government support, credit quality is indirectly enhanced by government support in the form of program payments to borrowers, which improve their ability to honor their commitments. However, due to the geographic location of the District and the resulting types of agriculture, government programs account for a relatively small percentage of net farm income in the territory served by the District Associations.

As a result of the improved economy and the District's efforts to resolve problem assets, the District's high-risk assets have declined and continue to be a small percentage of the total loan volume and total assets. High-risk assets, including accrued interest, at December 31 are detailed in the following table:

(dollars in thousands)	2017	2016	2015
High-risk Assets			
Nonaccrual loans	$ 238,857	$ 250,582	$ 252,508
Restructured loans	123,742	125,997	114,027
Accruing loans 90 days past due	75	113	1,372
Total high-risk loans	362,674	376,692	367,907
Other property owned	14,655	30,281	48,462
Total high-risk assets	$ 377,329	$ 406,973	$ 416,369
Ratios			
Nonaccrual loans to total loans	0.84%	0.91%	0.97%
High-risk assets to total assets	1.00%	1.11%	1.19%

Nonaccrual Loans

Nonaccrual loans represent all loans for which there is a reasonable doubt as to the collection of principal and/or interest under the contractual terms of the loan. Nonaccrual loans for the combined District at December 31, 2017 were $238.9 million compared to $250.6 million at December 31, 2016. Nonaccrual loans decreased $11.7 million during the year ended December 31, 2017 due primarily to repayments of $104.6 million, reinstatements to accrual status of $12.2 million, charge-offs of uncollectible balances of $9.3 million, and transfers to other property owned of $4.8 million. Offsetting these decreases were $113.6 million of loan balances transferred to nonaccrual status and recoveries of charge-offs of $6.5 million. At December 31, 2017, total nonaccrual loans were primarily in the field crops (16.15 percent of the total), poultry (10.83 percent), forestry (10.64 percent), grain (10.07 percent), cattle (8.79 percent), dairy (7.85 percent), and rural home loan (6.95 percent) segments. Nonaccrual loans were 0.84 percent of total loans outstanding at December 31, 2017 compared to 0.91 percent and 0.97 percent at December 31, 2016 and 2015, respectively.

Troubled Debt Restructurings

A troubled debt restructuring (TDR) occurs when a borrower is experiencing financial difficulties and a concession is granted to the borrower that the Bank and District Associations would not otherwise consider. Concessions are granted to borrowers based on either an assessment of the borrower's ability to return to financial viability or a court order. The concessions can be in the form of a modification of terms, rates, or amounts owed. Acceptance of other assets and/or equity as payment may also be considered a concession. The type of alternative financing granted is chosen in order to minimize the loss incurred by the Bank and District Associations. TDRs totaled $196.0 million at December 31, 2017, compared to $197.8 million at December 31, 2016. At December 31, 2017, TDRs were comprised of $123.7 million of accruing restructured loans and $72.3 million of nonaccrual restructured loans. Restructured loans were primarily in the forestry (14.48 percent of the total), field crops (13.98 percent), poultry (12.37 percent), tree fruits and nuts (6.29 percent), dairy (5.52 percent), and cattle (5.19 percent) segments.

Other Property Owned

Other property owned (OPO) consists primarily of assets once pledged as loan collateral that were acquired through foreclosure or deeded to the Bank and District Associations (or a lender group) in satisfaction of secured loans. OPO may be comprised of real estate, equipment, and equity interests in companies or partnerships. OPO decreased $15.6 million during 2017 to $14.7 million at December 31, 2017 due to disposals of $15.8 million and write-downs of OPO of $6.8 million, partially offset by property received in settlement of loans of $6.9 million. At December 31, 2017, the largest OPO holding was in the forestry segment and totaled $4.0 million (26.98 percent of the total). See discussion of OPO expense in the *Noninterest Expenses* section below.

ALLOWANCE FOR LOAN LOSSES

Each District institution maintains an allowance for loan losses at a level management considers adequate to provide for probable and estimable credit losses within its respective loan and finance lease portfolios as of each reported balance sheet date. The District increases the allowance by recording a provision for loan losses in the income statement. Loan losses are recorded against and serve to decrease the allowance when management determines that any portion of a loan or lease is uncollectible. Any subsequent recoveries are added to the allowance. Management's evaluations consider factors which include, among other things, loan loss experience, portfolio quality, loan portfolio composition, current agricultural production conditions, and general economic conditions.

The following table presents the activity in the allowance for loan losses for the most recent three years at December 31:

Allowance for Loan Losses Activity	**Year Ended December 31,**		
(dollars in thousands)	**2017**	**2016**	**2015**
Balance at beginning of year	$ 182,600	$ 178,617	$ 174,853
Charge-offs:			
Real Estate Mortgage	(2,873)	(3,520)	(5,220)
Production and Intermediate-term	(6,007)	(6,079)	(5,278)
Agribusiness	(133)	(348)	(2,226)
Power and Water/Waste Disposal	–	–	(414)
Rural Residential Real Estate	(401)	(539)	(952)
Lease Receivables	(1)	–	–
Total charge-offs	(9,415)	(10,486)	(14,090)
Recoveries:			
Real Estate Mortgage	3,423	9,012	11,957
Production and Intermediate-term	2,577	4,507	3,811
Agribusiness	265	686	1,826
Power and Water/Waste Disposal	16	–	–
Rural Residential Real Estate	173	433	233
Lease Receivables	29	3	–
Other (including Mission Related)	28	19	22
Total recoveries	6,511	14,660	17,849
Net (charge-offs) recoveries	(2,904)	4,174	3,759
Provision for (reversal of allowance for) loan losses	13,371	(191)	5
Balance at end of year	$ 193,067	$ 182,600	$ 178,617

The allowance for loan losses was $193.1 million at December 31, 2017, as compared with $182.6 million and $178.6 million at December 31, 2016 and 2015, respectively. Activity which increased the allowance during 2017 included loan recoveries of $6.5 million and provision expense of $13.4 million. Offsetting these increases were charge-offs of $9.4 million, as loan collectability became more measurable and apparent. Recoveries during 2017 were related primarily to borrowers in the nursery/greenhouse (45.25 percent of the total), forestry (12.65 percent), and cattle (11.49 percent) segments. The largest commodity segments included in charge-offs during 2017 were the tree fruits and nuts (14.87 percent of the total), field crops (10.09 percent), poultry (9.55 percent), and cattle (5.23 percent) segments. See *Provision for Loan Losses* section below for details regarding changes to the allowance from provision expense (reversal). The allowance at December 31, 2017 included specific reserves of $18.7 million (9.70 percent of the total) and $174.3 million (90.30 percent) of general reserves. The largest commodity segments included in the allowance at December 31, 2017 were the poultry (13.36 percent of the total), field crops (13.26 percent), forestry (10.65 percent), cattle (9.94 percent), and grain (7.70 percent) segments.

The allowance for loan losses by loan type for the most recent three years at December 31 is presented in the following table:

Allowance for Loan Losses by Loan Type	**December 31,**		
(dollars in thousands)	**2017**	**2016**	**2015**
Real Estate Mortgage	$ 82,686	$ 77,629	$ 79,176
Production and Intermediate-term	86,037	81,548	80,611
Agribusiness	10,977	10,342	8,087
Communication	2,237	2,987	2,449
Power and Water/Waste Disposal	2,935	3,040	1,933
Rural Residential Real Estate	7,262	6,008	5,268
International	151	186	106
Lease Receivables	54	38	41
Loans to OFIs	95	72	43
Other (including Mission Related)	633	750	903
Total	$193,067	$182,600	$178,617

The allowance for loan losses as a percentage of loans outstanding and as a percentage of nonaccrual loans at December 31 is shown below:

	2017	**2016**	**2015**
Allowance for loan losses to loans	0.68%	0.67%	0.68%
Allowance for loan losses to nonaccrual loans	80.83%	72.87%	70.74%

The general strong financial positions of the Bank and District Associations' borrowers have afforded them time to transition their operations to the lower price and margin environment. Due to this factor combined with management's emphasis on underwriting standards, the credit quality of the District loan portfolio has remained sound. Periods of uncertainty in the general economic environment create the potential for prospective risks in the loan portfolio. See Note 3, *Loans and Allowance for Loan Losses*, in the Notes to the Financial Statements and the *Critical Accounting Policies* section above for further information concerning the allowance for loan losses.

Interest Rate Risk Management

Interest rate risk is the risk of loss of future earnings or long-term market value of equity that may result from changes in interest rates. This risk can produce variability in District earnings (net interest spread achieved and net interest income earned) and, ultimately, the long-term capital position of the District. The objective of interest rate risk management is to generate a reliable level of net interest income in any interest rate environment and to preserve the long-term market value of equity. AgFirst uses a variety of analytical techniques to manage the complexities associated with offering numerous loan options. Interest rate sensitivity gap analysis is used to monitor the repricing characteristics of the District's interest-earning assets and interest-bearing liabilities. Simulation analysis is used to determine the potential change in net interest income and in the market value of equity under various possible future market interest rate environments.

The District adheres to a philosophy that loans should be priced competitively in the market and that loan rates and spreads should be contractually established at loan closing such that a borrower is not subject to rate changes at the discretion of management or boards of directors. Therefore, District Association variable rate and adjustable rate loans are generally indexed to market rates, and fixed rate loans are priced based on market rates. Loan products offered by the Associations include prime-indexed variable rate loans, LIBOR-indexed variable rate loans, one-, three-, and five-year Treasury-indexed adjustable rate loans, and fixed rate loans. Variable rate and adjustable rate loans are offered with or without caps. Terms are available for up to 30 years. A variety of repayment options are offered, with the ability to pay on a monthly, quarterly, semi-annual or annual frequency. In addition, customized repayment schedules may be negotiated to fit a borrower's unique circumstances.

The following tables represent the District's market value of equity and projected change over the next twelve months in net interest income for various rate movements as of December 31, 2017. The upward and downward shocks are generally based on movements in interest rates which are considered significant enough to capture the effects of embedded options and convexity within the assets and liabilities so that underlying risk may be revealed.

Net Interest Income
(dollars in thousands)

Scenarios	Net Interest Income	% Change
+4.0% Shock	$1,023,277	3.18 %
+2.0% Shock	$1,016,424	2.49 %
Base line **	$991,747	– %
-50% of 3M Tbill ***	$987,548	(0.42)%

Market Value of Equity
(dollars in thousands)

Scenarios	Assets	Liabilities*	Equity*	% Change
Book Value	$ 37,810,568	$ 31,610,694	$ 6,199,874	– %
+4.0% Shock	$ 34,573,989	$ 29,424,233	$ 5,149,756	(16.63)%
+2.0% Shock	$ 36,178,578	$ 30,509,073	$ 5,669,505	(8.22)%
Base line **	$ 37,849,458	$ 31,672,443	$ 6,177,015	– %
-50% of 3M Tbill ***	$ 38,363,809	$ 32,011,279	$ 6,352,530	2.84 %

* *For interest rate risk management, the $49.3 million perpetual preferred stock is included in liabilities rather than equity.*

** *Base line uses rates as of the balance sheet date before application of any interest rate shocks.*

*** *When the three-month Treasury bill interest rate is less than 4 percent, both the minus 200 and minus 400 basis point shocks are replaced with a downward shock equal to one-half of the three-month Treasury bill rate which is 69 basis points.*

The following table sets forth the repricing characteristics of interest-earning assets and interest-bearing liabilities outstanding at December 31, 2017. The amount of assets and liabilities shown in the table, which reprice or mature during a particular period, were determined in accordance with the earlier of term-to-repricing or contractual maturity, anticipated prepayments, and, in the case of liabilities, the exercise of call options.

Repricing/Maturity Gap Analysis

(dollars in thousands)	0 to 6 months	6 months to 1 Year	1 to 5 Years	Over 5 Years	Total
Floating Rate Loans					
Adjustable/Indexed Loans	$ 6,092,967	$ 10,147	$ 438	$ –	$ 6,103,552
Fixed Rate Loans					
Fixed Rate Loans	20,492	14,888	88,146	44,133	167,659
Fixed Rate Prepayable	4,125,549	2,208,013	9,575,480	6,032,697	21,941,739
Nonaccrual Loans					
Nonaccrual Loans	–	–	–	238,857	238,857
Total Loans	10,239,008	2,233,048	9,664,064	6,315,687	28,451,807
Total Investments *	4,594,962	1,041,490	2,122,805	699,015	8,458,272
Other Earning Assets	14,046	–	–	–	14,046
TOTAL INTEREST-EARNING ASSETS	**$ 14,848,016**	**$ 3,274,538**	**$ 11,786,869**	**$ 7,014,702**	**$ 36,924,125**
Interest-Bearing Liabilities					
Systemwide bonds and notes	$ 12,299,288	$ 3,252,000	$ 10,847,312	$ 3,364,391	$ 29,762,991
Other interest-bearing liabilities	1,026,370	–	–	–	1,026,370
Interest rate swaps	–	–	–	–	–
TOTAL INTEREST-BEARING LIABILITIES	**$ 13,325,658**	**$ 3,252,000**	**$ 10,847,312**	**$ 3,364,391**	**$ 30,789,361**
Interest Rate Sensitivity Gap	**$ 1,522,358**	**$ 22,538**	**$ 939,557**	**$ 3,650,311**	
Sensitivity Gap as a % of Total Earning Assets	4.12%	0.06%	2.54%	9.89%	
Cumulative Gap	$ 1,522,358	$ 1,544,896	$ 2,484,453	$ 6,134,764	
Cumulative Gap as a % of Total Earning Assets	4.12%	4.18%	6.73%	16.61%	
Rate Sensitive Assets/Rate Sensitive Liabilities	1.11	1.01	1.09	2.08	

* *includes cash equivalents*

At December 31, 2017, the Cumulative Repricing/Maturity Gap position of the District was asset sensitive (interest rates earned by the District on interest-earning assets may change or be changed more quickly than interest rates on interest-bearing liabilities used to fund the assets) as repricing/maturing assets exceeded liabilities that mature or reprice. Asset sensitivity implies an increase in net interest income in rising interest rate scenarios and lower net interest income in falling interest rate scenarios. However, the Repricing/Maturity Gap Analysis is a "point in time" view and is representative of the interest rate environment at December 31, 2017. The Repricing/Maturity Gap Analysis must be used with other analysis methods as the maturity and repricing attributes of balance sheet accounts react differently in changing interest rate environments. During a period of rising interest rates, call options on fixed rate debt are not exercised and the debt terms extend to reflect the longer original maturity dates. Prepayment optionality on fixed rate assets also slows as the economic incentive for borrowers to refinance decreases and extends the asset's term.

To supplement the Repricing/Maturity Gap Analysis, the District utilizes financial simulation modeling The simulations reflected an increase of 2.49 percent in net interest income for a +200 basis point parallel shift in interest rates. The District's net interest income sensitivity to falling interest rates was not significantly impacted. Market value of equity reflected a negative sensitivity in rising interest rate scenarios partially due to the Bank's practice of utilizing equity as a long-term funding source. When equity is used as long-term funding, its market value behaves similarly to a fixed rate bond. The simulations reflected a decrease of 8.22 percent in market value of equity for a +200 basis point parallel shift in interest which is appropriate for this funding structure. The District's market value of equity sensitivity to falling interest rates was not significantly impacted due to the current low level of interest rates. Interest rate risk is monitored through the Contractual Interbank Performance Agreement (CIPA) which incorporates net interest income and market value of equity sensitivity metrics.

At December 31, 2017, AgFirst had no outstanding interest rate swaps. The Bank may, under certain conditions, also use derivatives for asset/liability management purposes to reduce interest rate risk.

AgFirst policy prohibits the use of derivatives for speculative purposes. See Note 14, *Derivative Financial Instruments and Hedging Activities*, in the Notes to the Combined Financial Statements for additional information. The following table shows the activity in derivatives during the year ended December 31, 2017:

Notional amounts *(dollars in millions)*	**Receive Fixed**	**Forward Contracts**
Balance at December 31, 2016	$ 50	$ 1
Additions	–	9
Maturities/amortizations	(50)	(10)
Terminations	–	–
Balance at December 31, 2017	$ –	$ –

Liquidity Risk Management

Liquidity risk management is necessary to ensure the District's ability to meet its financial obligations. AgFirst and the District Associations maintain adequate liquidity to satisfy the District's daily cash needs. Along with normal cash flows associated with lending operations, the District has two primary sources of liquidity: the capacity to issue Systemwide Debt Securities through the Federal Farm Credit Banks Funding Corporation; and cash and investments. The Bank also maintains several repurchase agreement facilities. In addition, the System has established lines of credit in the event contingency funding is needed to meet obligations of System banks. Providing liquidity for the District's operations is primarily the responsibility of the Bank.

Cash, Cash Equivalents and Investments

As of December 31, 2017, AgFirst exceeded all applicable regulatory liquidity requirements. FCA regulations require that the Bank have a liquidity policy that establishes a minimum total "coverage" level of 90 days and that short-term liquidity requirements must be met by certain high quality investments or cash. "Coverage" is defined as the number of days that maturing debt could be funded with eligible cash, cash equivalents, and available-for-sale investments maintained by the Bank.

Eligible liquidity investments are classified according to three liquidity quality levels with level 1 being the highest. The first 15 days of minimum liquidity coverage are met using only level 1 instruments, which include cash and cash equivalents. Days 16 through 30 of minimum liquidity coverage are met using level 1 and level 2 instruments. Level 2 consists primarily of U.S. government guaranteed securities. Days 31 through 90 are met using level 1, level 2, and level 3 securities. Level 3 consists primarily of U.S. agency investments. Additionally, a supplemental liquidity buffer in excess of the 90-day minimum liquidity reserve is set to provide coverage to at least 120 days.

At December 31, 2017, AgFirst met all individual level criteria and had a total of 207 days of maturing debt coverage. The Bank's cash and cash equivalents position provided 28 days of the total liquidity coverage. Investment securities fully backed by the U.S. government provided an additional 164 days of liquidity. An additional 15 days of coverage were provided by a supplemental liquidity buffer. Cash provided by operating activities, primarily generated from net interest income in excess of operating expenses and maturities in the loan portfolio, is an additional source of liquidity that is not reflected in the coverage calculation.

Cash, cash equivalents and investment securities as of December 31, 2017 totaled $8.958 billion compared to $8.966 billion and $8.340 billion at December 31, 2016 and 2015, respectively.

An agreement with a commercial bank requires AgFirst to maintain $50.0 million as a compensating balance. At December 31, 2017, the Bank held $42.4 million in U.S. Treasury securities for that purpose. The remainder of the compensating balance is held in cash in a demand deposit account. These securities are excluded when calculating the amount of eligible liquidity investments.

The District's cash, cash equivalents and investment securities consisted of the following security types as of December 31:

	Cash, Cash Equivalents and Investment Securities					
(dollars in thousands)	**2017**		**2016**		**2015**	
Investment Securities Available-for-Sale						
U.S. Govt. Treasury Securities	$ 490,097	5.99%	$ 341,948	4.22%	$ 42,405	0.56%
U.S. Govt. Guaranteed	4,535,213	55.40	4,274,286	52.69	3,970,590	52.10
Rural Housing U.S. Govt. Agency Guaranteed	94,549	1.16	100,334	1.24	–	–
Other U.S. Govt. Agency Guaranteed	1,912,294	23.36	2,150,289	26.51	2,131,888	27.97
Non-Agency CMOs	–	–	–	–	126,860	1.66
Non-Agency Asset-Backed Securities	631,452	7.71	623,984	7.69	677,369	8.89
Total Available-for-Sale	$ 7,663,605	93.62%	$ 7,490,841	92.35%	$ 6,949,112	91.18%
Held to Maturity						
U.S. Govt. Guaranteed	$ 15,964	0.20%	$ 23,521	0.29%	$ 31,739	0.42%
Rural Housing U.S. Govt. Agency Guaranteed	399,513	4.88	460,222	5.67	462,031	6.06
Farmer Mac Guaranteed	2,297	0.03	2,666	0.03	3,042	0.04
Other Mission Related Investments	104,374	1.27	134,273	1.66	175,860	2.30
Total Held to Maturity	522,148	6.38	620,682	7.65	672,672	8.82
Total Investment Securities	$ 8,185,753	100.00%	$ 8,111,523	100.00%	$ 7,621,784	100.00%
Cash and Cash Equivalents						
Cash	$ 499,451	64.70%	$ 591,491	69.25%	$ 506,456	70.54%
Repurchase Agreements	150,000	19.43	262,624	30.75	211,554	29.46
Money Market Funds	122,519	15.87	–	–	–	–
Total Cash and Cash Equivalents	$ 771,970	100.00%	$ 854,115	100.00%	$ 718,010	100.00%
Total Investment Securities and Cash and Cash Equivalents	$ 8,957,723		$ 8,965,638		$ 8,339,794	

Cash and cash equivalents, which decreased $82.1 million from December 31, 2016 to a total of $772.0 million at December 31, 2017, consist primarily of cash on deposit and money market securities that are short-term in nature (from overnight maturities to maturities that range up to 90 days). Money market securities must carry one of the two highest short-term ratings from a rating agency. Incremental movements in cash balances are due primarily to changes in liquidity needs in relation to upcoming debt maturities between reporting periods.

FCA regulations provide that a System bank may hold certain eligible available-for-sale investments in an amount not to exceed 35.00 percent of its total loans outstanding. Based upon FCA guidelines, at December 31, 2017, the Bank's eligible available-for-sale investments were 33.78 percent of the total loans outstanding. These investments serve to provide liquidity to the Bank's operations, to manage short-term funds, and to manage interest rate risk. AgFirst maintains an investment portfolio for these purposes comprised primarily of short-duration, high-quality investments.

Investment securities totaled $8.186 billion, or 21.65 percent of total assets at December 31, 2017, compared to $8.112 billion, or 22.03 percent, as of December 31, 2016. Investment securities increased $74.2 million, or 0.92 percent, compared to December 31, 2016. Management maintains the available-for-sale liquidity investment portfolio size generally proportionate with that of the loan portfolio and within regulatory and policy guidelines. During 2017, the Bank sold investment securities totaling $77.4 million which resulted in a realized net loss of $258 thousand. These transactions benefitted the Bank by reducing costs and improving liquidity.

Investment securities classified as being available-for-sale totaled $7.664 billion at December 31, 2017. Available-for-sale investments included $490.1 million in U.S. Treasury securities, $4.535 billion in U.S. government guaranteed securities, $94.5 million in rural housing U.S. government agency guaranteed securities, $1.912 billion in other U.S. government agency guaranteed securities, and $631.5 million in non-agency asset-backed securities. As of December 31, 2017, all of these non-agency asset-backed securities were rated in the top category (AAA/Aaa) by Nationally Recognized Statistical Rating Organizations (NRSROs). Since the majority of the portfolio is invested in agency securities, the portfolio is highly liquid and potential credit loss exposure is limited.

The District also maintains a portfolio of investments that are not held for liquidity purposes and are accounted for as a held-to-maturity portfolio. These investments are authorized by FCA regulations that allow investments in Farmer Mac securities and also in specific investments approved by the FCA as Mission Related Investments. The vast majority of this portfolio is comprised of Mission Related Investments for a program to purchase RHMS, which when combined with eligible rural home loans, must not exceed 15.00 percent of total outstanding loans. Investment securities classified as being held-to-maturity totaled $522.1 million at December 31, 2017. As discussed previously, the FCA ended each Mission Related Investment pilot program effective December 31, 2014, but can consider future requests on a case-by-case basis. See *Mission Related Investments* section above.

Net unrealized losses related to investment securities were $19.6 million at December 31, 2017, compared to net unrealized gains $3.0 million at December 31, 2016. These net unrealized losses are reflected in Accumulated Other Comprehensive Income (AOCI) in the Financial Statements. The net unrealized losses stem from normal market factors such as the current interest rate environment.

The District performs periodic credit reviews, including other-than-temporary impairment analyses, on its entire investment securities portfolio. Based on the results of all analyses, the District did not recognize any other-than-temporary credit related impairment during the year ended December 31, 2017. See *Noninterest Income* section below and Note 2, *Summary of Significant Accounting Policies*, and Note 4, *Investments*, in the Notes to the Combined Financial Statements for further information.

Systemwide Debt Securities

The U.S. government does not guarantee, directly or indirectly, Systemwide Debt Securities. However, the Farm Credit System, as a GSE, has benefited from broad access to the domestic and global capital markets. This access has provided the System with a dependable source of competitively priced debt which is critical for supporting the System's mission of providing credit to agriculture and rural America. The implied link between the credit rating of the System and the U.S. government, given the System's status as a GSE and continued concerns regarding the government's borrowing limit and budget imbalances, could pose risk to the System in the future.

AgFirst's primary source of liquidity comes from its ability to issue Systemwide Debt Securities, which are the general unsecured joint and several obligations of the System banks. AgFirst continually raises funds in the debt markets to support its mission, to repay maturing Systemwide Debt Securities, and to meet other obligations.

The System does not have a guaranteed line of credit from the U.S. Treasury or the Federal Reserve. However, the Farm Credit System Insurance Corporation (FCSIC) has an agreement with the Federal Financing Bank (FFB), a federal instrumentality subject to the supervision and direction of the U.S. Treasury, pursuant to which the FFB could advance funds to the FCSIC. Under its existing statutory authority, the FCSIC may use these funds to provide assistance to the System banks in exigent market circumstances which threaten the banks' ability to pay maturing debt obligations. The agreement provides for advances of up to $10 billion and terminates on September 30, 2018, unless otherwise renewed. The decision whether to seek funds from the FFB is at the discretion of the FCSIC. Each funding obligation of the FFB is subject to various terms and conditions and, as a result, there can be no assurance that funding would be available if needed by AgFirst or the System.

Currently, Moody's Investors Service and Fitch Ratings have assigned long-term debt ratings for the System of Aaa and AAA, and short-term debt ratings of P-1 and F1, respectively. These are the highest ratings available from these rating agencies. S&P Global Ratings (S&P) maintains the long-term sovereign credit rating of the U.S. government at AA+, which directly corresponds to its AA+ long-term debt rating of the System. These rating agencies base their ratings on many quantitative and qualitative factors, including the System's status as a GSE. Negative changes to the System's credit ratings could reduce earnings by increasing debt funding costs, and could also have a material adverse effect on liquidity, the ability to conduct normal business operations, and the Bank's overall financial condition and results of operations. However, AgFirst anticipates continued access to funding necessary to support the District's and Bank's needs.

AgFirst's year-to-date average balance of Systemwide Debt Securities at December 31, 2017, was $29.000 billion. At December 31, 2017, AgFirst had $29.763 billion in total System debt outstanding compared to $29.408 billion at December 31, 2016 and $27.973 billion at December 31, 2015. Total interest-bearing liabilities increased primarily due to additional funding needs related to increases in loans and liquidity investments as discussed elsewhere in this report.

AgFirst's recorded liability for outstanding Systemwide Debt Securities as of December 31, 2017 is shown in the following table:

	December 31, 2017					
	Bonds		Discount Notes		Total	
Maturities	Amortized Cost	Weighted Average Interest Rate	Amortized Cost	Weighted Average Interest Rate	Amortized Cost	Weighted Average Interest Rate
			(dollars in thousands)			
2018	$ 7,036,715	1.29%	$ 4,933,312	1.32%	$ 11,970,027	1.30%
2019	5,819,914	1.35	–	–	5,819,914	1.35
2020	3,165,817	1.49	–	–	3,165,817	1.49
2021	1,984,470	1.75	–	–	1,984,470	1.75
2022	1,552,510	1.84	–	–	1,552,510	1.84
2023 and after	5,270,253	2.60	–	–	5,270,253	2.60
Total	$ 24,829,679	1.68%	$ 4,933,312	1.32%	$ 29,762,991	1.62%

In the preceding table, weighted average interest rates include the effect of any related derivative financial instruments, if applicable.

Refer to Note 6, *Debt*, in the Notes to the Combined Financial Statements, for additional information related to debt.

Operational Risk Management

Operational risk is the risk of loss resulting from inadequate or failed processes or systems, human factors or external events, including the execution of unauthorized transactions by employees, errors relating to transaction processing and technology, breaches of the internal control system and the risk of fraud by employees or persons outside the System. AgFirst's and the Associations' boards of directors are required, by regulation, to adopt internal control policies that provide adequate direction to their respective institutions in establishing effective controls over and accountability for operations, programs, and resources. The policies must include, at a minimum, the following items:

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

In addition, AgFirst has implemented a Risk Management Policy to ensure that business exposures to risk are identified, measured and controlled, using the most effective and efficient methods to mitigate such exposures. AgFirst's risk management structure was designed to ensure that an effective enterprise-wide risk management program is in place. Exposure to operational risk is typically identified with the assistance of senior management, and internal audit plans are developed with higher risk areas receiving more attention. The District's operations rely on the secure processing, transmission and storage of confidential information in its computer systems and networks. Although the District believes that it has robust information security procedures and controls, its technologies, systems, networks and customers' devices may be the target of cyber-attacks or information security breaches. Failure in or breach of the District's operational or security systems or infrastructure, or those of its third party vendors and other service providers, including as a result of cyber-attacks, could disrupt the District's businesses or the businesses of its customers, result in the unintended disclosure or misuse of confidential or proprietary information, damage the District's reputation, increase costs, and cause losses.

No control system, no matter how well designed and operated, can provide absolute assurance that the objectives of the control systems are met. Also, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud or errors can be detected. These inherent limitations include, but are not limited to, the realities that judgments in decision-making can be faulty and breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by individual acts of some persons, collusion of two or more people, or management override of the control. The design of any system of controls also is based in part on certain assumptions about the likelihood of future events and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, control may be inadequate because of changes in conditions, or compliance with policies or procedures may deteriorate.

Reputational Risk Management

Reputation risk is defined as the negative impact resulting from events, real or perceived, that shape the image of any District or System entity. Such risks include impacts related to investors' perceptions about agriculture, the reliability of any District or System institution financial information or actions by any District or System institution. Entities that serve the System at the national level, including the Coordinating Committee, the Presidents' Planning Committee and The Farm Credit Council, will communicate guidance to the System for reputational issues that have broader consequences for the System as a whole. These entities support those business and other practices that are consistent with AgFirst's mission.

Political Risk Management

Political risk to the System is the risk of loss of support for the System or agriculture by the U.S. government. System institutions are instrumentalities of the federal government and are intended to further governmental policy concerning the extension of credit to or for the benefit of agricultural and rural America. The System and its borrowers may be significantly affected by federal legislation that impacts the System directly, such as changes to the Farm Credit Act of 1971, as amended (the Farm Credit Act), or indirectly, such as agricultural appropriations bills. However, government programs account for a relatively small percentage of net farm income in the territory served by the District Associations.

The District addresses political risk by actively supporting the Farm Credit Council, which is a full-service, federal trade association representing the System before Congress, the Executive Branch, and others. The Council provides the mechanism for "grassroots" involvement in the development of System positions and policies with respect to federal legislation and government actions that impact the System. Additionally, the District takes an active role in representing the individual interests of System institutions and their borrowers before Congress. In addition to the Farm Credit Council, each district has its own Council, which is a member of the Farm Credit Council. The district Councils represent the interests of their members on a local and state level, as well as on a federal level.

RESULTS OF OPERATIONS

Net Income

District net income totaled $706.3 million for the year ended December 31, 2017, an increase of $145.2 million from 2016. Net income of $561.2 million for the year ended December 31, 2016 was an increase of $11.6 million from 2015. Major components of the changes in net income for the referenced periods are outlined in the following table and discussion:

Change in Net Income *(dollars in thousands)*	**Year Ended December 31, 2017**	**2016**
Net income (for prior year)	$ 561,151	$ 549,579
Increase (decrease) due to:		
Total interest income	111,106	102,098
Total interest expense	(108,487)	(70,136)
Net interest income	2,619	31,962
Provision for loan losses	(13,562)	196
Noninterest income	18,066	(1,032)
Noninterest expense	138,832	(19,823)
Provision for income taxes	(779)	269
Total increase (decrease) in net income	145,176	11,572
Net income	$ 706,327	$ 561,151

Key Results of Operations Comparisons

Key District results of operations comparisons for years ended December 31 are shown in the following table:

Key Results of Operations Comparisons	**For the Year Ended December 31, 2017**	**2016**	**2015**
Return on average assets	1.92%	1.55%	1.63%
Return on average shareholders' equity	11.39%	9.44%	9.63%
Net interest income as a percentage of average earning assets	2.88%	2.96%	3.08%
Operating expense as a percentage of net interest income and noninterest income	33.67%	47.73%	47.05%
Net (charge-offs) recoveries to average loans	(0.01)%	0.02%	0.02%

The first two ratios above increased in 2017 primarily due to an increase in net income. The $145.2 million increase in net income in 2017 resulted from a reduction in postretirement benefits costs of $145.8 million from a change in accounting estimate related to the District's multiemployer benefits plans. See *Noninterest Expenses* section below and Note 9, *Employee Benefit Plans*, in the Notes to the Financial Statements for further information. Net interest income as a percentage of average earning assets decreased in 2017 primarily as a result of higher average interest earning assets. For 2016, the first three ratios declined primarily due to higher average balances of total assets, total shareholders' equity, and total interest-earning assets. For the operating expense as a percentage of net interest income and noninterest income ratio, operating expense consists primarily of noninterest expenses excluding losses (gains) from other property owned. This ratio improved in 2017 primarily as a result of a decrease in operating expenses while it was negatively impacted by an increase in operating expenses in 2016. The net (charge-offs) recoveries ratio remained relatively constant for all three years presented due to minimal net (charge-offs) recoveries. See *Allowance for Loan Losses, Net Interest Income*, *Noninterest Income*, and *Noninterest Expenses* sections for further discussion.

Interest Income

Total interest income for the year ended December 31, 2017 was $1.470 billion, an increase of $111.1 million, as compared to the same period of 2016. Total interest income for the year ended December 31, 2016 was $1.359 billion, an increase of $102.1 million, as compared to the same period of 2015. For 2017, interest income increased primarily as a result of higher yields on earning assets. For 2016, interest income increased primarily as a result of higher average loan balances. The average yield on interest earning assets increased 18 basis points from 2016 to 2017 and 4 basis points from 2015 to 2016. The average volume of interest earning assets increased $1.167 billion in 2017 and $2.355 billion in 2016.

The following table illustrates the impact of volume and yield changes on interest income:

Net Change in Interest Income *(dollars in thousands)*	**Year Ended December 31, 2017-2016**	**2016-2015**
Current year increase (decrease) in average earning assets	$ 1,166,925	$ 2,354,832
Prior year average yield	3.89%	3.85%
Interest income variance attributed to change in volume	45,351	90,752
Current year average earning assets	36,126,918	34,959,993
Current year increase (decrease) in average yield	0.18%	0.04%
Interest income variance attributed to change in yield	65,755	11,346
Net change in interest income	$ 111,106	$ 102,098

Interest Expense

Total interest expense for the year ended December 31, 2017 was $431.0 million, an increase of $108.5 million, as compared to the same period of 2016. Total interest expense for the year ended December 31, 2016 was $322.5 million, an increase of $70.1 million, as compared to the same period of 2015. The increase in interest expense for both years was primarily attributed to higher average rates paid on System debt obligations.

The following table illustrates the impact of volume and rate changes on interest expense:

Net Change in Interest Expense *(dollars in thousands)*	**Year Ended December 31, 2017-2016**	**2016-2015**
Current year increase (decrease) in average interest-bearing liabilities	$ 373,146	$ 2,341,316
Prior year average rate	1.09%	0.93%
Interest expense variance attributed to change in volume	4,066	21,677
Current year average interest-bearing liabilities	29,969,561	29,596,415
Current year increase (decrease) in average rate	0.35%	0.16%
Interest expense variance attributed to change in rate	104,421	48,459
Net change in interest expense	$ 108,487	$ 70,136

Net Interest Income

Net interest income increased in both 2017 and 2016, as illustrated by the following table:

District Analysis of Net Interest Income
Year Ended December 31,
(dollars in thousands)

	2017			2016			2015		
	Avg. Balance	Interest	Avg. Yield	Avg. Balance	Interest	Avg. Yield	Avg. Balance	Interest	Avg. Yield
Loans	$ 27,793,235	$ 1,316,664	4.74%	$ 26,753,055	$ 1,228,558	4.59%	$ 24,856,555	$ 1,136,526	4.57%
Cash & investments	8,323,126	153,102	1.84	8,195,994	130,102	1.59	7,748,606	120,036	1.55
Other interest-earning assets	10,557	–	–	10,944	–	–	–	–	–
Total earning assets	36,126,918	1,469,766	4.07	34,959,993	1,358,660	3.89	32,605,161	1,256,562	3.85
Interest-bearing liabilities	29,969,561	(430,960)	1.44	29,596,415	(322,473)	1.09	27,255,099	(252,337)	0.93
Spread			2.63			2.80			2.92
Impact of capital	$ 6,157,357		0.25	$ 5,363,578		0.16	$ 5,350,062		0.16
Net Interest Income (NII) & NII to average earning assets		$ 1,038,806	2.88%		$ 1,036,187	2.96%		$ 1,004,225	3.08%

Net interest income for the year ended December 31, 2017 was $1.039 billion compared to $1.036 billion for the same period of 2016, an increase of $2.6 million, or 0.25 percent. For the year ended December 31, 2016, net interest income increased $32.0 million, or 3.18 percent, from $1.004 billion in 2015. The net interest margin was 2.88 percent, 2.96 percent, and 3.08 percent for the years ended December 31, 2017, 2016, and 2015, respectively, decreases of 8 and 12 basis points. The decreases for both years resulted from higher average balances of interest-earning assets and higher rates paid on interest-bearing liabilities.

During 2017, 2016, and 2015, the Bank called debt totaling $2.297 billion, $16.597 billion, and $8.565 billion, respectively, and was able to lower the cost of funds. Over time, as interest rates change and as assets prepay or reprice, the positive impact on the net interest margin that the Bank has experienced over the last several years from calling debt will continue to diminish.

Provision for Loan Losses

AgFirst and the Associations measure risks inherent in their individual portfolios on an ongoing basis and, as necessary, recognize provision for loan loss expense so that appropriate reserves for loan losses are maintained. Loan loss provision was a net expense of $13.4 million for the year ended December 31, 2017 compared to a net reversal of $191 thousand and a net expense of $5 thousand for the years ended December 31, 2016 and 2015, respectively. The $13.4 million in net provision expense for the year ended December 31, 2017 consisted of $8.9 million of net general reserve expense and $4.5 million of net provision expense related to reserves for specific credits. Total net provision expense in 2017 primarily related to borrowers in the cattle ($5.0 million), poultry ($4.3 million), field crops ($4.0 million), and rural home loan ($1.4 million) segments, partially offset by provision reversals in the nursery/greenhouse ($2.7 million) and utilities ($1.2 million) segments. The $191 thousand in net reversals of loan loss expense for the year ended December 31, 2016 consisted of $8.6 million of net general reserve expense and $8.8 million of net provision reversals related to reserves for specific credits. For 2016, net provision reversals primarily related to borrowers in the other real estate ($5.0 million), forestry ($3.4 million), nursery/greenhouse ($2.6 million), and tree fruits and nuts ($2.0 million) segments, partially offset by provision expense in the poultry ($2.8 million), grain ($2.6 million), field crops ($2.0 million), dairy ($1.5 million), and swine ($1.3 million) segments. The $5 thousand in net provision expense for the year ended December 31, 2015 consisted of $15.9 million of general reserve expense and $15.9 million of provision reversals related to reserves for specific credits. For 2015, net provision expense primarily related to borrowers in the field crops ($6.6 million), grain ($4.5 million), poultry ($3.8 million), dairy ($1.9 million), and corn ($1.3 million) segments, partially offset by provision reversals in the nursery/greenhouse ($8.0 million), forestry ($5.5 million), and cattle ($2.4 million) segments.

The increase in net provision expense in 2017 was due primarily to lower provision reversals for specific credits in 2017 compared to 2016 and 2015. A reduction in the overall level of problem assets resulted in minimal provision expense for 2017, 2016, and 2015. See the *Allowance for Loan Losses* section above and Note 3, *Loans and Allowance for Loan Losses*, in the Notes to the Combined Financial Statements for further information.

Noninterest Income

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

Noninterest Income *(dollars in thousands)*	For the Year Ended December 31, 2017	2016	2015	Increase (Decrease) 2017/2016	2016/2015
Loan fees	$ 30,917	$ 30,105	$ 29,273	$ 812	$ 832
Fees for financially related services	10,811	10,685	10,828	126	(143)
Building lease income	3,650	3,623	3,604	27	19
Net impairment losses	–	(14,947)	(1,909)	14,947	(13,038)
Gains (losses) on investments, net	(258)	23,822	1,126	(24,080)	22,696
Gains (losses) on called debt	(4,528)	(29,900)	(12,330)	25,372	(17,570)
Gains (losses) on other transactions	6,086	6,201	2,822	(115)	3,379
Other noninterest income	11,448	10,471	7,678	977	2,793
Total noninterest income	$ 58,126	$ 40,060	$ 41,092	$ 18,066	$ (1,032)

Total noninterest income increased $18.1 million from 2016 to 2017 primarily as a result of lower called debt and impairment losses, partially offset by lower investment gains. The $1.0 million decrease in noninterest income from 2015 to 2016 was due primarily to higher called debt and impairment losses, partially offset by higher investment gains. Significant line item variances are discussed below.

Loan fees increased $812 thousand for 2017 compared to 2016. This increase resulted primarily from increases of $1.4 million in origination fees and $785 thousand in servicing fee income from the first lien residential mortgage portfolio, partially offset by a reduction in mission-related loan fee income of $981 thousand primarily at one Association and $338 thousand lower fee income in the capital markets portfolio due to fewer transactions coming to market. Loan fees increased $832 thousand for 2016 compared to 2015 primarily due to higher fees on originated loans of $1.8 million, mainly in commitment, new loan, and appraisal fees, reflecting an increase in loan originations. This increase was partially offset by decreases of $519 thousand in fee income on loan participations, primarily in commitment and letter of credit fees, and $420 thousand in fee income from the first lien residential mortgage portfolio, primarily in servicing fees.

Net impairment losses on investments decreased $14.9 million and increased $13.3 million for the years ended December 31, 2017 and 2016, respectively. No impairment losses were recorded during 2017. The $13.3 million higher impairment losses for 2016 resulted from the Bank's sale of all of its ineligible available-for-sale investment securities in August, 2016. These securities totaled $129.4 million and $13.2 million in impairment losses was recognized as a result of the sale. The additional $1.7 million of impairment recorded in 2016 and the $1.7 million of impairment recorded in 2015 related to these ineligible securities. See the *Cash, Cash Equivalents and Investments* section and Note 4, *Investments*, in the Notes to the Financial Statements for further information.

Gains (losses) on investments during 2017, 2016, and 2015 were the result of investment activities related to managing the composition and overall size of the investment portfolio. These transactions benefitted the Bank by reducing carrying costs and improving liquidity. Losses on investments totaled $258 thousand for the year ended December 31, 2017 and gains on investments totaled $23.8 million and $1.1 million for the years ended December 31, 2016 and 2015, respectively. In May 2017, the Bank sold securities totaling $77.4 million which resulted in a net loss of $258 thousand. Gains of $23.2 million were recognized in August 2016 on the sale of the Bank's ineligible available-for-sale securities which totaled $129.4 million as discussed above. These transactions also benefitted the Bank by eliminating future costs related to third party impairment modeling, and reducing FCSIC premium and safekeeping expenses. In March 2016, the Bank sold agency mortgage-backed securities totaling $15.0 million which resulted in gains totaling $620 thousand. In March 2015, the Bank sold agency mortgage-backed securities totaling $28.0 million which resulted in gains of $1.1 million. See the *Cash, Cash Equivalents and Investments* section above and Note 4, *Investments*, in the Notes to the Financial Statements for further information.

Debt issuance expense is amortized over the life of the underlying debt security. When debt securities are called prior to maturity, any unamortized issuance cost is expensed. Losses on called debt decreased $25.4 million and increased $17.6 million for the years ended December 31, 2017 and 2016, respectively. Call options were exercised on bonds totaling $2.297 billion in 2017, $16.597 billion in 2016, and $8.565 billion in 2015. Debt is called to take advantage of favorable market interest rate changes. The amount of debt issuance cost expensed is dependent upon both the volume and remaining maturity of the debt when called. Losses on called debt are more than offset by interest expense savings realized as called debt is replaced by new debt issued at a lower rate of interest.

For the year ended December 31, 2016, gains on other transactions increased $3.4 million. This increase resulted primarily from a $1.2 million decrease in reserve expense for unfunded commitments, a $1.1 million increase in the market value of certain retirement plan trust assets, and higher gains on sales of rural home loans of $685 thousand. Changes in the reserve for unfunded commitments result from fluctuations in both the balance and composition of unfunded commitments between periods.

Other noninterest income increased by $977 thousand and $2.8 million for the years ended December 31, 2017 and 2016, respectively, compared to the prior years. The increases resulted primarily from increases in patronage received from other Farm Credit institutions of $1.5 million and $2.1 million for 2017 and 2016, respectively. Income of $467 thousand from previously forfeited earnest money recognized in 2016 on the sale of OPO properties also contributed to the variance for both periods.

Noninterest Expenses

Noninterest expenses for each of the three years ended December 31 are shown in the following table:

Noninterest Expenses	**For the Year Ended December 31,**			**Increase (Decrease)**	
(dollars in thousands)	**2017**	**2016**	**2015**	**2017/ 2016**	**2016/ 2015**
Salaries and employee benefits	$ 251,873	$ 245,157	$ 234,300	$ 6,716	$ 10,857
Postretirement benefits	(79,418)	73,958	72,717	(153,376)	1,241
Occupancy and equipment	42,897	42,711	40,754	186	1,957
Insurance Fund premiums	36,622	40,643	29,144	(4,021)	11,499
Other operating expenses	117,325	111,245	114,884	6,080	(3,639)
Losses (gains) from other property owned	6,830	1,247	3,339	5,583	(2,092)
Total noninterest expenses	$ 376,129	$ 514,961	$ 495,138	$ (138,832)	$ 19,823

Total noninterest expenses decreased $138.8 million and increased $19.8 million for the years ended December 31, 2017 and 2016, respectively. The decrease in 2017 resulted primary from a decrease in postretirement benefits expenses. For 2016, an increase in salaries and employee benefits expenses and higher Insurance Fund premiums were the primary reasons for the increase. Significant line item variances are discussed below.

Salaries and employee benefits expenses increased $6.7 million and $10.9 million for the years ended December 31, 2017 and 2016, respectively. The increases for both 2017 and 2016 resulted primarily from increases of $9.6 million and $11.2 million, respectively, in salaries and incentives due to normal salary administration. The increase in 2017 was partially offset by a $3.2 million decrease in group health insurance premium costs.

Postretirement benefits expenses decreased $153.4 million and increased $1.2 million for the years ended December 31, 2017 and 2016, respectively, compared to the prior years. During 2017, the method of recording expenses at participating District entities for the multiemployer pension and postretirement benefits 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 Balance Sheets. For 2017 and future years, participating entities will record postretirement benefit costs based on the actual contributions to the plans. This change caused the District 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 a reduction of Other Liabilities of $186.9 million and an increase in AOCI of $39.2 million on the District's Balance Sheets, and a total reduction of postretirement benefit costs of $145.8 million during 2017. In addition, 2017 expenses for the pension and other postretirement benefits plans were lower by $2.4 million and $6.2 million, respectively. For 2016 compared to 2015, increases of $4.0 million in pension plan expense and $958 thousand in 401(k) plan expenses were substantially offset by a reduction in other postretirement benefit plan expenses of $3.9 million. See further discussion of employee benefits in Note 9, *Employee Benefit Plans*, in the Notes to the Combined Financial Statements.

Occupancy and equipment expense increased $2.0 million for the year ended December 31, 2016 compared to the prior year primarily from an increase in depreciation and software amortization expenses of $1.6 million which included accelerated amortization of $642 thousand for a software license contract termination. Building lease income offset a portion of these expenses for all three years. See *Noninterest Income* section for additional information.

Insurance Fund premiums decreased $4.0 million and increased $11.5 million for the years ended December 31, 2017 and 2016, respectively, compared to the prior years. The decrease in 2017 resulted primarily from a decrease in the base annual premium rate. The increase in 2016 resulted primarily from an increase in the base annual premium rate. A change in the composition of the Bank's investment portfolio also contributed to the increase. The base annual premium rate was 15 basis points in 2017, 16 basis points in the first half of 2016 and 18 basis points in the second half of 2016, and 13 basis points in 2015. The FCSIC Board makes premium rate adjustments, as necessary, to maintain the secure base amount which is based upon insured debt outstanding at System banks. Insurance fund premiums decreased to 9 basis points effective January 1, 2018.

Other operating expenses increased $6.1 million and decreased $3.6 million for the years ended December 31, 2017 and 2016, respectively. The increase for 2017 resulted primarily from $4.1 million in additional public and member relations expenses resulting from Association contributions to charitable foundations and an increase of $2.1 million in professional fees primarily related to technology initiatives. These increases in 2017 were partially offset by $1.0 million lower periodic costs related to nonaccrual loans, primarily legal fees and property taxes. The decrease in other operating expenses for 2016 resulted primarily from a $2.3 million decrease in public and member relations expenses resulting from one Association's establishment of a $3.0 million charitable foundation in 2015 and a $2.0 million decrease in professional and service provider fees as a result of a delay in certain Bank technology projects. The remainder of the variance in other operating expenses was comprised of numerous and varied expenses, none of which individually had a significant change compared to the prior year period.

Losses from other property owned increased $5.6 million and decreased $2.1 million during 2017 and 2016, respectively. The increase in 2017 resulted primarily from lower gains on sales of $5.0 million. The decrease in 2016 was primarily a result of lower writedowns of $1.8 million. See *Other Property Owned* section above for further discussion.

Provision for Income Taxes

Provision for income taxes increased to $1.1 million in 2017 from $326 thousand in 2016. See Note 12, *Income Taxes*, in the Notes to the Combined Financial Statements for further details.

CAPITAL

Capital serves to support future asset growth, investment in new products and services, and to provide protection against credit, interest rate, and other risks, as well as operating losses. A sound capital position is critical to provide protection to investors in Systemwide Debt Securities and to ensure long-term financial success.

The AgFirst Capitalization Plan (the "Plan") approved by the Bank's board of directors establishes guidelines 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. The Bank's capital objectives are considered adequate to support inherent risk. There were no significant changes to the Plan for 2017 other than to reflect changes for the new capital regulations which became effective January 1, 2017. See *Regulatory Matters* section below for further discussion.

Total District shareholders' equity at December 31, 2017 was $6.249 billion, compared to $5.881 billion and $5.671 billion at December 31, 2016 and 2015, respectively. The $368.1 million increase in 2017 resulted primarily from an increase in retained earnings from net income of $708.3 million and increase of $14.1 million in employee benefit plans adjustments. These increases in shareholders' equity were offset by decreases from cash distributions declared of $237.4 million, retained earnings retired of $84.8 million, increases in net unrealized losses on investments of $22.6 million, and net capital stock and participation certificates retired of $8.4 million. The $210.0 million increase in shareholders' equity in 2016 resulted primarily from an increase in retained earnings from net income of $561.2 million, increases of $13.3 million in employee benefit plans adjustments, and net capital stock and participation certificates issued of $11.3 million. These increases in shareholders' equity were offset by decreases from cash distributions declared of $176.8 million, retained earnings retired of $88.2 million, and decreases in net unrealized gains on investments of $63.0 million and the redemption of perpetual preferred stock of $46.9 million.

During 2016 and 2015, the Bank repurchased, through privately negotiated transactions, and subsequently cancelled, Class B Perpetual Non-Cumulative Fixed-to-Floating Rate Subordinated Preferred Stock with par value totaling $65.8 million and $10.3 million, respectively. The effect of the repurchases on shareholders' equity was to reduce preferred stock outstanding by $65.8 million and $10.3 million, respectively, and to increase additional paid-in capital by $18.9 million and $3.4 million, respectively.

See Note 7, *Shareholders' Equity,* in the Notes to the Combined Financial Statements for further information.

Regulatory Ratios

The Bank's regulatory ratios at December 31 are shown in the following table:

	Regulatory Minimum**	AgFirst Ratio as of December 31, 2017	2016	2015
Permanent Capital Ratio	7.00%	22.21%	21.31%	20.71%
Common Equity Tier 1 (CET1) Capital Ratio	7.00%	21.73%	*	*
Tier 1 Capital Ratio	8.50%	22.18%	*	*
Total Regulatory Capital Ratio	10.50%	22.31%	*	*
Tier 1 Leverage Ratio	5.00%	7.67%	*	*
Unallocated Retained Earnings (URE) and URE Equivalents Leverage Ratio	1.50%	6.72%	*	*
Total Surplus Ratio	7.00%	*	21.21%	20.64%
Core Surplus Ratio	3.50%	*	19.13%	18.48%
Net Collateral Ratio	103.00%	*	106.69%	106.93%

**Not applicable due to changes in regulatory capital ratio requirements effective January 1, 2017*
*** Includes fully phased-in capital conservation buffers which will be effective January 1, 2020*

The FCA sets minimum regulatory capital adequacy requirements for System banks and associations. Effective January 1, 2017, these requirements were modified to make System regulatory requirements more transparent and to ensure that the System's capital requirements are comparable with the Basel III framework and the standardized approach of federal banking regulatory agencies. The new requirements are based on regulatory ratios as defined by the FCA and include common equity tier 1 (CET1), tier 1, and total capital ratios which replace the total surplus and core surplus ratios. The net collateral ratio is also replaced by the tier 1 leverage ratio and the unallocated retained earnings (URE) and URE equivalents leverage ratio under the new regulations. The permanent capital ratio remains in effect under the Farm Credit Act with minor modifications to risk-adjusted assets.

The permanent capital, CET1, tier 1, and total capital ratios are calculated by dividing the three-month average daily balance of the capital numerator, as defined by the FCA, by a risk-adjusted asset base as were the total surplus and core surplus ratios prior to 2017. Unlike these ratios, the tier 1 leverage, URE and URE equivalents, and collateral ratios do not incorporate any risk-adjusted weighting of assets. Risk-adjusted assets refer to the total dollar amount of the institution's assets adjusted by an appropriate credit conversion factor as defined by regulation. Generally, higher credit conversion factors are applied to assets with more inherent risk. The tier 1 leverage and URE and URE equivalents leverage ratios are calculated by dividing the three-month average daily balance of the capital numerator, as defined by the FCA, by the three-month average daily balance of total assets adjusted for regulatory deductions. The collateral ratio was calculated by dividing the Bank's period-end collateral, as defined by FCA regulations, by period-end total liabilities.

For all periods presented, AgFirst exceeded minimum regulatory standards for all of the ratios. The Bank's permanent capital ratio increased at December 31, 2017 compared to December 31, 2016 due to higher average capital levels in the 2017 period. The Bank's permanent capital, total surplus, and core surplus ratios increased at December 31, 2016 compared to the prior year. Higher average capital balances in 2016 and the sale in August, 2016 of the Bank's ineligible available-for-sale investment securities, which are deducted from capital in the ratio calculations, improved the December 31, 2016 ratios. The Bank's net collateral ratio remained relatively constant for 2016.

The following table illustrates the risk bearing capacity of the District Associations at December 31, 2017:

Associations	Permanent Capital Ratio	Common Equity Tier 1 Capital Ratio	Tier 1 Capital Ratio	Total Regulatory Capital Ratio	Tier 1 Leverage Ratio	URE and URE Equivalents Leverage Ratio
Regulatory minimum*	7.00%	7.00%	8.50%	10.50%	5.00%	1.50%
AgCarolina	21.99%	18.92%	18.92%	20.03%	19.08%	19.18%
AgChoice	17.94	17.68	17.68	18.34	19.05	19.15
Ag Credit	19.87	17.90	17.90	19.71	14.34	14.85
AgGeorgia	22.57	22.38	22.38	23.23	23.38	15.64
AgSouth	19.38	13.14	13.14	20.10	12.51	12.32
ArborOne	18.44	18.20	18.20	19.46	16.58	8.24
Cape Fear	20.53	20.35	20.35	21.22	20.45	20.66
Carolina	20.68	17.41	17.41	21.15	17.06	16.68
Central Florida	18.75	18.58	18.58	19.50	17.80	14.02
Central Kentucky	16.91	16.66	16.66	17.54	14.63	14.29
Colonial	26.05	25.94	25.94	26.38	27.72	27.85
First South	16.92	16.43	16.43	17.35	16.42	10.91
Florida	19.77	19.64	19.64	20.34	21.67	16.37
MidAtlantic	19.67	18.55	18.55	20.44	19.64	17.89
Northwest Florida	28.26	27.91	27.91	29.16	28.81	25.32
Puerto Rico	36.67	36.36	36.36	37.23	31.96	32.64
River Valley	19.04	15.97	15.97	17.51	14.60	14.40
Southwest Georgia	14.70	13.04	13.04	15.53	12.26	14.45
Virginias	21.09	20.93	20.93	21.72	21.41	21.59

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

All Associations met all of the regulatory minimum capital requirements at December 31, 2017. AgFirst and each Association maintain an allowance for loan losses determined by its management and are capitalized to serve their unique markets.

See Note 7, *Shareholders' Equity*, in the Notes to the Combined Financial Statements for additional information regarding regulatory capitalization requirements and restrictions.

THE DISTRICTWIDE YOUNG, BEGINNING, AND SMALL (YBS) FARMERS AND RANCHERS PROGRAM

The District is committed to providing sound and dependable credit to young, beginning, and small (YBS) farmers and ranchers. Because of the unique needs of these individuals, and their importance to the future growth of the Associations, the Associations have established annual marketing goals to increase market shares 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' access to a stable source of credit. AgFirst and the District Associations recognize that YBS farmers are vitally important to the future of agriculture and are committed to continue offering programs to help educate, assist, and provide quality financial services to YBS farmers**.**

The FCA regulatory definitions for YBS farmers and ranchers are as follows:

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

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

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

It is important to note that due to the regulatory definitions a farmer/rancher may be included in multiple categories as he/she would be included in each category in which the definition was met.

The following table summarizes information regarding the combined District's loans outstanding to Young and Beginning Farmers and Ranchers as of December 31, 2017:

Young and Beginning Farmers and Ranchers
Number/Volume of Loans Outstanding
(dollars in thousands)

Category	Number of Loans	Percent of Total	Volume Outstanding	Percent of Total
1. Total loans and commitments outstanding at year-end	150,848		$ 34,752,996	
2. Young farmers and ranchers	26,832	17.79%	$ 3,233,377	9.30%
3. Beginning farmers and ranchers	41,818	27.72%	$ 5,187,193	14.93%

The following table summarizes information regarding the combined District's loans outstanding to Small Farmers and Ranchers as of December 31, 2017:

Small Farmers and Ranchers
Number/Volume of Loans Outstanding by Loan Size
(dollars in thousands)

Number/Volume Outstanding	$0- $50,000	$50,001- $100,000	$100,001- $250,000	$250,001- and greater
1. Total number of loans and commitments outstanding at year-end	73,128	27,028	28,313	22,379
2. Total number of loans to small farmers and ranchers	49,620	15,706	14,022	6,192
3. Number of loans to small farmers and ranchers as a % of total number of loans	67.85%	58.11%	49.52%	27.67%
4. Total loan volume outstanding at year-end	$ 1,519,756	$ 1,954,900	$ 4,481,950	$ 26,796,390
5. Total loan volume to small farmers and ranchers	$ 979,893	$ 1,126,987	$ 2,175,809	$ 3,066,628
6. Loan volume to small farmers and ranchers as a % of total loan volume	64.48%	57.65%	48.55%	11.44%

The following table summarizes information regarding the combined District's new loans made to Young and Beginning Farmers and Ranchers for the year ended December 31, 2017:

Young and Beginning Farmers and Ranchers
Gross New Business During 2017, Number/Volume of Loans
(dollars in thousands)

Category	Number of Loans	Percent of Total	Volume Outstanding	Percent of Total
1. Total gross new loans and commitments made during 2017	44,967		$ 9,438,174	
2. Total loans and commitments made during 2017 to young farmers and ranchers	8,635	19.20%	$ 1,115,157	11.82%
3. Total loans and commitments made during 2017 to beginning farmers and ranchers	12,624	28.07%	$ 1,685,212	17.86%

The following table summarizes information regarding the combined District's new loans made to Small Farmers and Ranchers for the year ended December 31, 2017:

Small Farmers and Ranchers
Gross New Business by Loan Size, Number/Volume of Loans
(dollars in thousands)

Number/Volume	$0- $50,000	$50,001 - $100,000	$100,001- $250,000	$250,001- and greater
1. Total number of new loans and commitments made during 2017	21,653	7,885	8,255	7,174
2. Total number of loans made to small farmers and ranchers during 2017	14,878	4,092	3,622	1,809
3. Number of loans to small farmers and ranchers as a % of total number of loans	68.71%	51.90%	43.88%	25.22%
4. Total gross loan volume of all new loans and commitments made during 2017	$ 483,128	$ 587,432	$ 1,360,131	$ 7,007,483
5. Total gross loan volume to small farmers and ranchers	$ 312,636	$ 299,061	$ 579,032	$ 906,585
6. Loan volume to small farmers and ranchers as a % of total gross new loan volume	64.71%	50.91%	42.57%	12.94%

COMMITMENTS AND CONTINGENCIES

On the basis of information presently available, management and legal counsel are of the opinion that the ultimate liability, if any, from legal actions pending against AgFirst would be immaterial in relation to the financial position of AgFirst. Refer to Note 11, *Commitments and Contingencies*, in the Notes to the Combined Financial Statements for additional information.

REGULATORY MATTERS

On July 25, 2014, the FCA published a proposed rule in the Federal Register to revise the requirements governing the eligibility of investments for System banks and associations. The public comment period ended on October 23, 2014. The FCA expects to issue a final regulation in 2018. The stated objectives of the proposed rule are as follows:

- To strengthen the safety and soundness of System banks and associations,
- To ensure that System banks hold sufficient liquidity to continue operations and pay maturing obligations in the event of market disruption,
- To enhance the ability of the System banks to supply credit to agricultural and aquatic producers,
- To comply with the requirements of section 939A of the Dodd-Frank Act,
- To modernize the investment eligibility criteria for System banks, and
- To revise the investment regulation for System associations to improve their investment management practices so they are more resilient to risk.

FINANCIAL REGULATORY REFORM

Derivatives transactions are subject to myriad regulatory requirements including, among other things, clearing through a third-party central clearinghouse trading on regulated exchanges or other multilateral platforms. Margin is required for these transactions. Derivative transactions that are not subject to mandatory trading and clearing requirements may be subject to minimum margin and capital requirements.

The Commodity Futures Trading Commission and other federal banking regulators have exempted System institutions from certain, but not all, of these new requirements, including for swaps with members, mandatory clearing and minimum margin for non-cleared swaps.

Notwithstanding these exceptions, counterparties of System institutions may require margin or other forms of credit support as a condition to entering into non-cleared transactions because such transactions may subject these counterparties to more onerous capital, liquidity and other requirements absent such margin or credit support. Alternatively, these counterparties may pass on the capital and other costs associated with entering into transactions if insufficient margin or if other credit support is not provided.

The Dodd-Frank Act also created a new federal agency called the Consumer Financial Protection Bureau (CFPB). The CFPB is responsible for regulating the offering of consumer financial products or services under federal consumer financial laws. The Farm Credit Administration retains the responsibility to oversee and enforce compliance by System institutions with relevant rules adopted by the CFPB.

The regulatory requirements that apply to derivatives transactions could affect funding and hedging strategies and increase funding and hedging costs.

RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS

Please refer to Note 2, *Summary of Significant Accounting Policies*, in the Notes to the Combined 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 2017-08 – Receivables – Nonrefundable Fees and Other Costs (Subtopic 310-20): Premium Amortization on Purchased Callable Debt Securities	
• Requires amortization of premiums to the earliest call date on debt securities with call features that are explicit, noncontingent and callable at fixed prices and on preset dates. • Does not impact securities held at a discount; the discount continues to be amortized to the contractual maturity. • Requires adoption on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings as of the beginning of the period of adoption. • Effective for interim and annual periods beginning after December 15, 2018. Early adoption is permitted.	• The investment securities portfolio includes holdings of callable debt securities. The District is currently evaluating the impact of the Update on the financial statements, which will be affected by any investments in callable debt securities carried at a premium at the time of adoption. • The District expects to adopt the guidance using the modified retrospective method with a cumulative effect adjustment to retained earnings as of the beginning of the year of adoption.
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. • Changes the present incurred loss impairment guidance for loans to a CECL model. • The Update also modifies the other-than-temporary impairment model for debt securities to require an allowance for credit impairment instead of a direct write-down, which allows for reversal of credit impairments in future periods based on improvements in credit. • Eliminates existing guidance for purchased credit impaired (PCI) loans, and requires recognition of an allowance for expected credit losses on these financial assets. • Requires a cumulative-effect adjustment to retained earnings as of the beginning of the reporting period of adoption. • Effective for fiscal years beginning after December 15, 2020, and interim periods within those fiscal years. Early application will be permitted for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018.	• The District has begun implementation efforts by establishing a cross-discipline governance structure. The District is currently identifying key interpretive issues, and assessing existing credit loss forecasting models and processes against the new guidance to determine what modifications may be required. • The District expects that the new guidance will result in an increase in its allowance for credit losses due to several factors, including: 1. The allowance related to loans and commitments will most likely increase to cover credit losses over the full remaining expected life of the portfolio, and will consider expected future changes in macroeconomic conditions, 2. An allowance will be established for estimated credit losses on debt securities, 3. The nonaccretable difference on any PCI loans will be recognized as an allowance, offset by an increase in the carrying value of the related loans. • The extent of the increase is under evaluation, but will depend upon the nature and characteristics of the District's portfolio at the adoption date, and the macroeconomic conditions and forecasts at that date. • The District 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. • Lessor accounting activities are largely unchanged from existing lease accounting. • The Update also eliminates leveraged lease accounting but allows existing leveraged leases to continue their current accounting until maturity, termination or modification. • Also, expands qualitative and quantitative disclosures of leasing arrangements. • Requires adoption using a modified cumulative effect approach wherein the guidance is applied to all periods presented. • 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. • The District has started its implementation of the Update which has included an initial evaluation of leasing contracts and activities. • As a lessee the District is developing its methodology to estimate the right-of-use assets and lease liabilities, which is based on the present value of lease payments but does not expect a material change to the timing of expense recognition. • Given the limited changes to lessor accounting, the District does not expect material changes to recognition or measurement, but it is early in the implementation process and the impact will continue to be evaluated. • The District is evaluating existing disclosures and may need to provide additional information as a result of adopting the Update. • The District expects to adopt the guidance in first quarter 2019 using the modified retrospective method and practical expedients for transition.

ASU 2016-01 – Financial Instruments – Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities	
• The Update amends the presentation and accounting for certain financial instruments, including liabilities measured at fair value under the fair value option and equity investments. • Requires certain equity instruments be measured at fair value, with changes in fair value recognized in earnings. • The guidance also updates fair value presentation and disclosure requirements for financial instruments measured at amortized cost. • Effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years.	• The District is currently evaluating any impacts to the financial statements. The District's implementation efforts include the identification of securities within the scope of the guidance, the evaluation of the measurement alternative available for equity securities without a readily determinable fair value, and the related impact to accounting policies, presentation, and disclosures. • Any investments in nonmarketable equity investments accounted for under the cost method of accounting (except for other Farm Credit Institution stock) will be accounted for either at fair value with unrealized gains and losses reflected in earnings or, if elected, using an alternative method. The alternative method is similar to the cost method of accounting, except that the carrying value is adjusted (through earnings) for subsequent observable transactions in the same or similar investment. The District is currently evaluating which method will be applied to these nonmarketable equity investments. • Additionally, for purposes of disclosing the fair value of loans carried at amortized cost, the District is evaluating valuation methods to determine the necessary changes to conform to an "exit price" notion as required by the Standard. Accordingly, the fair value amounts disclosed for such loans may change upon adoption. • The District expects to adopt the guidance in first quarter 2018 with a cumulative-effect adjustment to retained earnings as of the beginning of the year of adoption, except for changes related to nonmarketable equity investments, which is applied prospectively. The District expects the primary accounting changes will relate to equity investments.

ASU 2014-09 – Revenue from Contracts With Customers (Topic 606) and subsequent related Updates	
• Requires that revenue from contracts with customers be recognized upon transfer of control of a good or service, and transfers of nonfinancial assets, in an amount equaling the consideration expected to be received. • Changes the accounting for certain contract costs, including whether they may be offset against revenue in the Consolidated Statements of Income, and requires additional disclosures about revenue and contract costs. • May be adopted using a full retrospective approach or a modified, cumulative effect approach wherein the guidance is applied only to existing contracts as of the date of initial application, and to new contracts transacted after that date. • Effective for reporting periods beginning after December 15, 2017. Early application is not permitted.	• The District's revenue is the sum of net interest income and noninterest income. The scope of the guidance explicitly excludes net interest income as well as many other revenues for financial assets and liabilities including loans, leases, securities, and derivatives. Accordingly, the majority of the District's revenues will not be affected. • The District is performing an assessment of revenue contracts as well as working with industry participants on matters of interpretation and application. Accounting policies will not change materially since the principles of revenue recognition from the Update are largely consistent with existing guidance and current business practices. The District has not identified material changes to the timing or amount of revenue recognition. • The District expects a minor change to the presentation of costs for certain underwriting activities which will be presented in expenses rather than the current presentation against the related revenues. The District will provide qualitative disclosures of performance obligations related to revenue recognition and will continue to evaluate disaggregation for significant categories of revenue in the scope of the guidance. • The District intends to adopt the guidance in first quarter 2018 using the modified retrospective method with a cumulative-effect adjustment to opening retained earnings.

Additional 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,* to the 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 and concentrations of assets, if any, is incorporated in *Management's Discussion & Analysis of Financial Condition & Results of Operations* included in this Annual Report to shareholders.

Unincorporated Business Entities

The Bank holds an equity investment at December 31, 2017 in the following Unincorporated Business Entities (UBEs) as an equity interest holder of the limited liability company (LLC). The LLCs were organized for the stated purpose of holding and managing unusual or complex collateral associated with former loans, until such time as the assets may be sold or otherwise disposed of pursuant to the terms of Operating Agreements of the respective LLCs.

Entity Name	Entity Type	Entity Purpose
CBF Holdings, LLC	LLC	Manage Acquired Property
Sequoyah Marina & Resort, LLC	LLC	Manage Acquired Property
Hardee Peaceful Horse Acquisition, LLC	LLC	Manage Acquired Property
Desoto Peaceful Acquisition, LLC	LLC	Manage Acquired Property
Desoto County Land Holding Acquisition, LLC	LLC	Manage Acquired Property
Ethanol Holding Company, LLC	LLC	Manage Acquired Property
First Kentucky Land, LLC	LLC	Manage Acquired Property
RAAC Land, LLC	LLC	Manage Acquired Property

Description of Property

The following table sets forth certain information regarding the properties owned by the Bank at December 31, 2017, all of which are located in Columbia, South Carolina:

Location	Description
1115 Calhoun Street	Bank operations facility
1901 Main Street	Bank office building and adjacent parking facility, partially leased to tenants

Legal Proceedings

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

Description of Capital Structure

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

Description of Liabilities

The description of liabilities and contingent liabilities to be disclosed in this section is incorporated herein by reference to Notes 2, 6, 9, 11 and 13 to the Financial Statements included in this Annual Report to shareholders.

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

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

Senior Officers

The following represents certain information regarding the directors and senior officers of the Bank.

The chief executive officer and all other senior officers of the Bank, together with their length of service at their present position, as well as positions held currently and during the last five years, are as follows:

Name and Title	Time in Position	Prior Experience	Other Business Interests
Leon T. Amerson, *President and Chief Executive Officer*	5.5 years		Chairman of the Presidents Planning Committee of the Farm Credit System and Member of the Business Practices Committee; Member of the Board of Directors of the Federal Farm Credit Banks Funding Corporation serving as Chairman of the Board and Member of the Governance Committee; Member of the Farm Credit System Coordinating Committee; Council Member of the National Council of Farmer Cooperatives; Member of the Midlands Business Leadership Group; Member of the Board of Directors for Palmetto Agribusiness Council serving on the Executive Committee; Member of the Finance Committee for United Way of the Midlands; Member of the AgFirst Plan Sponsor Committee and the AgFirst/FCBT Plan Sponsor Committee; Member of the University of South Carolina Risk and Uncertainty Management Advisory Board.
Charl L. Butler, *Executive Vice President and Chief Operating Officer*	9 months	Senior Vice President and Chief Financial Officer March 2007 to March 2017	Chairman of the Board of the Farm Credit System Captive Insurance Company; Chairman of the AgFirst/FCBT Plan Fiduciary Committee; Board Member of City Center Partnership; Board Member of the Columbia Chamber of Commerce.
Isvara M. A. Wilson, *Executive Vice President and Chief Administrative Officer*	9 months	Senior Vice President and General Counsel December 2012 to March 2017	Board Member of the Farm Credit System Captive Insurance Company; Board Member of the Columbia Urban League, Inc.; Board Member and Treasurer of the Columbia Museum of Art; Board Member of the Boys and Girls Club of the Midlands.
William E. Brown, *Senior Vice President and Chief Credit Officer*	5 months	Manager, Credit Integration / Commercial Credit Executive at First Citizens Bank and Trust of North Carolina 2014 to 2016, Executive Vice President and Chief Credit Officer at First Citizens Bank of South Carolina 2011 to 2014	
Sam Esfahani, *Senior Vice President and Chief Information Officer*	5 months	Technology Consultant at Danske Bank A/S 2016 to 2017, Chief Technology Officer at PSCU 2012 to 2016	
Stephen Gilbert, *Senior Vice President and Chief Financial Officer*	9 months	Vice President and Controller August 2009 to March 2017	
Frances S. Griggs, *Senior Vice President and General Counsel*	9 months	Vice President and Assistant General Counsel July 2013 to March 2017, General Counsel and Corporate Secretary at Howden North America, Inc. from 2007 to 2013	
Daniel E. LaFreniere, *Senior Vice President and Chief Audit Executive*	4.5 years	Director of Audit Services at SCANA Corporation from 2007 to 2013	

The total amount of compensation earned by the Chief Executive Officer (CEO) and the senior officers and other highly compensated employees as a group during the years ended December 31, 2017, 2016 and 2015, is as follows:

Name of Individual or Number in Group	Year	Salary	Incentives	Deferred Comp.	Change in Pension Value*(b)*	Perq./ Other*	Total
Leon T. Amerson	2017	$ 766,029	$ 838,564	$ 30,903	$ 1,061,268	$ 25,292	$ 2,722,056
Leon T. Amerson	2016	$ 735,028	$ 717,691	$ 29,417	$ 1,016,907	$ 21,141	$ 2,520,184
Leon T. Amerson	2015	$ 700,027	$ 704,920	$ 25,280	$ 575,111	$ 21,091	$ 2,026,429
9 Officers *(a)*	2017	$ 2,469,284	$ 2,030,766	$ 115,011	$ 213,388	$ 349,841 *(c)*	$ 5,178,290
6 Officers	2016	$ 1,781,534	$ 1,404,502	$ 90,234	$ 144,389	$ 177,993	$ 3,598,652
6 Officers	2015	$ 1,692,345	$ 1,422,239	$ 65,955	$ 47,282	$ 176,608	$ 3,404,429

* *Includes company contributions to 401(k) plan (see Note 9, Employee Benefit Plans, to the Financial Statements), group life insurance premiums, spousal travel and bank-provided automobile.*

(a) *Disclosure of information on the total compensation paid during 2017 to any senior officer, or to any other individual included in the aggregate, is available to shareholders upon request. Includes two senior officers who retired during 2017.*

(b) *The changes in pension values as reflected in the table above resulted primarily from an additional year of benefit accrual and changes in the actuarial assumptions for mortality and discount rate. See further discussion in Note 9, Employee Benefit Plans, of the Financial Statements.*

(c) *Includes payment of accrued annual leave of $73,441, a one-time pension benefits differential payment of $15,607 and reimbursement of insurance premiums of $13,783 upon retirement of two senior officers.*

Pension Benefits Table
As of December 31, 2017

Name of Individual or Number in Group	Year	Plan Name	Number of Years Credited Service		Actuarial Present Value of Accumulated Benefits		Payments During 2017
CEO:							
Leon T. Amerson	2017	AgFirst Farm Credit Retirement Plan	31.50	$	2,307,070	$	–
Leon T. Amerson	2017	AgFirst Farm Credit Bank Supplemental Retirement Plan	31.50		5,563,334		–
				$	7,870,404	$	–
Senior Officers and Highly Compensated Employees:							
1 Officer, excluding the CEO	2017	AgFirst Farm Credit Retirement Plan	20.17	$	1,592,615	$	24,623
6 Officers, excluding the CEO	2017	AgFirst Farm Credit Cash Balance Retirement Plan	6.14*		–		172,783
7 Total *(a)*				$	1,592,615	$	197,406

* *Represents the average years of credited service for the group.*
(a) Excludes two senior officers who began employment during 2017 and do not participate in a defined benefit retirement plan.

Executive Incentive Compensation Plan

In addition to a base salary, certain named senior officers may earn additional compensation under the Bank's Executive Incentive Plan, which has a short-term and a long-term component. Participation in the plan is at the sole discretion of the CEO or in the case of the CEO at the sole discretion of the Board of Directors. The objectives of this plan are to provide a market-competitive financial rewards package to executives, provide incentive for the achievement of the AgFirst short- and long-term business objectives and to provide the Bank the ability to attract and retain key executives. The plan's payments are based upon the Bank's achievement of minimum performance thresholds for capital adequacy, net income sufficient to pay patronage and dividend distributions, achievement of a targeted threshold customer satisfaction score and the senior officers' overall performance achievement as determined by an individual performance rating. Short-term incentive awards are shown in the year earned and payments are made in the first quarter of the following year.

Effective with the 2014 plan year, the long-term component of the plan is subject to forfeiture based upon AgFirst's performance during the three-year performance period immediately following the plan year. Specifically, the long-term award for a particular plan year will be reduced by an amount equal to one-third of the original award for each subsequent year during the three-year performance period in which any one of the performance thresholds is not achieved.

Long-term incentive award amounts are shown in the year accrued and are vested over a period of time composed of the plan year and the performance period subsequent to the end of the plan year. Incentive awards are forfeited if the participant fails to remain employed until the end of the performance period subsequent to the end of the plan year, unless the end of employment is due to the participant's death or disability, or the Board of Directors, in its sole discretion, determines that the participant should be paid all or a portion of the incentive awards.

Retirement and Deferred Compensation Plans

The Bank's compensation programs include retirement and deferred compensation plans designed to provide income following an employee's retirement. Although retirement benefits are paid following an employee's retirement, the benefits are earned while employed. The objective of the Bank is to offer benefit plans that are market competitive and aligned with the Bank's strategic objectives. The plans are designed to enable the Bank to proactively attract, retain, recognize and reward a highly skilled, motivated and diverse staff that supports the Bank's mission and that allows the Bank to align the human capital needs with the Bank's overall strategic plan.

Employees hired prior to January 1, 2003 participate in the AgFirst Farm Credit Retirement Plan. Employees are eligible to retire and begin drawing unreduced pension benefits at age 65 or when years of credited service plus age equal "85" once age 55 is reached. Upon retirement, annual payout is equal to 2 percent of the highest three years average compensation times years of credited service, subject to the Internal Revenue Code limitations. For purposes of determining the payout, "average compensation" is defined as regular salary (i.e., does not include incentive awards compensation). At the election of the retiree, benefits are paid based upon various annuity terms or on a lump sum basis. Benefits under the plan are not subject to an offset for Social Security.

Employees hired on or after January 1, 2003, but prior to November 4, 2014, previously participated in the AgFirst Farm Credit Cash Balance Retirement Plan. Benefit accruals in the plan were frozen as of December 31, 2014, at which time active participants were fully vested regardless of years of credited service. The plan was terminated effective as of December 31, 2015, was submitted to the Internal Revenue Service for review and received a favorable determination letter from the Internal Revenue Service. Benefits in the plan were distributed to plan participants during March 2017.

Employees participate in the Farm Credit Benefits Alliance 401(k) Plan, a qualified 401(k) defined contribution plan which has an employer matching contribution determined by the employee's date of hire. Employees hired prior to January 1, 2003 receive a maximum employer matching contribution equal to $0.50 for each $1.00 of employee compensation contributed up to 6 percent, subject to the Internal Revenue Code limitation on compensation. Employees hired on or after January 1, 2003 receive a maximum employer matching contribution equal to $1.00 for each $1.00 of employee compensation contributed up to 6 percent, subject to the Internal Revenue Code limitation on compensation. As a result of the termination of the AgFirst Farm Credit Cash Balance Retirement Plan, beginning January 1, 2015, employees hired on or after January 1, 2003 also receive an employer nonelective contribution equal to 3 percent of employee compensation, subject to the Internal Revenue Code limitation on compensation.

Senior officers and other highly compensated employees participate in the Farm Credit Benefits Alliance Nonqualified Supplemental 401(k) Plan, a nonqualified deferred compensation plan that allows certain key employees to defer compensation and which restores the benefits limited in the qualified 401(k) plan as a result of restrictions in the Internal Revenue Code. The plan also includes a provision for discretionary contributions to be made by the Bank.

Chief Executive Officer

Mr. Amerson participates in the AgFirst Farm Credit Retirement Plan, as described above.

Mr. Amerson participates in the AgFirst Farm Credit Bank Supplemental Retirement Plan, a nonqualified supplemental executive retirement plan. Benefits that would have accrued in the qualified defined benefit retirement plan in the absence of Internal Revenue Code limitations are made up through the nonqualified supplemental executive retirement plan. At the election of the retiree, benefits are paid based upon various annuity terms.

Mr. Amerson participates in the Farm Credit Benefits Alliance 401(k) Plan and the Farm Credit Benefits Alliance Nonqualified Supplemental 401(k) Plan, as described above.

Senior Officers

Senior officers hired before November 4, 2014 participate in one of two qualified defined benefit retirement plans based upon date of hire, as described above.

Senior officers participate in the Farm Credit Benefits Alliance 401(k) Plan and the Farm Credit Benefits Alliance Nonqualified Supplemental 401(k) Plan, as described above.

Additionally, senior officers as well as all employees are reimbursed for all direct travel expenses incurred when traveling on Bank business. A copy of the travel policy is available to shareholders upon written request.

Bank compensation plans are reviewed annually by the Board of Directors' Compensation Committee.

AgFirst Farm Credit Bank Board of Directors

Name	Position	Year Term Expires
John S. Langford	Chairman	December 31, 2019***
Curtis R. Hancock, Jr.	Vice Chairman	December 31, 2020
Jack W. Bentley, Jr.	Director	December 31, 2017
James C. Carter, Jr.	Director	December 31, 2018
William J. Franklin, Jr.	Director	December 31, 2021**
Bonnie V. Hancock	Director	December 31, 2021#
Dale R. Hershey	Director	December 31, 2019
Walter C. Hopkins, Sr.	Director	December 31, 2020
William K. Jackson	Director	December 31, 2020
S. Jerry Layman	Director	December 31, 2018
J. Alvin Lyons	Director	December 31, 2021**
S. Alan Marsh	Director	December 31, 2021*
James L. May	Director	December 31, 2017
Fred R. Moore, Jr.	Director	December 31, 2021*
James M. Norsworthy, III	Director	December 31, 2019
Katherine A. Pace	Director	December 31, 2019
Thomas E. Porter, Jr.	Director	December 31, 2017
William T. Robinson	Director	December 31, 2019
Robert H. Spiers, Jr.	Director	December 31, 2017
Michael T. Stone	Director	December 31, 2018
Ellis W. Taylor	Director	December 31, 2019

* *These directors were re-elected to a 4-year term commencing January 1, 2018.*
** *These directors were newly elected in 2017 to a 4-year term commencing January 1, 2018.*
*** *This director resigned effective January 5, 2018.*
\# *This director was re-appointed to a 4-year term commencing January 1, 2018.*

John S. Langford, 68, Chairman of the Board, is from Lakeland, Florida and owns and operates John Langford, Inc., a citrus farming operation. Mr. Langford also owns and operates John Langford Realty, Inc., which specializes in the sale of agricultural lands. He currently serves as a director on the boards of Farm Credit of Central Florida, ACA, and Lake Wales Citrus Growers Association, a citrus growers' cooperative. Mr. Langford also serves as a member of the Farm Credit System Audit Committee. Mr. Langford obtained his Bachelor of Arts in History and Accounting from Emory University, his Master of Business Administration from Harvard Business School and graduated from the Graduate School of Banking at Louisiana State University in 2014. As Chairman of the Board he served as an ex-officio member of all Board Committees in 2017. Mr. Langford resigned from the Board effective January 5, 2018.

Curtis R. Hancock, Jr., 71, Vice Chairman of the Board, is from Fulton, Kentucky and is owner and operator of Hancock Farms. His operations consist of row crops including corn, wheat and soybeans. He serves on the board of River Valley, ACA; The Farm Credit Council, a trade organization; and Kentucky Small Grain Growers, a grain cooperative. Mr. Hancock received a Bachelor of Science in Agriculture from the University of Tennessee-Martin and a Master of Science in Agricultural Economics from the University of Tennessee. Mr. Hancock served on the Board Compensation Committee in 2017. He was elected Chairman of the Board for 2018 and will serve as an ex-officio member of all Board Committees in 2018.

Jack W. Bentley, Jr., 60, from Tignall, Georgia, owns and operates A&J Dairy, a dairy, pasture, crop and timberland operation. Mr. Bentley is a director of AgGeorgia Farm Credit, ACA. Mr. Bentley also serves on the boards of the following agricultural and dairy trade and promotion organizations: USDA Farm Service Agency, Southeast United Dairy Industry Association, American Dairy Association, Lone Star Milk Producers and the Wilkes County Farm Bureau. Mr. Bentley has a Bachelor of Science in Ag Mechanics and Business from Clemson University. He served on the Board Compensation Committee. Mr. Bentley was also the Board appointed member of both the AgFirst Plan Sponsor Committee and the AgFirst/FCBT Plan Sponsor Committee in 2017. Mr. Bentley's term expired December 31, 2017.

James C. Carter, Jr., 71, from McDonough, Georgia, owns and operates Southern Belle Farm, Inc., as well as JC Carter Family Farm, LLC, beef cattle and hay farms that include fruit and vegetable crops and provides agriculturally related educational activities. Mr. Carter also operates a feed business from the farm. Mr. Carter is an independent sales representative for ABS Global, Inc. which provides artificial insemination services and supplies for cattle. Mr. Carter is a director of AgSouth Farm Credit, ACA, and The Farm Credit Council, a trade organization. He serves as chairman of the Henry County Water and Sewage Authority, a provider of water and sewer services and he is a representative on the Ocmulgee River Basin Advisory Council, a water resource management council. Mr. Carter serves as vice president of the Henry County Farm Bureau which focuses on the promotion of agriculture. He is a member of the board for the Henry County Cattleman's Association, a cattle industry trade association. Mr. Carter has a Bachelor of Science in Agriculture and Master of Science in Animal Nutrition from the University of Georgia. Mr. Carter served on the Board Governance Committee in 2017 and will serve on the Board Audit Committee in 2018.

William J. Franklin, Jr., 60, from Duffield, Virginia, owns and operates Franklin Farms, a beef cattle and hay farm. Mr. Franklin is also Chief Executive Officer of Scott County Telephone Cooperative. Mr. Franklin is a director of Farm Credit of the Virginias, ACA. He also serves as a director on the boards of the following agricultural and telecommunication organizations: Scott County Cattle Association, IRIS Networks, LIT Networks, National Rural Broadband PAC Board and Carolina-Virginia Telecommunications Membership Association. He is also a member of the Southwest Virginia Workforce Development Board. Mr. Franklin has a Bachelor of Science in Ag Education from Virginia Tech. Mr. Franklin became a director in 2018 and will serve on the Board Risk Policy Committee.

Bonnie V. Hancock, 56, outside director for the Board, is from Wake Forest, North Carolina. Ms. Hancock is Executive Director of the Enterprise Risk Management Initiative at North Carolina State University (NCSU) and she teaches courses in financial management, enterprise risk management and strategy and financial statement analysis. Prior to joining NCSU, Ms. Hancock worked with Progress Energy as senior vice president of finance and information technology and later as president of Progress Fuels, a subsidiary that produced and marketed gas, coal and synthetic fuels. Ms. Hancock has a Bachelor of Business Administration with an accounting major from the College of William and Mary and a Master of Science in Taxation from Georgetown University. She is a member of the boards of Powell Industries, designer and manufacturer of electrical equipment systems for industrial facilities, where she serves on the compensation committee; the Office of Mortgage Settlement Oversight, which monitors servicers' obligations related to distressed borrowers, where she serves as chair of the audit committee; the North Carolina Coastal Pines Girl Scout Council, a leadership development organization for girls, where she serves as chair of the audit committee; and the National Association of Corporate Directors – Research Triangle Chapter, an organization for the advancement of exemplary board leadership. Ms.

Hancock served on the Board Governance Committee in 2017 and will serve on the Board Risk Policy Committee in 2018.

Dale R. Hershey, 70, is from Manheim, Pennsylvania, where he is a partner in Hershey Brothers Dairy Farms. Mr. Hershey has served as senior partner in the ownership and management of the dairy and cropping enterprises since 1980. He serves on the board of directors of MidAtlantic Farm Credit, ACA, The Farm Credit Council, a trade organization and Farm Credit Council Services, a service provider. He also serves on the AgAdvisory Committee for his local municipal township and is a member of Pennsylvania Farm Bureau and the National Holstein Association. Mr. Hershey has a Bachelor of Science in Community Development and a Master of Science in Ag Economics and Rural Sociology from Penn State University. Mr. Hershey served as chair of the Board Governance Committee in 2017 and will serve on the Board Audit Committee in 2018.

Walter C. Hopkins, Sr., 70, from Lewes, Delaware, is the owner and operator of Green Acres Farm, Inc., a dairy and grain farming operation. He also manages Lyons LLC, a land holding company. He serves on the board of directors of MidAtlantic Farm Credit, ACA, and was chair of both the AgFirst Plan Sponsor Committee and the AgFirst/FCBT Plan Sponsor Committee in 2017. Mr. Hopkins has a Bachelor of Science in Agricultural Engineering from the University of Delaware. Mr. Hopkins served on the Board Compensation Committee in 2017 and will serve on the Board Compensation Committee and as chair of the Board Governance Committee in 2018.

William K. Jackson, 62, from New Salem, Pennsylvania, is a partner in Jackson Farms, a dairy operation with other farming interests, including corn and alfalfa. He is president of Jackson Farms 2, LLC, a small dairy processing facility that produces milk and makes ice cream marketed to area stores and sold via an on-site convenience store. Mr. Jackson is also president of Jackson Farms 3, LLC and Jackson Farms Limited Partnership, which are involved in the production of natural gas. He serves on the boards of AgChoice Farm Credit, ACA; the Fay Penn Economic Development Council, a local economic development committee; president of the Fayette County Agricultural Improvement Association Board, a local county fair; and the Penn State Fayette, Eberly Campus Advisory Board, which oversees campus community involvement. Mr. Jackson has a Bachelor of Science in Agricultural Business Management from Penn State University. Mr. Jackson serves as chair of the Board Risk Policy Committee for both 2017 and 2018.

S. Jerry Layman, 69, from Kenton, Ohio, is the owner and operator of Little Bit Farm, a corn and soybean operation. Mr. Layman also serves as a part-time farm drainage contractor through Layman Farm Drainage, an agricultural tile installation business and as Chairman of the Grove Cemetery Association, which provides the sale of personal graves. Mr. Layman currently serves as a board member of AgCredit, ACA. He represents AgCredit on the Independent Associations' Retirement Plan Sponsor Committee and was a member of both the AgFirst Plan Sponsor Committee and the AgFirst/FCBT Plan Sponsor Committee in 2017. Mr. Layman is a stockholder in the agricultural cooperative Heritage Farm Coop. Mr. Layman serves on the following boards: Buck Township Trustees, sale of personal graves; and as Chairman of the Hardin County Fair Foundation Board, which financially supports the mission of the county fair. Mr. Layman has a Bachelor of Science in Agriculture Education from the Ohio State University and a Master of Science of Education Leadership from the University of Dayton. Mr. Layman served on the Board Governance Committee in 2017 and will serve on the Board Risk Policy Committee in 2018.

J. Alvin Lyons, 60, from Georgetown, Kentucky, is owner operator of Lyons Family Farms, a farming operation of row crops including corn, soybeans, wheat, tobacco and hay. His farm also includes a commercial cow calf herd and stockers. Mr. Lyons also serves as Magistrate of Scott County Fiscal Court. Mr. Lyons is a director of Central Kentucky AgCredit, ACA. He is a director on the boards of the Scott County Farm Bureau, Scott County Rural Land Management and the Scott County Beef Improvement Association. He also serves on the University of Kentucky Ag Leadership Development Steering Committee. Mr. Lyons has completed the University of Kentucky Ag Leadership Development and Master Cattleman Programs. Mr. Lyons became a director in 2018 and will serve on the Board Audit Committee.

S. Alan Marsh, 63, from Madison, Alabama, is a partner in Marsh Farms, Inc., an operation consisting of row crops including cotton, soybeans, wheat and corn. Mr. Marsh is a director of First South Farm Credit, ACA, and Limestone County Farmers Federation, an agricultural trade organization and he is president and stockholder of South Limestone Co-op Gin, cotton ginning operation and an association borrower. He is also an advisory board member for Staplcotn, a cotton cooperative association. Mr. Marsh received a Business Management Certification from Stratford Career Institute. Mr. Marsh served on the Board Governance Committee in 2017 and will serve on both the Board Compensation and Board Governance Committees in 2018.

James L. May, 68, from Waynesburg, Kentucky, is owner and operator of Mayhaven Farm, LLC. His cattle program consists of a beef cow herd and a back grounding program of feeder cattle. The farming operation also includes alfalfa hay, corn, soybeans and wheat. He also operates Mayhaven Seed Sales, an agricultural seed sales business. He currently serves on the boards of Central Kentucky Ag Credit, ACA, Lincoln County Extension Council, an education organization and the Lincoln County Farm Bureau, an agricultural promotion organization. Mr. May has a Bachelor of Science in Agricultural Economics from the University of Kentucky. Mr. May served on the Board Audit Committee. Mr. May's term expired December 31, 2017.

Fred R. Moore, Jr., 65, from Eden, Maryland, is president of Fred R. Moore & Son, Inc. d/b/a Collins Wharf Sod, a turf and grain operation, which grows sod (turf), corn, soybeans and wheat. He is also partner of F&E Properties, LLC, a rental business. He currently serves on the boards of MidAtlantic Farm Credit, ACA, Wicomico Soil Conservation District, an environmental and conservation entity and Wicomico County Farm Bureau, an agricultural promotion organization. He currently serves as an active life member of the Allen Volunteer Fire Company. Mr. Moore has a Bachelor of Science in Agriculture Education from the University of Maryland Eastern Shore. Mr. Moore served on the Board Audit Committee in 2017 and will serve on both the Board Compensation and Board Governance Committees in 2018.

James M. Norsworthy, III, *67*, from Jackson, Louisiana, runs 100 Cedars Cattle Farm, a cow-calf operation with other farming interests including a commercial hay operation and a pine and hardwood timber operation. He is a member of the board of directors of First South Farm Credit, ACA. Mr. Norsworthy is a member of the board of directors for Centreville Academy, an educational institution and served as a former mayor of the town of Jackson, Louisiana. Mr. Norsworthy also serves on the local board for Feliciana Farm Bureau, which promotes agriculture. Mr. Norsworthy has a Bachelor of Science in Vocational Agriculture Education from Louisiana State University. He serves on the Board Risk Policy Committee.

Katherine A. Pace, 56, outside director for the Board, is from Orlando, Florida. Ms. Pace is a certified public accountant and principal of Family Business Consulting, LLC, which provides financial and strategic planning for closely-held businesses. In addition to her work through Family Business Consulting, effective January 1, 2018 she began serving as Chief Financial Officer/Treasurer of NASCAR Holdings, Inc., a motorsports business. Prior to forming her company, she was a tax partner with KPMG, LLP, from 1985-2005. While at KPMG, her practice included a variety of cooperative and agribusiness clients as well as participation in trade associations such as the National Society of Accountants for Cooperatives. Ms. Pace obtained her Bachelor of Science in Accounting from Furman University. She is a member of the American Institute of Certified Public Accountants and the Florida Institute of Certified Public Accountants and she is a current and past member and director of numerous trade and charitable organizations. Ms. Pace is the board designated financial expert and serves on the Board Audit Committee.

Thomas E. Porter, Jr., 63, from Concord, North Carolina, is president of Porter Farms, Inc., a farming operation consisting of a sow farrow unit and a wean swine operation, pullet houses, layer houses and a cow / calf operation. He also manages The Farm at Brush Arbor, LLC, an agritourism business on his farm. He currently serves on the Carolina Farm Credit, ACA, board of directors. Mr. Porter also holds board and leadership positions with the following agricultural trade and promotion organizations: board member on the Cabarrus County Ag advisory board, president of Cabarrus County Farm Bureau, as chairman of Cabarrus County Extension Advisory Board, Cabarrus County Soil and Water Conservation District and the Water Committee for the American Farm Bureau. He also serves on the Commissioners Circle for the North Carolina Commissioner of Agriculture. Mr. Porter served on the Board Risk Policy Committee. Mr. Porter's term expired December 31, 2017.

William T. Robinson, 50, from St. Matthews, South Carolina, is the owner/operator of Robinson Family Farm which consists of row crops, hay, cattle and timber. Mr. Robinson is currently employed as Executive Director for the SEFA group, an engineering, construction and transportation company and he retired from the department of Treasury and Corporate Financial Planning at Santee Cooper, South Carolina's state owned electric and water utility. He serves on the board of the South Carolina Palmetto AgriBusiness Council, the Orangeburg Area Cattleman's Association and the Lexington County Chamber of Commerce. Mr. Robinson obtained a Bachelor of Science and a Master of Science in Civil Engineering from Clemson University and a Master of Business Administration from Charleston Southern University. He currently serves as chairman of the board of AgSouth Farm Credit, ACA. Mr. Robinson is a member of both the AgFirst Plan Sponsor Committee and the AgFirst/FCBT Plan Sponsor Committee and serves as chair of both committees in 2018. Mr. Robinson serves as chair of the Board Audit Committee.

Robert H. Spiers, Jr., 72, is from Stony Creek, Virginia. Mr. Spiers is the owner/operator of Spiers Farms, LLC, with a tobacco, corn, soybeans, milo, wheat and timber operation, as well as a partner in Double Branch Farms, LLC, an agricultural operation. He currently serves on the boards of Colonial Farm Credit, ACA; The Farm Credit Council, a trade organization; Tobacco Associates, Inc., which promotes export of US tobacco; and Dinwiddie County Farm Bureau, which promotes agriculture. He is also a governor appointed director on the Virginia Flue-cured Tobacco Board and the Virginia Tobacco Revitalization Commission. Mr. Spiers has a Bachelor of Science in Ag Economics from Virginia Tech University. He is Vice Chair of the AgFirst Plan Sponsor Committee and a member of the AgFirst/FCBT Plan Sponsor Committee. Mr. Spiers served on the Board Risk Policy Committee. Mr. Spiers term expired December 31, 2017.

Michael T. Stone, 46, from Rowland, North Carolina, owns and operates P & S Farms, Inc. and Bo Stone Farms, LLC. The row crop units produce corn, wheat and soybeans and the operations include a swine finishing unit under contract with Murphy Brown, a cow/calf herd, timber management and small produce for a roadside stand. Mr. Stone is a director of Cape Fear Farm Credit, ACA, a director of Southeastern Health hospital, a director of Dillon Christian School, and a member of the North Carolina Farm Bureau Energy and Transportation Committee. He also serves on the board of The Farm Credit Council, a trade organization. Mr. Stone has a Bachelor of Science in Agricultural Business Management (with a minor in Animal Science) and a Master of Science in Agriculture from North Carolina State University. He serves as chair of the Board Compensation Committee and will also serve on the Board Governance Committee in 2018. Mr. Stone is the Board-appointed member of both the AgFirst Plan Sponsor Committee and the AgFirst/FCBT Plan Sponsor Committee in 2018.

Ellis W. Taylor, 48, from Roanoke Rapids, North Carolina, is the owner/operator of a row crop operation, Mush Island Farms, which consists of cotton, soybeans, wheat, corn and timber. Mr. Taylor is also a partner in Mush Island Farms, LLC, a trucking operation. He is also part owner of Roanoke Cotton Company, LLC, which operates cotton gins and a warehouse. He is a director on the boards of AgCarolina Farm Credit, ACA, and Northampton County Farm Bureau, and the Federal Farm Credit Banks Funding Corporation. Mr. Taylor has a Bachelor of Science in Agronomy, a Bachelor of Science in Agricultural Business Management and a Master of Science in Economics from North Carolina State University. He was elected Vice Chairman of the Board for 2018. Mr. Taylor served on the Board Audit Committee in 2017 and will serve on both the Board Compensation and Board Governance Committees in 2018.

Committees

The Board has established an audit committee, compensation committee, risk policy committee and governance committee. All members of the Board, other than the Chairman, serve on a committee. The Chairman of the Board serves as an ex-officio member of all Board committees and the Vice Chairman serves as a member of the Board Compensation Committee. The Board has one designated financial expert who serves on the Audit Committee. The responsibilities for each committee are set forth in its respective board approved charter.

Compensation of Directors

Directors were compensated in 2017 in cash at the rate of $58,115 per year, payable at $4,843 per month. This is compensation for attendance at Board meetings, Board committee meetings, certain other meetings pre-approved by the Board and other duties as assigned. Farm Credit Administration (FCA) regulations also allow additional compensation to be paid to a director in exceptional circumstances where extraordinary time and effort are involved. In this regard, additional compensation was paid for certain leadership positions on the Board, including the Chairman of the Board, Vice Chairman of the Board, Chair of each Board standing committee as well as to members of the Board Audit Committee in recognition of greater than normal participation in Board activities. Total cash compensation paid to all directors as a group during 2017 was $1,164,937. Directors received no non-cash compensation during 2017. Additional information for each director who served during 2017 is provided in the following table.

	Number of Days Served			
Name of Director	Board Meetings	Other Official Activities*	Farm Credit Council Bd. Activities	Total Comp. Paid During 2017
Jack W. Bentley, Jr.**	17.50	14.50	6.00	$ 58,115
James C. Carter, Jr.	17.50	11.50	6.00	58,115
Bonnie V. Hancock	17.50	5.50	4.00	58,532
Curtis R. Hancock, Jr.	17.50	16.25	7.00	64,447
Dale R. Hershey	17.50	14.50	6.00	63,699
Walter C. Hopkins, Sr.	17.50	14.75	6.00	58,532
William K. Jackson	17.50	17.75	6.00	63,115
John S. Langford	13.00	7.50	4.00	66,532
S. Jerry Layman	17.50	8.50	6.00	58,115
S. Alan Marsh	17.50	8.50	6.00	58,115
James L. May	17.50	16.25	6.00	63,115
Fred R. Moore, Jr.	17.50	16.25	6.00	63,115
James M. Norsworthy, III	17.50	8.75	6.00	58,115
Katherine A. Pace	17.50	10.25	6.00	63,115
Thomas E. Porter, Jr.	15.50	11.25	6.00	58,115
William T. Robinson	17.50	18.25	6.00	67,699
Robert H. Spiers, Jr.	17.50	11.75	6.00	58,115
Michael T. Stone	17.50	14.50	6.00	62,698
Ellis W. Taylor	17.50	13.00	6.00	63,533
Total				$ 1,164,937

* *Other official activities include Board committee meetings and Board training.*
** *Does not include 4.5 days served as Board-appointed member of the AgFirst and AgFirst/FCBT Plan Sponsor Committees.*

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 upon request.

The aggregate amount of reimbursement for travel, subsistence and other related expenses for all directors as a group was $180,174 for 2017, $193,742 for 2016 and $197,154 for 2015.

Transactions with Senior Officers and Directors

The Bank's disclosure on loans to and transactions with its officers and directors, to be disclosed in this section, is incorporated herein by reference to Note 10, *Related Party Transactions,* to the Financial Statements included in this Annual Report to shareholders. Such loans are subject to special approval requirements contained in the FCA regulations and were made on the same terms, including interest rate, amortization schedule and collateral, as those prevailing at the time for comparable transactions with unaffiliated persons. No loan to a director or to any organization affiliated with such person, or to any immediate family member who resides in the same household as such person or in whose loan or business operation such person has a material financial or legal interest, involved more than the normal risk of collectability.

There have been no transactions between the Bank and senior officers or directors which require reporting per FCA regulations.

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.

Relationship with Independent Auditors

There were no changes in or material disagreements with the Bank's independent auditors on any matter of accounting principles or financial statement disclosure during this period.

Aggregate fees expensed by the Bank for services rendered by its independent auditors for the year ended December 31, 2017 were as follows:

	2017
Independent Auditors	
PricewaterhouseCoopers LLP (PwC)	
Audit services	$ 921,071
Audit-related services	51,072
Non-audit services	51,436
Total	$ 1,023,579

Audit fees of $921,071 were for the annual audits of financial statements of the Bank and District, of which $18,323 related to the 2016 audit. Audit-related fees were for benefit plan audits. Non-audit fees were for Farmer Mac minimum servicing standards attestation and board election tabulations. Out-of-pocket expenses are included in the fee amounts reported above.

All non-audit services provided by PwC require pre-approval by the Audit Committee.

Financial Statements

The Financial Statements, together with the report thereon of PricewaterhouseCoopers LLP, dated March 13, 2018, and the Report of Management, which appear in this Annual Report to shareholders are incorporated herein by reference.

Borrower Information Regulations

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

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

Shareholder Investment

Shareholder investment in a District Association is materially affected by the financial condition and results of operations of AgFirst Farm Credit Bank. Copies of AgFirst's Annual and Quarterly Reports and combined information concerning AgFirst Farm Credit Bank and District Associations are available upon request free of charge by calling 1-800-845-1745, ext. 2764, or writing Matthew Miller, Director of Financial Reporting and ICFR, AgFirst Farm Credit Bank, P.O. Box 1499, Columbia, SC 29202. This information can also be obtained at the Bank's website, **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 each Quarterly Report within 40 days after the end of each fiscal quarter, except that no report is 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 Bank's Board of Directors (the Committee) is comprised of the directors named below. None of the directors who serve on the Committee is an employee of AgFirst Farm Credit Bank (the Bank) and in the opinion of the Board of Directors, each is free of any relationship with the Bank 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 audited financial statements with management, which has primary responsibility for the financial statements. The financial statements were prepared under the oversight of the Committee.

PricewaterhouseCoopers LLP (PwC), the Bank and District Associations combined independent auditors for 2017, is responsible for expressing an opinion on the conformity of the Bank and District Associations combined 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 the Bank and District Associations combined. 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 Bank and District Associations combined Annual Report for 2017. The foregoing report is provided by the following independent directors, who constitute the Committee:

William T. Robinson
Chairman of the Audit Committee

Members of Audit Committee

James C. Carter, Jr.
Dale R. Hershey
J. Alvin Lyons
Katherine A. Pace

March 13, 2018

pwc

Report of Independent Auditors

To the Board of Directors
of AgFirst Farm Credit Bank and District Associations

We have audited the accompanying combined financial statements of AgFirst Farm Credit Bank and District Associations (together, the "District"), which comprise the combined balance sheets as of December 2017, 2016, and 2015, and the related combined statements of income, comprehensive income, changes in shareholders' equity and cash flows for the years then ended.

Management's Responsibility for the Combined Financial Statements

Management is responsible for the preparation and fair presentation of the combined 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 combined 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 combined 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 combined financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the combined financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the combined financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the Company's preparation and fair presentation of the combined 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 Company'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 combined 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 combined financial statements referred to above present fairly, in all material respects, the financial position of AgFirst Farm Credit Bank and District Associations as of December 31, 2017, 2016, and 2015, 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

Certified Public Accountants
Miami, Florida

March 13, 2018

PricewaterhouseCoopers LLP, 333 SE 2nd Avenue, Suite 3000, Miami, FL 33301
T:(305) 375 7400, F:(305) 375 6221, www.pwc.com/us

Combined Balance Sheets

(dollars in thousands)	As of December 31, 2017	2016	2015
Assets			
Cash	**$ 499,451**	$ 591,491	$ 506,456
Cash equivalents	**272,519**	262,624	211,554
Investment securities:			
Available for sale (amortized cost of $7,683,631, $7,488,279, $6,884,126, respectively)	**7,663,605**	7,490,841	6,949,112
Held to maturity (fair value of $528,713, $625,980, $687,754, respectively)	**522,148**	620,682	672,672
Total investment securities	**8,185,753**	8,111,523	7,621,784
Loans held for sale	**14,046**	17,561	14,179
Loans	**28,451,807**	27,457,966	26,152,756
Allowance for loan losses	**(193,067)**	(182,600)	(178,617)
Net loans	**28,258,740**	27,275,366	25,974,139
Accrued interest receivable	**227,323**	205,487	192,618
Accounts receivable	**49,339**	57,102	46,822
Investments in other Farm Credit System institutions	**40,292**	34,610	31,252
Premises and equipment, net	**197,492**	194,283	189,458
Other property owned	**14,655**	30,281	48,462
Other assets	**50,958**	40,791	42,800
Total assets	**$ 37,810,568**	$ 36,821,119	$ 34,879,524
Liabilities			
Systemwide bonds payable	**$ 24,829,679**	$ 22,660,317	$ 22,339,694
Systemwide notes payable	**5,949,507**	7,442,928	6,083,805
Accrued interest payable	**83,221**	59,273	56,690
Accounts payable	**316,960**	257,249	236,833
Advanced conditional payments	**10,175**	4,368	6,483
Other liabilities	**371,902**	515,927	484,959
Total liabilities	**31,561,444**	30,940,062	29,208,464
Commitments and contingencies (Note 11)			
Shareholders' Equity			
Perpetual preferred stock	**49,250**	49,250	115,000
Protected borrower equity	**502**	513	606
Capital stock and participation certificates	**169,716**	174,877	160,456
Additional paid-in-capital	**82,573**	82,573	63,678
Retained earnings			
Allocated	**2,097,179**	1,971,423	1,893,930
Unallocated	**4,231,956**	3,976,744	3,762,253
Accumulated other comprehensive income (loss)	**(382,052)**	(374,323)	(324,863)
Total shareholders' equity	**6,249,124**	5,881,057	5,671,060
Total liabilities and equity	**$ 37,810,568**	$ 36,821,119	$ 34,879,524

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

Combined Statements of Income

(dollars in thousands)	For the year ended December 31, 2017	2016	2015
Interest Income			
Investments	**$ 153,102**	$ 130,102	$ 120,036
Loans	**1,316,664**	1,228,558	1,136,526
Total interest income	**1,469,766**	1,358,660	1,256,562
Interest Expense	**430,960**	322,473	252,337
Net interest income	**1,038,806**	1,036,187	1,004,225
Provision for (reversal of allowance for) loan losses	**13,371**	(191)	5
Net interest income after provision for loan losses	**1,025,435**	1,036,378	1,004,220
Noninterest Income			
Loan fees	**30,917**	30,105	29,273
Fees for financially related services	**10,811**	10,685	10,828
Building lease income	**3,650**	3,623	3,604
Total other-than-temporary impairment losses	—	(4,665)	(251)
Portion of loss recognized in other comprehensive income	—	(10,282)	(1,658)
Net other-than-temporary impairment losses	—	(14,947)	(1,909)
Gains (losses) on investments, net	**(258)**	23,822	1,126
Gains (losses) on called debt	**(4,528)**	(29,900)	(12,330)
Gains (losses) on other transactions	**6,086**	6,201	2,822
Other noninterest income	**11,448**	10,471	7,678
Total noninterest income	**58,126**	40,060	41,092
Noninterest Expenses			
Salaries and employee benefits	**251,873**	245,157	234,300
Postretirement benefits (Notes 2 and 9)	**(79,418)**	73,958	72,717
Occupancy and equipment	**42,897**	42,711	40,754
Insurance Fund premiums	**36,622**	40,643	29,144
Other operating expenses	**117,325**	111,245	114,884
Losses (gains) from other property owned	**6,830**	1,247	3,339
Total noninterest expenses	**376,129**	514,961	495,138
Income before income taxes	**707,432**	561,477	550,174
Provision (benefit) for income taxes	**1,105**	326	595
Net income	**$ 706,327**	$ 561,151	$ 549,579

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

Combined Statements of Comprehensive Income

(dollars in thousands)	For the year ended December 31, 2017	2016	2015
Net income	**$ 706,327**	$ 561,151	$ 549,579
Other comprehensive income net of tax:			
Unrealized gains (losses) on investments:			
Other-than-temporarily impaired	**—**	(15,968)	2,526
Not other-than-temporarily impaired	**(22,648)**	(46,925)	(45,506)
Change in value of cash flow hedges	**856**	119	(409)
Employee benefit plans adjustments	**14,063**	13,314	15,837
Other comprehensive income (Note 7)	**(7,729)**	(49,460)	(27,552)
Comprehensive income	**$ 698,598**	$ 511,691	$ 522,027

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

Combined Statements of Changes in Shareholders' Equity

(dollars in thousands)	Perpetual Preferred Stock	Protected Borrower Equity	Capital Stock and Participation Certificates	Additional Paid-in-Capital	Retained Earnings Allocated	Retained Earnings Unallocated	Accumulated Other Comprehensive Income	Total Shareholders' Equity
Balance at December 31, 2014	$ 125,250	$ 655	$ 154,471	$ 60,270	$ 1,818,123	$ 3,540,901	$ (297,311)	$ 5,402,359
Comprehensive income						549,579	(27,552)	522,027
Protected borrower equity retired		(49)						(49)
Capital stock/participation certificates issued (retired), net			3,724					3,724
Dividends declared/paid			2,261			(2,449)		(188)
Redemption of perpetual preferred stock (Note 7)	(10,250)			3,408				(6,842)
Dividends paid on perpetual preferred stock						(1,743)		(1,743)
Patronage distribution								
Cash						(167,102)		(167,102)
Qualified allocated retained earnings					9,819	(9,819)		—
Nonqualified allocated retained earnings					30,599	(30,599)		—
Nonqualified retained earnings					109,967	(109,967)		—
Retained earnings retired					(82,879)	71		(82,808)
Patronage distribution adjustment					8,301	(6,619)		1,682
Balance at December 31, 2015	$ 115,000	$ 606	$ 160,456	$ 63,678	$ 1,893,930	$ 3,762,253	$ (324,863)	$ 5,671,060
Comprehensive income						561,151	(49,460)	511,691
Protected borrower equity retired		(93)						(93)
Capital stock/participation certificates issued (retired), net			11,274					11,274
Dividends declared/paid			3,134			(3,318)		(184)
Redemption of perpetual preferred stock (Note 7)	(65,750)			18,895				(46,855)
Dividends paid on perpetual preferred stock						(1,548)		(1,548)
Patronage distribution								
Cash						(176,843)		(176,843)
Qualified allocated retained earnings					10,005	(10,005)		—
Nonqualified allocated retained earnings					34,007	(34,007)		—
Nonqualified retained earnings					123,767	(123,767)		—
Retained earnings retired					(88,300)	90		(88,210)
Patronage distribution adjustment			13		(1,986)	2,738		765
Balance at December 31, 2016	$ 49,250	$ 513	$ 174,877	$ 82,573	$ 1,971,423	$ 3,976,744	$ (374,323)	$ 5,881,057
Comprehensive income						**706,327**	**(7,729)**	**698,598**
Protected borrower equity retired		**(11)**						**(11)**
Capital stock/participation certificates issued (retired), net			**(8,396)**					**(8,396)**
Dividends declared/paid			**3,233**			**(3,417)**		**(184)**
Dividends paid on perpetual preferred stock						**(1,146)**		**(1,146)**
Patronage distribution								
Cash						**(237,411)**		**(237,411)**
Qualified allocated retained earnings					**9,925**	**(9,925)**		—
Nonqualified allocated retained earnings					**48,960**	**(48,960)**		—
Nonqualified retained earnings					**153,990**	**(153,990)**		—
Retained earnings retired					**(84,766)**			**(84,766)**
Retained earnings adjustment (Note 9)						**1,933**		**1,933**
Patronage distribution adjustment			**2**		**(2,353)**	**1,801**		**(550)**
Balance at December 31, 2017	**$ 49,250**	**$ 502**	**$ 169,716**	**$ 82,573**	**$ 2,097,179**	**$ 4,231,956**	**$ (382,052)**	**$ 6,249,124**

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

Combined Statements of Cash Flows

(dollars in thousands)	For the years ended December 31, 2017	2016	2015
Cash flows from operating activities:			
Net income	**$ 706,327**	$ 561,151	$ 549,579
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation on premises and equipment	**20,082**	21,008	19,109
Amortization of net deferred loan (fees) costs and premium amortization (discount accretion)	**(2,481)**	(1,893)	(2,446)
Premium amortization (discount accretion) on investment securities	**11,127**	12,283	7,501
(Premium amortization) discount accretion on bonds and notes	**59,705**	45,619	15,502
Amortization (accretion) of yield mark resulting from merger	**(1,256)**	(2,095)	(2,151)
Provision for (reversal of allowance for) loan losses	**13,371**	(191)	5
(Gains) losses on other property owned	**5,899**	(432)	2,238
Net impairment losses on investments	**—**	14,947	1,909
(Gains) losses on investments, net	**258**	(23,822)	(1,126)
(Gains) losses on called debt	**4,528**	29,900	12,330
(Gains) losses on other transactions	**(6,086)**	(6,201)	(2,822)
Net change in loans held for sale	**12,658**	9,539	6,147
Changes in operating assets and liabilities:			
(Increase) decrease in accrued interest receivable	**(21,836)**	(12,869)	(7,913)
(Increase) decrease in accounts receivable	**7,763**	(10,280)	17,396
Increase (decrease) in accrued interest payable	**23,948**	2,583	9,162
Increase (decrease) in accounts payable	**(5,519)**	7,985	13,160
Change in other, net	**(135,191)**	42,561	(30,710)
Total adjustments	**(13,030)**	128,642	57,291
Net cash provided by (used in) operating activities	**693,297**	689,793	606,870
Cash flows from investing activities:			
Investment securities purchased	**(2,861,553)**	(3,004,521)	(1,960,812)
Proceeds from investment securities sold or matured	**2,754,161**	2,448,663	1,831,041
Net (increase) decrease in loans	**(1,005,396)**	(1,319,799)	(1,777,824)
(Increase) decrease in investments in other Farm Credit System institutions	**(5,682)**	(3,358)	(2,367)
Purchase of premises and equipment, net	**(23,918)**	(28,011)	(18,581)
Proceeds from sale of premises and equipment, net	**1,562**	3,337	2,299
Proceeds from sale of other property owned	**14,999**	31,710	34,129
Net cash provided by (used in) investing activities	**(1,125,827)**	(1,871,979)	(1,892,115)
Cash flows from financing activities:			
Bonds and notes issued	**18,370,609**	33,882,688	26,745,053
Bonds and notes retired	**(17,758,797)**	(32,273,019)	(25,376,153)
Net increase (decrease) in advanced conditional payments	**5,807**	(2,115)	(1,985)
Protected borrower equity retired	**(11)**	(93)	(49)
Capital stock and participation certificates issued/retired, net	**(8,396)**	11,274	3,724
Patronage refunds and dividends paid	**(172,915)**	(163,831)	(172,131)
Redemption of perpetual preferred stock	**—**	(46,855)	(6,842)
Dividends paid on perpetual preferred stock	**(1,146)**	(1,548)	(1,743)
Retained earnings retired	**(84,766)**	(88,210)	(82,808)
Net cash provided by (used in) financing activities	**350,385**	1,318,291	1,107,066
Net increase (decrease) in cash and cash equivalents	**(82,145)**	136,105	(178,179)
Cash and cash equivalents, beginning of period	**854,115**	718,010	896,189
Cash and cash equivalents, end of period	**$ 771,970**	$ 854,115	$ 718,010
Supplemental schedule of non-cash activities:			
Financed sales of other property owned	**$ 1,748**	$ 3,698	$ 3,122
Receipt of property in settlement of loans	**7,118**	16,795	42,074
Change in unrealized gains (losses) on investments, net	**(22,648)**	(62,893)	(42,980)
Employee benefit plans adjustments	**(14,063)**	(13,314)	(15,837)
Non-cash changes related to interest rate hedging activities:			
Increase (decrease) in bonds and notes	**$ (92)**	$ (5,082)	$ (11,093)
Decrease (increase) in other assets	**92**	5,082	11,093
Supplemental information:			
Interest paid	**$ 347,319**	$ 274,631	$ 227,901
Taxes paid, net	**435**	59	852

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

Notes to the Combined Financial Statements

Note 1 — Organization and Operations

A. **Organization:** AgFirst Farm Credit Bank (the Bank or AgFirst) is a member-owned cooperative that provides credit and credit-related services to qualified borrowers. The Bank is chartered to serve the states of Pennsylvania, Delaware, Maryland, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, the Commonwealth of Puerto Rico and portions of Ohio, Tennessee, Kentucky and Louisiana.

AgFirst is a lending institution in the Farm Credit System (the System), a nationwide network of cooperatively owned banks, associations and related service organizations. It was established by Acts of Congress and is subject to the provisions of the Farm Credit Act of 1971, as amended (the 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. The System Banks obtain a substantial majority of the funds for their lending operations through the sale of consolidated Systemwide bonds and notes to the public, but also obtain a portion from internally generated earnings, the issuance of common and preferred stock and, to a lesser extent, the issuance of subordinated debt.

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 and its related associations (Associations or District Associations) are collectively referred to as the AgFirst District. The District Associations, certain Other Financing Institutions (OFIs), other System institutions, and preferred stockholders jointly own AgFirst. As of year end, the AgFirst District consisted of the Bank and nineteen District Associations. All nineteen were structured as ACA holding companies, with PCA and FLCA subsidiaries.

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

The Farm Credit Act also established the Farm Credit System Insurance Corporation (FCSIC) to administer the Farm Credit Insurance Fund (Insurance Fund). The Insurance Fund is required to be used: (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 FCSIC to provide assistance to certain troubled System institutions and to cover the operating expenses of the FCSIC. Each System bank has been required to pay premiums, which may be passed on to the Associations, into the Insurance Fund until the assets in the 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 FCSIC at its sole discretion determines to be actuarially sound. When the amount in the Insurance Fund exceeds the secure base amount, the FCSIC 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.

Premiums are charged based upon each bank's pro rata share of outstanding Insured Debt. Premiums of up to 20 basis points on adjusted Insured Debt obligations can be assessed along with a risk surcharge of 10 basis points on nonaccrual loans and other-than-temporarily impaired investments. For 2017, the premium was 15 basis points. For 2016, the premium was 16 basis points from January 1, 2016 to June 30, 2016, and increased to 18 basis points from July 1, 2016 to December 31, 2016. For 2015, the premium was 13 basis points. Effective January 1, 2018, the premium was reduced to 9 basis points.

AgFirst, in conjunction with other System Banks, jointly owns organizations that were created to provide a variety of services for the System:

- Federal Farm Credit Banks Funding Corporation (Funding Corporation) – provides for the issuance, marketing and processing of Systemwide Debt Securities using a network of investment dealers and dealer banks. The Funding Corporation also provides financial management and reporting services.
- FCS Building Association – leases premises and equipment to the FCA.
- Farm Credit System Association Captive Insurance Company – being a reciprocal insurer, provides insurance services to its member organizations.

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

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

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

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 lending agreement 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, their exposure to interest rate risk is minimized.

In addition to providing loan funds, 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 the interest charges to the Associations, or in some cases billed directly to certain Associations that use a specific service.

The District is also authorized to provide, in participation with other lenders and the secondary market, 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 Bank may also lend to other financial institutions qualified to engage in lending to eligible borrowers.

Note 2 — Summary of Significant Accounting Policies

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

The accompanying Combined Financial Statements include the accounts of AgFirst and the District Associations, and reflect the investments in and allocated earnings of the service organizations in which AgFirst and Associations have partial ownership interests. All significant transactions and balances between AgFirst and District Associations have been eliminated in combination.

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

A. **Cash and Cash Equivalents:** Cash and Cash Equivalents include cash on hand and short-term investments with original maturities of three months or less. Certain highly liquid equity securities, such as money market funds, may also be included.

B. **Loans and Allowance for Loan Losses:** The loan portfolio includes originated loans, loan participations/syndications purchased, Correspondent Lending loans (primarily first lien rural residential mortgages), and loans to OFIs.

Long-term real estate mortgage loans generally have original maturities up to 40 years. Substantially all short- and intermediate-term loans for agricultural production or operating purposes have maturities of 10 years or less. Loans are 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 is deferred as part of the carrying amount of the loan and the net difference is amortized over the life of the related loan as an adjustment to interest income using the 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 it is formally restructured or until the entire amount past due, including principal, accrued interest, and penalty interest incurred as the result of past due status, is collected or otherwise discharged in full.

Loans are generally classified as nonaccrual when principal or interest is delinquent for 90 days or more (unless adequately secured 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) and/or charged against the allowance for loan losses (if accrued in prior years).

When loans are in nonaccrual status, 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 is generally recognized as interest income. Otherwise, loan payments are applied against the recorded investment in the loan asset. 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 District 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 District 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 District 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.

Certain loan pools acquired from several of the District Associations are analyzed in accordance with the selling Association's allowance methodologies for assigning general and specific allowances.

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

- Credit risk classifications,
- Collateral values,
- Risk concentrations,
- Weather-related conditions,
- Current production and economic conditions, and
- Prior loan loss experience.

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, 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 incurred in the remainder of the loan portfolio at the financial statement date, which excludes loans included 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 District's allowance for loan losses evaluation, and is generally incorporated into the institution's loan underwriting standards and internal lending limit. The District 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.

The District may acquire loans individually, in groups or portfolios. Acquired loans are recorded at estimated fair value on their purchase date with no carryover of any related allowance for loan losses. Acquired loans are segregated between those considered to be credit impaired and those deemed performing. To make this determination, management considers such factors as past due status, nonaccrual status and credit risk ratings. The fair value of acquired performing loans is determined by discounting expected cash flows, both principal and interest, for each loan at prevailing market interest rates. The difference between the fair value and principal balances due at acquisition date, the fair value discount, is accreted into income over the estimated life of each loan.

Purchased Credit Impaired (PCI) Loans

For certain acquired loans that experienced deterioration in credit quality between origination and acquisition, the amount paid for the loan will reflect this fact. At acquisition, each loan is reviewed to determine whether there is evidence of deterioration of credit quality since origination and if it is probable that the Association would be unable to collect all amounts due according to the loan's contractual terms. If both conditions exist, the purchaser determines whether each such loan is to be accounted for individually or assembled into pools of loans based on common risk characteristics (credit score, loan type, and date of origination, for example). Considerations of value should include expected prepayments, the estimated amount and timing of undiscounted expected principal, interest, and other cash flows (expected at acquisition) for each loan and the subsequently aggregated pool of loans. Any excess of the loan's or pool's scheduled contractual principal and contractual interest payments over all of the cash flows expected at acquisition is an amount that should not be accreted to income (nonaccretable difference). The remaining amount, representing the excess of the loan's cash flows expected to be collected over the amount paid, is accreted into interest income over the remaining life of the loan or pool (accretable yield).

Accounting guidance requires that the purchaser continue to estimate cash flows expected to be collected over the life of the loan or pool. It then evaluates at the balance sheet date whether the present value of its loans, determined using the effective interest rate, has decreased and if so, recognizes a loss. For loans or pools that are not accounted for as debt securities, the present value of any subsequent increase in the loan's or pool's actual cash flows or cash flows expected to be collected is used first to reverse any existing valuation allowance for that loan or pool. For any remaining increases in cash flows expected to be collected, or for loans or pools accounted for as debt securities, a purchaser adjusts the amount of accretable yield recognized on a prospective basis over the loan's or pool's remaining life.

Valuation allowances for all PCI loans reflect only those losses incurred after acquisition, that is, the present value of cash flows expected at acquisition that are not expected to be collected. Valuation allowances are established only subsequent to acquisition of the loans.

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.

   Generally, only home loans that are to be sold on the secondary mortgage market through various lenders or into a securitization are held for sale.

D. **Other Property Owned:** 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 Losses (Gains) from Other Property Owned in the Combined Statements of 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, which range from 3 to 40 years. Gains and losses on dispositions are reflected in current operations. Maintenance and repairs are charged to operating expense and improvements that extend the useful life of the asset 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-downs of property held for sale are recorded as other noninterest expense.

F. **Investments:** The District holds investments and investment securities as described below.

   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 accounted for using the cost method and are analyzed for impairment similar to investment securities as discussed in the section below.

Other Investments
Several Associations are investors in a USDA approved Rural Business Investment Company (RBIC). This investment was made under the USDA's Rural Business Investment Program, which is authorized by the Farm Security and Rural Investment Act (FSRIA). FSRIA authorizes FCS institutions to establish and invest in RBICs. These investments are accounted for under the cost method.

As discussed in Note 8, certain investments, consisting primarily of mutual funds, are held in trust accounts and are reported at fair value. Holding period gains and losses are included within Gains (Losses) on Other Transactions on the Combined Statements of Income and the balance of these investments is included in Other Assets on the accompanying Combined Balance Sheets.

Investment Securities
The District holds certain investment securities, as permitted under the FCA regulations. These investments are classified based on management's intention on the date of purchase and are generally recorded in the Balance Sheets as securities on the trade date.

Securities for which the District has the intent and ability to hold to maturity are classified as held-to-maturity and carried at amortized cost. Investment securities classified as available-for-sale (AFS) are carried at fair value with net unrealized gains and losses included as a component of other comprehensive income (OCI). Equity securities with a readily determinable fair value are carried at fair value with unrealized gains and losses included in earnings. Purchase premiums and discounts are amortized or accreted ratably over the term of the respective security using the interest method.

Certain equity securities with high turnover rates and high volume amounts, such as money market funds, may be considered cash equivalents but are subject to the accounting and disclosure requirements for investment securities.

The District reviews all investments that are in a loss position in order to determine whether the unrealized loss, which is considered an impairment, is temporary or other-than-temporary. As mentioned above, changes in the fair value of AFS investments are reflected in OCI, unless the investment is deemed to be other than temporarily impaired. Impairment is considered to be other-than-temporary if the present value of cash flows expected to be collected from the debt security is less than the amortized cost basis of the security (any such shortfall is referred to as a "credit loss"). If the District intends to sell an impaired debt security or is more likely than not to be required to sell the security before recovery of its amortized cost basis less any current-period credit loss, the impairment is other-than-temporary and recognized currently in earnings in an amount equal to the entire difference between fair value and amortized cost. If a credit loss exists, but the District does not intend to sell the impaired debt security and is not more likely than not to be required to sell before recovery, the impairment is other-than-temporary and is separated into (i) the estimated amount relating to credit loss, and (ii) the amount relating to all other factors. Only the estimated credit loss amount is charged to current earnings, with the remainder of the loss amount recognized in OCI.

In subsequent periods, if the present value of cash flows expected to be collected is less than the amortized cost basis, the District will record an additional other-than-temporary impairment (OTTI) and adjust the yield of the security prospectively. The amount of total OTTI for an AFS security that previously was impaired is determined as the difference between its carrying amount prior to the determination of OTTI and its fair value.

Interest on investment securities, including amortization of premiums and accretion of discounts, is included in Interest Income. Realized gains and losses from the sales of investment securities are recognized in current earnings using the specific identification method.

G. **Debt Issuance Cost:** Direct expenses incurred in issuing debt and mandatorily redeemable preferred stock are deferred and amortized using the straight-line method (which approximates the interest method) over the term of the related indebtedness or term of the mandatorily redeemable preferred stock. Debt issuance costs are presented in the Combined Balance Sheets as a direct deduction from the carrying amount of the respective debt liability.

H. **Employee Benefit Plans:** Employees participate 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 a defined contribution 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 plan are expensed as funded.

Additional information for the above may be found in Note 9.

Multiemployer Defined Benefit Plans
Certain employees may participate in one or more defined benefit plans. The Plans are noncontributory and include eligible Bank and District employees. The "Projected Unit Credit" actuarial method is used for financial reporting purposes.

The District also provides certain health care and life insurance benefits for retired employees (Other Postretirement Benefits) through a retiree healthcare plan. Substantially all employees are eligible for those benefits when they reach early retirement age while working for the District. 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. This Other Postretirement Benefits plan is unfunded with expenses paid as incurred.

Since the foregoing plans are multiemployer, the District entities do not apply the provisions of FASB guidance on employers' accounting for defined benefit pension and other postretirement plans in their stand-alone financial statements. Rather, the effects of this guidance are reflected in the Combined Financial Statements of AgFirst Farm Credit Bank and District Associations for the pension plans and in the Annual Information Statement of the Farm Credit System for the Other Postretirement Benefits plan.

Additional information for the above may be found in Note 9 and in the Annual Information Statement of the Farm Credit System for the Other Postretirement Benefits plan.

Single Employer Defined Benefit Plans
Certain District entities also sponsor defined benefit postretirement plans for certain key employees. These plans are nonqualified; therefore, the associated liabilities are included in the Combined Balance Sheets in Other Liabilities.

The foregoing defined benefit plans are considered single employer, therefore each entity applies the provisions of FASB guidance on employers' accounting for defined benefit pension and other postretirement plans in its stand-alone financial statements.

See Note 9 for additional information.

I. **Income Taxes:** The District 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 or tax-exempt entity.

Income taxes are accounted for 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 basis 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.

A valuation allowance is recorded at the balance sheet dates against the portion of 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 any expected patronage program, which reduces taxable earnings.

J. **Derivative Instruments and Hedging Activity:** The Bank is party to derivative financial instruments, primarily interest rate swaps, which are principally used to reduce funding costs. The Bank may also enter into forward contracts to create a fixed purchase price. Derivatives are included in the Balance Sheets as assets and liabilities and reflected at fair value.

Changes in the fair value of a derivative are recorded in current period earnings or Accumulated Other Comprehensive Income (AOCI) depending on the risk being hedged. For fair-value hedge transactions, which hedge changes in the fair value of assets, liabilities, or firm commitments, changes in the fair value of the derivative will generally be offset by changes in the hedged item's fair value and changes reported in earnings. For cash-flow hedge transactions, which hedge the variability of future cash flows related to a variable-rate asset, liability, or a forecasted transaction, changes in the fair value of the derivative will generally be deferred and reported in AOCI. The gains and losses on the derivative that are deferred and reported in AOCI will be reclassified into earnings in the periods during which earnings are impacted by the variability of the cash flows of the hedged item. The ineffective portion of all hedges is recorded in current period earnings. For derivatives not designated as a hedging instrument, if any, the related change in fair value is recorded in current period earnings.

The Bank formally documents all relationships between hedging instruments and hedged items, as well as its risk management objective and strategy for undertaking various hedge transactions. This process includes linking all derivatives that are designated as fair value or cash flow hedges to (1) specific assets or liabilities on the balance sheet or (2) firm commitments or forecasted transactions. The Bank also formally assesses at the hedge's inception whether the derivatives that are used in hedging transactions will be highly effective in offsetting changes in the fair value or cash flows of hedged items and whether those derivatives may be expected to remain highly effective in future periods. The Bank uses regression analysis (or other statistical analysis) to assess the effectiveness of its hedges on an ongoing basis. The Bank discontinues hedge accounting prospectively when the Bank determines that a derivative has not been or is not expected to be effective as a hedge. For cash flow hedges, any remaining AOCI would be amortized into earnings over the remaining life of the original hedged item. For fair value hedges, changes in the fair value of the derivative would be recorded in current period earnings. In all situations in which hedge accounting is discontinued and the derivative remains outstanding, the Bank will carry the derivative at its fair value on the balance sheet, recognizing changes in fair value in current period earnings.

The Bank may occasionally purchase a financial instrument in which a derivative instrument is "embedded." Upon purchasing the financial instrument, the Bank assesses whether the economic characteristics of the embedded derivative are clearly and closely related to the economic characteristics of the remaining component of the financial instrument and whether a separate, non-embedded instrument with the same terms as the embedded instrument would meet the definition of a derivative instrument. When it is determined that (1) the embedded derivative possesses economic characteristics that are not clearly and closely related to the economic characteristics of the host contract and (2) a separate, stand-alone instrument with the same terms would qualify as a derivative instrument, the embedded derivative is separated from the host contract, carried at fair value, and may be designated as either a fair value or cash flow hedge. However, if the entire contract were to be measured at fair value, with changes in fair value reported in current earnings, or if the Bank could not reliably identify and measure the embedded derivative for purposes of separating that derivative from its host contract, the entire contract would be carried on the balance sheet at fair value and not be designated as a hedging instrument.

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 1 assets and liabilities could include investment securities and derivative contracts that are traded in an active exchange market, in addition to certain U.S. Treasury securities that are highly-liquid and are actively traded in over-the-counter 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 2 assets and liabilities could include investment securities that are traded in active, non-exchange markets and derivative contracts that are traded in active, over-the-counter markets.

Level 3 inputs to the valuation methodology are unobservable and supported by little or no market activity. Level 3 assets and liabilities could include investments and derivative contracts whose value is determined using pricing models, discounted cash flow methodologies, or similar techniques, and other instruments for which the determination of fair value requires significant management judgment or estimation. Level 3 assets and liabilities could also include investments and derivative contracts whose price has been adjusted based on dealer quoted pricing that is different than a third-party valuation or internal model pricing.

The District may use 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.

Any transfers between fair value levels occur at the end of the period.

Please see further discussion 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.

Unfunded commitments, and other 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. **Advance Conditional Payments:** The District Associations are 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, those advance conditional payments (ACPs) are netted against the borrower's related loan balance. ACPs which are held by the District but cannot be used to reduce outstanding loan balances, except at the direction of the borrower, are classified as liabilities in the Combined Balance Sheets. ACPs are not insured, and interest is generally paid by the Associations on such balances. The outstanding gross balances of advance conditional payments netted against loans at December 31, 2017, 2016 and 2015 were $303.7 million, $307.8 million, and $287.2 million, respectively. The outstanding gross balances of advance conditional payments classified as liabilities at December 31, 2017, 2016 and 2015 were $10.2 million, $4.4 million, and $6.5 million, respectively.

N. **Business Combinations:** Business Combinations are accounted for under the acquisition method. Purchased assets, including identifiable intangibles, and assumed liabilities are recorded at their respective acquisition date fair values. If the fair value of net assets purchased exceeds the consideration given, a "bargain purchase gain" is recognized. If the consideration given exceeds the fair value of the net assets received, goodwill is recognized. Fair values are subject to refinement for up to one year after the closing date of an acquisition as information relative to closing date fair values becomes available. Purchased loans acquired in a business combination are recorded at estimated fair value on their purchase date with no carryover of the related allowance for loan losses. See Loans and Allowance for Loan Losses section above for accounting policy regarding loans acquired in a business combination.

All identifiable intangible assets that are acquired in a business combination are recognized at fair value on the acquisition date. Identifiable intangible assets are recognized separately if they arise from contractual or other legal rights or if they are separable (i.e., capable of being sold, transferred, licensed, rented, or exchanged separately from the entity).

The acquisition method of accounting requires the financial statement presentation of combined balances as of the date of the merger, but of only the acquirer for previous periods.

O. **Revenue Recognition:** The largest source of revenue for the District 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.

P. **Accounting Standards Updates (ASUs):** 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. Early adoption is permitted.

In August 2017, the FASB issued ASU 2017-12 —Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities. The Update is intended to improve the financial reporting of hedging relationships to better portray the economic results of an entity's risk management activities in its financial statements. In addition to that main objective, the amendments make certain targeted improvements to simplify the application of the hedge accounting guidance in current GAAP. For public business entities, the amendments are effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. The District is in the process of evaluating the guidance and what effects it may have on the statements of financial condition and results of operations.

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. Early adoption is permitted. The District is in the process of evaluating what effects the guidance may have on the statements of financial condition and results of operations.

In March 2017, the FASB issued ASU 2017-07 Compensation—Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost related to the income statement presentation of the components of net periodic benefit cost for an entity's sponsored defined benefit pension and other postretirement plans. The amendments will be effective for the District for interim and annual periods beginning after December 15, 2017 for public business entities. The District does not expect these amendments to have a material effect on its financial statements.

In February 2017, the FASB issued ASU 2017-06 Plan Accounting—Defined Benefit Pension Plans (Topic 960), Defined Contribution Pension Plans (Topic 962), Health and Welfare Benefit Plans (Topic 965): Employee Benefit Plan Master Trust Reporting (a consensus of the Emerging Issues Task Force) which amended the guidance related to employee benefit plan master trust reporting. The new guidance provides for presentation within the plan's financial statements of its interest in a master trust as a single line item; disclosure of the master trust's investments by general type as well as by the dollar amount of the plan's interest in each type; disclosure of the master trust's other assets and liabilities and the balances related to the plan; and elimination of required disclosures for Section 401(h) accounts that are already provided by the associated defined benefit plan. The amendments are effective for fiscal years beginning after December 15, 2018.

Early adoption is permitted. The District does not expect these amendments to have a material effect on its financial statements.

In February 2017, the FASB issued ASU 2017-05 Other Income—Gains and Losses from the Derecognition of Nonfinancial Assets (Subtopic 610-20): Clarifying the Scope of Asset Derecognition Guidance and Accounting for Partial Sales of Nonfinancial Assets. The Update clarifies whether certain transactions are within the scope of the guidance on derecognition and the accounting for partial sales of nonfinancial assets, and defines the term in substance nonfinancial asset. The amendments conform the derecognition guidance on nonfinancial assets with the model for transactions in the new revenue standard. The amendments will be effective for reporting periods beginning after December 15, 2017 for public business entities. The District does not expect these amendments to have a material effect on its financial statements.

In January 2017, the FASB issued ASU 2017-04 Intangibles—Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment to simplify the accounting for goodwill impairment for public business entities and other entities that have goodwill reported in their financial statements and have not elected the private company alternative for the subsequent measurement of goodwill. The amendment removes Step 2 of the goodwill impairment test. A goodwill impairment will now be the amount by which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. The effective date and transition requirements for the technical corrections will be effective for reporting periods beginning after December 15, 2020 for public business entities that are not SEC filers. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The District 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 2017-03 Accounting Changes and Error Corrections (Topic 250) and Investments—Equity Method and Joint Ventures (Topic 323): Amendments to SEC Paragraphs Pursuant to Staff Announcements at the September 22, 2016 and November 17, 2016 EITF Meetings (SEC Update). The ASU incorporates recent SEC guidance about disclosing, under SEC SAB Topic 11.M, the effect on financial statements of adopting the revenue, leases, and credit losses standards. The Update was effective upon issuance. Application of this guidance had no impact on the District's financial condition or 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. For public business entities, the ASU is effective for annual periods beginning after December 15, 2017, including interim periods within those periods. The amendments should be applied prospectively. The District does not expect these amendments to have a material effect on its financial statements.

In November 2016, the FASB issued ASU 2016-18 Statement of Cash Flows (Topic 230): Restricted Cash. The Update clarifies that amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. The amendments are effective for public business entities for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. The District elected retrospective early adoption of this guidance. The criteria of the standard were not significantly different from the District's policy in place at adoption. Application of the guidance had no impact on the District's Statements of Cash Flows.

In October 2016, the FASB issued ASU 2016-17 Consolidation (Topic 810): Interests Held through Related Parties that Are under Common Control. The Update amends the consolidation guidance on how a reporting entity that is the single decision maker of a variable interest entity (VIE) should treat indirect interests in the entity held through related parties that are under common control with the reporting entity when determining whether it is the primary beneficiary of that VIE. The amendments were effective for public business entities for fiscal years beginning after December 15, 2016, including interim periods within those fiscal years. Application of the guidance in 2017 had no impact on the District's financial statements.

In October 2016, the FASB issued ASU 2016-16 Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory. This Update requires an entity to recognize the income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs. For public business entities, the amendments are effective, on a modified retrospective basis, for annual reporting periods beginning after December 15, 2017, including interim reporting periods within those annual reporting periods. The District does not expect these amendments to have a material effect on its financial statements.

In August 2016, the FASB issued ASU 2016-15 Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments (a consensus of the Emerging Issues Task Force). This Update eliminates diversity in practice in how certain cash receipts and cash payments are presented and classified in the statement of cash flows. The Update addresses eight specific cash flow issues with the objective of reducing existing diversity in practice. The amendments are effective for public business entities for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. Early adoption is permitted, including adoption in an interim period. An entity that elects early adoption must adopt all of the amendments in the same period. The amendments are to be applied using a retrospective transition method to each period presented. The District elected retrospective early adoption of this guidance. The criteria of the standard were not significantly different from the District's policy in place at adoption. Application of the guidance had no impact on the District's Statements of Cash Flows.

In June 2016, the FASB issued ASU 2016-13 Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments. The Update improves 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 District is in the process of evaluating what effects the guidance may have on the statements of financial condition and results of operations.

In March 2016, the FASB issued ASU 2016-07 Investments Equity Method and Joint Ventures (Topic 323): Simplifying the Transition to the Equity Method of Accounting. This Update simplifies the accounting for equity method investments. The amendments eliminate the requirement that an entity retroactively adopt the equity method of accounting if an investment qualifies for use of the equity method as a result of an increase in the level of ownership or degree of influence. The amendments require that the equity method investor add the cost of acquiring the additional interest in the investee to the current basis of the investor's previously held interest and adopt the equity method of accounting as of the date the investment becomes qualified for equity method accounting. The guidance was effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2016. Adoption of this guidance in 2017 had no effect on the District's statements of financial condition and results of operations.

In March 2016, the FASB issued ASU 2016-06 Derivatives and Hedging (Topic 815): Contingent Put and Call Options in Debt Instruments to clarify the requirements for assessing whether contingent call (put) options that can accelerate the payment of principal on debt instruments are clearly and closely related to their debt hosts. The Update requires the assessment to be done solely in accordance with the four-step decision sequence. The amendments were effective for financial statements issued for fiscal years beginning after December 15, 2016, and interim periods within those fiscal years. The amendments were applied on a modified retrospective basis to existing debt instruments at the beginning of the fiscal year. The criteria of the standard were not significantly different from the District's policy in place at adoption. Application of the guidance had no impact on the District's financial statements.

In March 2016, the FASB issued ASU 2016-05 Derivatives and Hedging (Topic 815): Effect of Derivative Contract Novations on Existing Hedge Accounting Relationships. The term novation refers to replacing one counterparty to a derivative instrument with a new counterparty. The amendments clarify that a change in the counterparty to a derivative instrument that has been designated as the hedging instrument under Topic 815, does not, in and of itself, require dedesignation of that hedging relationship provided that all other hedge accounting criteria continue to be met. The amendments were effective for financial statements issued for fiscal years beginning after December 15, 2016, and interim periods within those fiscal years. The amendments were applied on a prospective basis. The criteria of the standard were not significantly different from the District's policy in place at adoption. Application of the guidance had no impact on the District's financial statements.

In February 2016, the FASB issued ASU 2016-02 Leases (Topic 842): This Update 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. Early adoption is permitted. The District is in the process of evaluating what effects the guidance may have on the statements of financial condition and results of operations.

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 is intended to improve the recognition and measurement of financial instruments. The new guidance makes targeted improvements to existing GAAP. The ASU will be effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years for public business entities. The District does not expect these amendments to have a material effect on its financial statements.

In September, 2015, the FASB issued ASU 2015-16 Business Combinations (Topic 805): Simplifying the Accounting for Measurement-Period Adjustments. The amendments in this Update require that an acquirer recognize adjustments to provisional amounts that are identified during the measurement period in the reporting period in which the adjustment amounts are determined and to present separately on the face of the income statement or disclose in the notes the portion of the amount recorded in current-period earnings by line item that would have been recorded in previous reporting periods if the adjustment to the provisional amounts had been recognized as of the acquisition date. For public business entities, the amendments are effective for fiscal years beginning after December 15, 2015, including interim periods within those fiscal years. Adoption of this guidance did not have an impact on the District's financial condition or results of operations.
In May, 2015, the FASB issued ASU 2015-07 Fair Value Measurement (Topic 820): Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent). Topic 820 permits a reporting entity, as a practical expedient, to measure the fair value of certain investments using the net asset value per share of the investment. Investments valued using the practical expedient were categorized within the fair value hierarchy on the basis of whether the investment was redeemable with the investee at net asset value on the measurement date, never redeemable with the investee at net asset value, or redeemable with the investee at net asset value at a future date. To address diversity in practice related to how certain investments measured at net asset value with future redemption dates were categorized, the amendments in this Update removed the requirement to categorize investments for which fair values are measured using the net asset value per share practical expedient. It also limited disclosures to investments for which the entity has elected to measure the fair value using the practical expedient. For public business entities, the guidance was effective for fiscal years beginning after December 15, 2015, and interim periods within those fiscal years. Adoption of this guidance was applied retrospectively to all periods presented and did not have an impact on the District's financial condition or results of operations.

In February, 2015, the FASB issued ASU 2015-02 Consolidation (Topic 810): Amendments to the Consolidation Analysis. The amendments affect reporting entities that are required to evaluate whether they should consolidate certain legal entities. All legal entities are subject to reevaluation under the revised consolidation model. Specifically, the amendments modify the evaluation of whether limited partnerships and similar legal entities are variable interest entities (VIEs) or voting interest entities, eliminate the presumption that a general partner should consolidate a limited partnership, affect the consolidation analysis of reporting entities that are involved with VIEs, particularly those that have fee arrangements and related party relationships, and provide a scope exception from consolidation guidance for reporting entities with interests in legal entities that are required to comply with or operate in accordance with requirements that are similar to those in Rule 2a-7 of the Investment Company Act of 1940 for registered money market funds. The amendments in this Update were effective for public business entities for fiscal years, and for interim periods within those fiscal years, beginning after December 15, 2015. Adoption of this guidance did not have an impact on the District's financial condition or results of operations.

In May 2014, the FASB issued ASU 2014-09 Revenue from Contracts with Customers (Topic 606): This guidance changes the recognition of revenue from contracts with customers. The core principle of the new 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. This guidance also includes 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 has issued several additional Updates that generally provide clarifying guidance where there was the potential for diversity in practice, or address the cost and complexity of applying Topic 606. The guidance and all related updates will be effective for reporting periods beginning after December 15, 2017 for public business entities. The amendments are to be applied retrospectively. The District has identified ancillary revenues that will be affected by this Update. However, because financial instruments are not within the scope of the guidance, it is expected that adoption will not have a material impact on the District's financial condition or results of operations. The District will adopt the guidance in first quarter 2018 using the modified retrospective method and that adoption will result in additional disclosures.

Note 3 — Loans and Allowance for Loan Losses

For a description of the District'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 District manages credit risk associated with lending activities through an assessment of the credit risk profile of an individual obligor. The District 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 District'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.
- Loans to OFIs — revolving lines of credit provided to financing institutions to fund the lending needs of their borrowers.
- 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 follows:

	December 31,		
(dollars in thousands)	**2017**	**2016**	**2015**
Real estate mortgage	$ 14,092,944	$ 13,238,788	$ 12,524,416
Production and intermediate-term	7,044,930	7,248,346	6,947,773
Loans to cooperatives	662,604	625,642	256,774
Processing and marketing	1,442,935	1,450,352	1,693,055
Farm-related business	363,137	321,956	441,461
Communication	466,975	473,352	451,028
Power and water/waste disposal	629,317	581,249	504,714
Rural residential real estate	3,431,905	3,228,215	3,076,692
International	98,625	100,860	70,317
Lease receivables	12,358	13,595	3,189
Loans to OFIs	131,572	122,573	108,020
Other (including Mission Related)	74,505	53,038	75,317
Total loans	$ 28,451,807	$ 27,457,966	$ 26,152,756

The District's concentration of credit risk is spread among various agricultural commodities. A substantial portion of the District's lending activities are collateralized, and, accordingly, the credit risk associated with lending activities is considerably less than the recorded loan principal and is considered in the allowance for loan losses.

The District 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, 2017					
	Within Farm Credit System		Outside Farm Credit System		Total	
(dollars in thousands)	Participations Purchased	Participations Sold	Participations Purchased	Participations Sold	Participations Purchased	Participations Sold
Real estate mortgage	$ 365,353	$ 100,833	$ 46,148	$ 12,054	$ 411,501	$ 112,887
Production and intermediate-term	767,110	409,738	237,238	4,484	1,004,348	414,222
Loans to cooperatives	659,531	–	–	–	659,531	–
Processing and marketing	377,296	408,032	836,351	16	1,213,647	408,048
Farm-related business	27,063	2,354	27,734	249	54,797	2,603
Communication	468,444	–	–	–	468,444	–
Power and water/waste disposal	613,164	–	18,026	–	631,190	–
Rural residential real estate	–	–	123	–	123	–
International	98,919	–	–	–	98,919	–
Lease receivables	4,539	–	–	–	4,539	–
Other (including Mission Related)	–	–	46,924	–	46,924	–
Total	$ 3,381,419	$ 920,957	$ 1,212,544	$ 16,803	$ 4,593,963	$ 937,760

	December 31, 2016					
	Within Farm Credit System		Outside Farm Credit System		Total	
(dollars in thousands)	Participations Purchased	Participations Sold	Participations Purchased	Participations Sold	Participations Purchased	Participations Sold
Real estate mortgage	$ 313,993	$ 124,552	$ 48,661	$ 13,113	$ 362,654	$ 137,665
Production and intermediate-term	870,125	328,955	172,737	9,089	1,042,862	338,044
Loans to cooperatives	623,055	–	3,341	–	626,396	–
Processing and marketing	508,105	417,347	846,021	–	1,354,126	417,347
Farm-related business	26,847	4,215	33,593	26	60,440	4,241
Communication	474,676	–	–	–	474,676	–
Power and water/waste disposal	577,194	–	5,733	–	582,927	–
Rural residential real estate	–	–	2,003	–	2,003	–
International	–	–	23,911	–	23,911	–
Lease receivables	4,020	–	–	–	4,020	–
Other (including Mission Related)	101,069	–	1,010	–	102,079	–
Total	$ 3,499,084	$ 875,069	$ 1,137,010	$ 22,228	$ 4,636,094	$ 897,297

	December 31, 2015					
	Within Farm Credit System		Outside Farm Credit System		Total	
(dollars in thousands)	Participations Purchased	Participations Sold	Participations Purchased	Participations Sold	Participations Purchased	Participations Sold
Real estate mortgage	$ 283,023	$ 105,671	$ 69,681	$ 16,506	$ 352,704	$ 122,177
Production and intermediate-term	677,974	229,517	163,179	14,876	841,153	244,393
Loans to cooperatives	242,394	–	6,902	–	249,296	–
Processing and marketing	766,058	298,552	965,568	8,700	1,731,626	307,252
Farm-related business	106,972	8,629	134,016	38	240,988	8,667
Communication	452,422	–	–	–	452,422	–
Power and water/waste disposal	500,369	–	6,137	–	506,506	–
Rural residential real estate	–	–	2,375	–	2,375	–
International	–	–	6,682	–	6,682	–
Lease receivables	1,494	–	–	–	1,494	–
Other (including Mission Related)	82,078	–	22,447	–	104,525	–
Total	$ 3,112,784	$ 642,369	$ 1,376,987	$ 40,120	$ 4,489,771	$ 682,489

A significant source of liquidity for the District 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, 2017			
(dollars in thousands)	Due less than 1 year	Due 1 Through 5 years	Due after 5 years	Total
Real estate mortgage	$ 349,626	$ 2,561,065	$ 11,182,253	$ 14,092,944
Production and intermediate-term	2,299,275	3,352,750	1,392,905	7,044,930
Loans to cooperatives	16,369	470,750	175,485	662,604
Processing and marketing	135,400	938,627	368,908	1,442,935
Farm-related business	56,837	177,361	128,939	363,137
Communication	–	391,278	75,697	466,975
Power and water/waste disposal	41,909	149,317	438,091	629,317
Rural residential real estate	106,919	54,316	3,270,670	3,431,905
International	–	86,523	12,102	98,625
Lease receivables	328	8,870	3,160	12,358
Loans to OFIs	7,102	124,470	–	131,572
Other (including Mission Related)	2,226	9,818	62,461	74,505
Total loans	$ 3,015,991	$ 8,325,145	$ 17,110,671	$ 28,451,807
Percentage	10.60%	29.26%	60.14%	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:

	2017	2016	2015
Real estate mortgage:			
Acceptable	95.09%	94.95%	94.70%
OAEM	2.65	2.53	2.69
Substandard/doubtful/loss	2.26	2.52	2.61
	100.00%	100.00%	100.00%
Production and intermediate-term:			
Acceptable	91.67%	92.31%	92.62%
OAEM	4.94	4.82	3.65
Substandard/doubtful/loss	3.39	2.87	3.73
	100.00%	100.00%	100.00%
Loans to cooperatives:			
Acceptable	98.75%	98.43%	99.00%
OAEM	–	1.39	–
Substandard/doubtful/loss	1.25	0.18	1.00
	100.00%	100.00%	100.00%
Processing and marketing:			
Acceptable	99.60%	98.24%	98.12%
OAEM	0.21	1.39	1.20
Substandard/doubtful/loss	0.19	0.37	0.68
	100.00%	100.00%	100.00%
Farm-related business:			
Acceptable	94.02%	91.89%	98.84%
OAEM	2.11	0.84	0.60
Substandard/doubtful/loss	3.87	7.27	0.56
	100.00%	100.00%	100.00%
Communication:			
Acceptable	100.00%	97.95%	97.84%
OAEM	–	2.05	2.16
Substandard/doubtful/loss	–	–	–
	100.00%	100.00%	100.00%

	2017	2016	2015
Power and water/waste disposal:			
Acceptable	99.65%	91.98%	89.87%
OAEM	–	8.02	10.13
Substandard/doubtful/loss	0.35	–	–
	100.00%	100.00%	100.00%
Rural residential real estate:			
Acceptable	99.21%	99.15%	99.00%
OAEM	0.32	0.44	0.55
Substandard/doubtful/loss	0.47	0.41	0.45
	100.00%	100.00%	100.00%
International:			
Acceptable	100.00%	100.00%	100.00%
OAEM	–	–	–
Substandard/doubtful/loss	–	–	–
	100.00%	100.00%	100.00%
Lease receivables:			
Acceptable	99.49%	98.50%	96.10%
OAEM	0.11	0.89	3.40
Substandard/doubtful/loss	0.40	0.61	0.50
	100.00%	100.00%	100.00%
Loans to OFIs:			
Acceptable	100.00%	100.00%	100.00%
OAEM	–	–	–
Substandard/doubtful/loss	–	–	–
	100.00%	100.00%	100.00%
Other (including Mission Related):			
Acceptable	99.97%	100.00%	98.96%
OAEM	–	–	–
Substandard/doubtful/loss	0.03	–	1.04
	100.00%	100.00%	100.00%
Total Loans:			
Acceptable	95.27%	95.00%	94.99%
OAEM	2.62	2.87	2.65
Substandard/doubtful/loss	2.11	2.13	2.36
	100.00%	100.00%	100.00%

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

	December 31, 2017					
(dollars in thousands)	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	Recorded Investment 90 Days or More Past Due and Accruing Interest
Real estate mortgage	$ 57,790	$ 42,995	$ 100,785	$ 14,116,210	$ 14,216,995	$ –
Production and intermediate-term	36,022	56,464	92,486	7,022,256	7,114,742	75
Loans to cooperatives	–	–	–	663,838	663,838	–
Processing and marketing	459	2,761	3,220	1,444,785	1,448,005	–
Farm-related business	2,348	247	2,595	362,268	364,863	–
Communication	–	–	–	467,502	467,502	–
Power and water/waste disposal	–	–	–	631,817	631,817	–
Rural residential real estate	55,025	6,266	61,291	3,379,607	3,440,898	–
International	–	–	–	98,952	98,952	–
Lease receivables	–	–	–	12,390	12,390	–
Loans to OFIs	–	–	–	131,818	131,818	–
Other (including Mission Related)	367	546	913	74,352	75,265	–
Total	$ 152,011	$ 109,279	$ 261,290	$ 28,405,795	$ 28,667,085	$ 75

(dollars in thousands)	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	Recorded Investment 90 Days or More Past Due and Accruing Interest
Real estate mortgage	$ 49,883	$ 50,006	$ 99,889	$ 13,250,044	$ 13,349,933	$ 113
Production and intermediate-term	39,914	49,172	89,086	7,223,079	7,312,165	–
Loans to cooperatives	–	–	–	626,605	626,605	–
Processing and marketing	213	5,388	5,601	1,448,885	1,454,486	–
Farm-related business	866	429	1,295	322,323	323,618	–
Communication	–	–	–	473,579	473,579	–
Power and water/waste disposal	–	–	–	583,793	583,793	–
Rural residential real estate	46,018	5,280	51,298	3,185,697	3,236,995	–
International	–	–	–	101,844	101,844	–
Lease receivables	–	–	–	13,626	13,626	–
Loans to OFIs	–	–	–	122,772	122,772	–
Other (including Mission Related)	103	–	103	53,604	53,707	–
Total	$ 136,997	$ 110,275	$ 247,272	$ 27,405,851	$ 27,653,123	$ 113

(dollars in thousands)	December 31, 2015 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	Recorded Investment 90 Days or More Past Due and Accruing Interest
Real estate mortgage	$ 63,847	$ 45,682	$ 109,529	$ 12,520,873	$ 12,630,402	$ 223
Production and intermediate-term	26,330	43,769	70,099	6,938,339	7,008,438	205
Loans to cooperatives	5	–	5	257,253	257,258	–
Processing and marketing	1,500	–	1,500	1,695,649	1,697,149	–
Farm-related business	4	374	378	442,847	443,225	–
Communication	–	–	–	451,442	451,442	–
Power and water/waste disposal	–	–	–	505,704	505,704	–
Rural residential real estate	36,434	6,561	42,995	3,041,847	3,084,842	944
International	–	–	–	70,307	70,307	–
Lease receivables	–	6	6	3,189	3,195	–
Loans to OFIs	–	–	–	108,181	108,181	–
Other (including Mission Related)	–	–	–	76,081	76,081	–
Total	$ 128,120	$ 96,392	$ 224,512	$ 26,111,712	$ 26,336,224	$ 1,372

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

(dollars in thousands)	December 31, 2017	2016	2015
Nonaccrual loans:			
Real estate mortgage	$ 118,073	$ 125,359	$ 133,339
Production and intermediate-term	99,646	105,026	104,034
Processing and marketing	2,827	5,389	1,508
Farm-related business	3,224	4,335	4,512
Rural residential real estate	15,037	10,390	9,095
Lease receivables	50	83	6
Other (including Mission Related)	–	–	14
Total	$ 238,857	$ 250,582	$ 252,508
Accruing restructured loans:			
Real estate mortgage	$ 64,234	$ 59,943	$ 60,932
Production and intermediate-term	47,100	52,488	38,659
Farm-related business	439	1,596	1,794
Rural residential real estate	3,011	2,920	3,318
Other (including Mission Related)	8,958	9,050	9,324
Total	$ 123,742	$ 125,997	$ 114,027
Accruing loans 90 days or more past due:			
Real estate mortgage	$ –	$ 113	$ 223
Production and intermediate-term	75	–	205
Rural residential real estate	–	–	944
Total	$ 75	$ 113	$ 1,372
Total nonperforming loans	$ 362,674	$ 376,692	$ 367,907
Other property owned	14,655	30,281	48,462
Total nonperforming assets	$ 377,329	$ 406,973	$ 416,369
Nonaccrual loans as a percentage of total loans	0.84%	0.91%	0.97%
Nonperforming assets as a percentage of total loans and other property owned	1.33%	1.48%	1.59%
Nonperforming assets as a percentage of capital	6.04%	6.92%	7.34%

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

	December 31,		
(dollars in thousands)	2017	2016	2015
Impaired nonaccrual loans:			
Current as to principal and interest	$ 104,285	$ 106,037	$ 127,764
Past due	134,572	144,545	124,744
Total impaired nonaccrual loans	$ 238,857	$ 250,582	$ 252,508
Impaired accrual loans:			
Restructured	$ 123,742	$ 125,997	$ 114,027
90 days or more past due	75	113	1,372
Total impaired accrual loans	$ 123,817	$ 126,110	$ 115,399
Total impaired loans	$ 362,674	$ 376,692	$ 367,907
Additional commitments to lend	$ 1,109	$ 663	$ 7,878

Additional impaired loan information at period end is summarized as follows:

(dollars in thousands)	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	$ 21,823	$ 25,664	$ 3,942	$ 21,524	$ 1,065
Production and intermediate-term	45,877	51,572	13,291	44,172	2,295
Processing and marketing	–	–	–	–	–
Farm-related business	86	91	17	1,557	4
Rural residential real estate	4,456	4,628	844	1,810	82
Lease receivables	50	50	–	43	3
Other (including Mission Related)	8,918	8,857	624	9,132	477
Total	$ 81,210	$ 90,862	$ 18,718	$ 78,238	$ 3,926
With no related allowance for credit losses					
Real estate mortgage	$ 160,484	$ 194,843	$ –	$ 160,040	$ 7,774
Production and intermediate-term	100,944	145,749	–	107,672	6,481
Processing and marketing	2,827	3,201	–	4,089	145
Farm-related business	3,577	5,420	–	2,997	181
Rural residential real estate	13,592	14,917	–	12,819	564
Lease receivables	–	–	–	18	–
Other (including Mission Related)	40	891	–	92	2
Total	$ 281,464	$ 365,021	$ –	$ 287,727	$ 15,147
Total					
Real estate mortgage	$ 182,307	$ 220,507	$ 3,942	$ 181,564	$ 8,839
Production and intermediate-term	146,821	197,321	13,291	151,844	8,776
Processing and marketing	2,827	3,201	–	4,089	145
Farm-related business	3,663	5,511	17	4,554	185
Rural residential real estate	18,048	19,545	844	14,629	646
Lease receivables	50	50	–	61	3
Other (including Mission Related)	8,958	9,748	624	9,224	479
Total	$ 362,674	$ 455,883	$ 18,718	$ 365,965	$ 19,073

(dollars in thousands)	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	$ 25,136	$ 28,746	$ 5,636	$ 31,749	$ 1,260
Production and intermediate-term	40,892	45,734	10,326	47,033	2,132
Processing and marketing	–	–	–	1,105	–
Farm-related business	3,480	4,242	154	3,744	190
Rural residential real estate	2,282	2,392	437	1,775	90
Lease receivables	–	–	–	–	–
Other (including Mission Related)	9,050	9,005	605	9,274	245
Total	$ 80,840	$ 90,119	$ 17,158	$ 94,680	$ 3,917
With no related allowance for credit losses					
Real estate mortgage	$ 160,279	$ 195,427	$ –	$ 158,324	$ 8,381
Production and intermediate-term	116,622	162,400	–	106,808	7,730
Processing and marketing	5,389	5,583	–	2,352	295
Farm-related business	2,451	3,818	–	2,490	122
Rural residential real estate	11,028	12,470	–	9,991	438
Lease receivables	83	136	–	22	4
Other (including Mission Related)	–	820	–	450	245
Total	$ 295,852	$ 380,654	$ –	$ 280,437	$ 17,215
Total					
Real estate mortgage	$ 185,415	$ 224,173	$ 5,636	$ 190,073	$ 9,641
Production and intermediate-term	157,514	208,134	10,326	153,841	9,862
Processing and marketing	5,389	5,583	–	3,457	295
Farm-related business	5,931	8,060	154	6,234	312
Rural residential real estate	13,310	14,862	437	11,766	528
Lease receivables	83	136	–	22	4
Other (including Mission Related)	9,050	9,825	605	9,724	490
Total	$ 376,692	$ 470,773	$ 17,158	$ 375,117	$ 21,132

(dollars in thousands)	December 31, 2015			Year Ended December 31, 2015	
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	$ 42,006	$ 46,344	$ 8,094	$ 51,679	$ 1,869
Production and intermediate-term	57,049	73,294	12,289	56,147	2,467
Processing and marketing	1,500	1,500	–	379	75
Farm-related business	3,920	4,583	367	7,683	190
Power and water/waste disposal	–	–	–	347	–
Rural residential real estate	2,068	2,460	470	2,664	92
Lease receivables	–	–	–	–	–
Other (including Mission Related)	9,249	9,179	592	8,555	491
Total	$ 115,792	$ 137,360	$ 21,812	$ 127,454	$ 5,184
With no related allowance for credit losses					
Real estate mortgage	$ 152,488	$ 195,648	$ –	$ 143,514	$ 8,514
Production and intermediate-term	85,849	125,081	–	105,985	4,355
Processing and marketing	8	2,152	–	1,468	1
Farm-related business	2,386	2,405	–	2,578	116
Power and water/waste disposal	–	–	–	–	–
Rural residential real estate	11,289	13,490	–	7,574	407
Lease receivables	6	61	–	10	–
Other (including Mission Related)	89	880	–	1,910	3
Total	$ 252,115	$ 339,717	$ –	$ 263,039	$ 13,396
Total					
Real estate mortgage	$ 194,494	$ 241,992	$ 8,094	$ 195,193	$ 10,383
Production and intermediate-term	142,898	198,375	12,289	162,132	6,822
Processing and marketing	1,508	3,652	–	1,847	76
Farm-related business	6,306	6,988	367	10,261	306
Power and water/waste disposal	–	–	–	347	–
Rural residential real estate	13,357	15,950	470	10,238	499
Lease receivables	6	61	–	10	–
Other (including Mission Related)	9,338	10,059	592	10,465	494
Total	$ 367,907	$ 477,077	$ 21,812	$ 390,493	$ 18,580

Unpaid principal balance represents the contractual principal balance of the loan.

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

(dollars in thousands)	Real Estate Mortgage	Production and Intermediate-term	Agribusiness*	Communication	Power and Water/Waste Disposal	Rural Residential Real Estate	International	Lease Receivables	Other Loans **	Total
Activity related to allowance for credit losses:										
Balance at December 31, 2016	$ 77,629	$ 81,548	$ 10,342	$ 2,987	$ 3,040	$ 6,008	$ 186	$ 38	$ 822	$ 182,600
Charge-offs	(2,873)	(6,007)	(133)	–	–	(401)	–	(1)	–	(9,415)
Recoveries	3,423	2,577	265	–	16	173	–	29	28	6,511
Provision for loan losses	4,404	7,744	503	(750)	(121)	1,482	(35)	(37)	181	13,371
Loan type reclassification	103	175	–	–	–	–	–	25	(303)	–
Balance at December 31, 2017	$ 82,686	$ 86,037	$ 10,977	$ 2,237	$ 2,935	$ 7,262	$ 151	$ 54	$ 728	$ 193,067
Balance at December 31, 2015	$ 79,176	$ 80,611	$ 8,087	$ 2,449	$ 1,933	$ 5,268	$ 106	$ 41	$ 946	$ 178,617
Charge-offs	(3,520)	(6,079)	(348)	–	–	(539)	–	–	–	(10,486)
Recoveries	9,012	4,507	686	–	–	433	–	3	19	14,660
Provision for loan losses	(6,996)	2,611	1,902	538	1,107	846	80	(6)	(273)	(191)
Loan type reclassification	(43)	(102)	15	–	–	–	–	–	130	–
Balance at December 31, 2016	$ 77,629	$ 81,548	$ 10,342	$ 2,987	$ 3,040	$ 6,008	$ 186	$ 38	$ 822	$ 182,600
Balance at December 31, 2014	$ 76,151	$ 76,431	$ 11,990	$ 1,518	$ 2,406	$ 5,142	$ 54	$ 80	$ 1,081	$ 174,853
Charge-offs	(5,220)	(5,278)	(2,226)	–	(414)	(952)	–	–	–	(14,090)
Recoveries	11,957	3,811	1,826	–	–	233	–	–	22	17,849
Provision for loan losses	(1,981)	4,585	(4,172)	931	(59)	845	27	(39)	(132)	5
Loan type reclassification	(1,731)	1,062	669	–	–	–	25	–	(25)	–
Balance at December 31, 2015	$ 79,176	$ 80,611	$ 8,087	$ 2,449	$ 1,933	$ 5,268	$ 106	$ 41	$ 946	$ 178,617
Allowance on loans evaluated for impairment:										
Individually	$ 3,942	$ 13,291	$ 17	$ –	$ –	$ 844	$ –	$ –	$ 624	$ 18,718
Collectively	78,744	72,746	10,960	2,237	2,935	6,418	151	54	104	174,349
PCI	–	–	–	–	–	–	–	–	–	–
Balance at December 31, 2017	$ 82,686	$ 86,037	$ 10,977	$ 2,237	$ 2,935	$ 7,262	$ 151	$ 54	$ 728	$ 193,067
Individually	$ 5,636	$ 10,326	$ 154	$ –	$ –	$ 437	$ –	$ –	$ 605	$ 17,158
Collectively	71,993	71,222	10,188	2,987	3,040	5,571	186	38	217	165,442
PCI	–	–	–	–	–	–	–	–	–	–
Balance at December 31, 2016	$ 77,629	$ 81,548	$ 10,342	$ 2,987	$ 3,040	$ 6,008	$ 186	$ 38	$ 822	$ 182,600
Individually	$ 8,094	$ 12,289	$ 367	$ –	$ –	$ 470	$ –	$ –	$ 592	$ 21,812
Collectively	71,082	68,322	7,720	2,449	1,933	4,798	106	41	354	156,805
PCI	–	–	–	–	–	–	–	–	–	–
Balance at December 31, 2015	$ 79,176	$ 80,611	$ 8,087	$ 2,449	$ 1,933	$ 5,268	$ 106	$ 41	$ 946	$ 178,617
Recorded investment in loans evaluated for impairment:										
Individually	$ 320,369	$ 144,163	$ 6,062	$ –	$ –	$ 1,414,184	$ –	229	$ 8,918	$ 1,893,925
Collectively	13,894,608	6,970,579	2,470,644	467,502	631,817	2,026,655	98,952	12,161	198,165	26,771,083
PCI	2,018	–	–	–	–	59	–	–	–	2,077
Ending balance at December 31, 2017	$ 14,216,995	$ 7,114,742	$ 2,476,706	$ 467,502	$ 631,817	$ 3,440,898	$ 98,952	$ 12,390	$ 207,083	$ 28,667,085
Individually	$ 291,064	$ 150,529	$ 12,733	$ –	$ –	$ 1,652,900	$ –	305	$ 9,050	$ 2,116,581
Collectively	13,056,781	7,161,636	2,391,976	473,579	583,793	1,584,054	101,844	13,321	167,429	25,534,413
PCI	2,088	–	–	–	–	41	–	–	–	2,129
Ending balance at December 31, 2016	$ 13,349,933	$ 7,312,165	$ 2,404,709	$ 473,579	$ 583,793	$ 3,236,995	$ 101,844	$ 13,626	$ 176,479	$ 27,653,123
Individually	$ 269,840	$ 129,699	$ 12,133	$ –	$ –	$ 1,771,871	$ –	$ –	$ 9,304	$ 2,192,847
Collectively	12,358,355	6,878,739	2,385,499	451,442	505,704	1,312,847	70,307	3,195	174,958	24,141,046
PCI	2,207	–	–	–	–	124	–	–	–	2,331
Ending balance at December 31, 2015	$ 12,630,402	$ 7,008,438	$ 2,397,632	$ 451,442	$ 505,704	$ 3,084,842	$ 70,307	$ 3,195	$ 184,262	$ 26,336,224

* *Includes the loan types: Loans to Cooperatives, Processing and Marketing, and Farm-Related Business.*
** *Includes Loans to OFIs and Mission Related loans.*

To mitigate risk of loan losses, the Bank and Associations may enter into guarantee arrangements with certain government-sponsored enterprises (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 Bank or 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 $3.201 billion, $3.245 billion, and $3.479 billion at December 31, 2017, 2016, and 2015, respectively. Fees paid for such guarantee commitments totaled $5.4 million, $5.9 million, and $6.6 million for 2017, 2016, and 2015, 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 modifications that occurred during the periods presented. The tables do not include any purchased credit impaired loans.

(dollars in thousands)	Year Ended December 31, 2017				
Outstanding Recorded Investment	**Interest Concessions**	**Principal Concessions**	**Other Concessions**	**Total**	**Charge-offs**
Pre-modification:					
Real estate mortgage	$ 5,064	$ 24,149	$ –	$ 29,213	
Production and intermediate-term	3,112	27,274	198	30,584	
Processing and marketing	–	2,030	–	2,030	
Rural residential real estate	1,304	388	–	1,692	
Total	$ 9,480	$ 53,841	$ 198	$ 63,519	
Post-modification:					
Real estate mortgage	$ 5,118	$ 24,233	$ –	$ 29,351	$ (1)
Production and intermediate-term	3,397	26,432	198	30,027	(690)
Processing and marketing	–	2,029	–	2,029	–
Rural residential real estate	1,408	391	–	1,799	–
Total	$ 9,923	$ 53,085	$ 198	$ 63,206	$ (691)

(dollars in thousands)	Year Ended December 31, 2016				
Outstanding Recorded Investment	**Interest Concessions**	**Principal Concessions**	**Other Concessions**	**Total**	**Charge-offs**
Pre-modification:					
Real estate mortgage	$ 5,421	$ 18,122	$ 252	$ 23,795	
Production and intermediate-term	2,730	27,397	–	30,127	
Farm-related business	–	82	–	82	
Rural residential real estate	643	769	29	1,441	
Total	$ 8,794	$ 46,370	$ 281	$ 55,445	
Post-modification:					
Real estate mortgage	$ 5,347	$ 17,189	$ 253	$ 22,789	$ (20)
Production and intermediate-term	2,722	27,731	–	30,453	(1)
Farm-related business	–	72	–	72	–
Rural residential real estate	653	778	31	1,462	–
Total	$ 8,722	$ 45,770	$ 284	$ 54,776	$ (21)

(dollars in thousands)	Year Ended December 31, 2015				
Outstanding Recorded Investment	**Interest Concessions**	**Principal Concessions**	**Other Concessions**	**Total**	**Charge-offs**
Pre-modification:					
Real estate mortgage	$ 1,963	$ 17,107	$ –	$ 19,070	
Production and intermediate-term	4,482	33,851	106	38,439	
Processing and marketing	–	489	–	489	
Rural residential real estate	226	820	80	1,126	
Other (including Mission Related)	–	–	1,000	1,000	
Total	$ 6,671	$ 52,267	$ 1,186	$ 60,124	
Post-modification:					
Real estate mortgage	$ 2,007	$ 16,900	$ –	$ 18,907	$ (43)
Production and intermediate-term	4,508	33,494	106	38,108	(82)
Processing and marketing	–	489	–	489	–
Rural residential real estate	230	845	126	1,201	–
Other (including Mission Related)	–	–	1,000	1,000	–
Total	$ 6,745	$ 51,728	$ 1,232	$ 59,705	$ (125)

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.

The following table presents outstanding recorded investment for TDRs that occurred during the previous twelve months and for which there was a subsequent payment default during the period. Payment default is defined as a payment that was thirty days or more past due.

Defaulted troubled debt restructurings	Year Ended December 31,		
(dollars in thousands)	**2017**	**2016**	**2015**
Real estate mortgage	$ 6,453	$ 1,491	$ 2,782
Production and intermediate-term	2,615	4,772	4,546
Farm-related business	–	45	–
Rural residential real estate	650	209	904
Total	$ 9,718	$ 6,517	$ 8,232

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,		
(dollars in thousands)	2017	2016	2015	2017	2016	2015
Real estate mortgage	$ 101,252	$ 95,557	$ 102,280	$ 37,018	$ 35,614	$ 41,348
Production and intermediate-term	75,951	84,126	91,329	28,851	31,638	52,670
Processing and marketing	1,600	–	1	1,600	–	1
Farm-related business	2,461	4,355	4,559	2,022	2,759	2,765
Rural residential real estate	5,785	4,703	5,217	2,774	1,783	1,899
Other (including Mission Related)	8,958	9,050	9,338	–	–	14
Total	$ 196,007	$ 197,791	$ 212,724	$ 72,265	$ 71,794	$ 98,697
Additional commitments to lend	$ 880	$ 321	$ 6,948			

The following table presents foreclosure information as of period end:

(dollars in thousands)	December 31, 2017
Carrying amount of foreclosed residential real estate properties held as a result of obtaining physical possession	$ 509
Recorded investment of consumer mortgage loans secured by residential real estate for which formal foreclosure proceedings are in process	$ 1,892

PCI Loans

For further discussion of the District's accounting for PCI loans, see Note 2, *Summary of Significant Accounting Policies*.

In connection with past mergers, certain Associations purchased impaired loans that are not accounted for as debt securities. The carrying amounts of those loans included in the balance sheet amounts of loans receivable at December 31, 2017, were as follows.

(dollars in thousands)	
Real estate mortgage	$ 2,018
Rural residential real estate	59
Total Loans	$ 2,077

There was no allowance related to these loans at December 31, 2017, 2016 or 2015. During the periods ended December 31, 2017, 2016, and 2015, provision expense on these loans was a net expense reversal of $290 thousand, a net expense reversal of $480 thousand, and a net expense reversal of $888 thousand, respectively. See above for a summary of changes in the total allowance for loan losses for the periods ended December 31, 2017, 2016, and 2015. There were no loans acquired for 2017, 2016 or 2015 for which it was probable at acquisition that all contractually required payments would not be collected.

Certain loans that are within the scope of purchased impaired loan guidance are accounted for using a cash basis method of income recognition because the acquiring Associations could not reasonably estimate cash flows expected to be collected. Substantially all of the loans acquired were real estate collateral dependent loans. At the time of purchase, the real estate markets were very unpredictable, making estimation of the amount and timing of a sale of loan collateral in essentially the same condition as received upon foreclosure indeterminate. As such, the acquiring Associations did not have the information necessary to reasonably estimate cash flows expected to be collected to compute their yield. Management determined a nonaccrual classification would be the most appropriate and that no income would be recognized on these loans as is allowed under accounting guidance.

Note 4 — Investments

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.

Other Investments

In 2006, certain Associations agreed to become one of several investors in a USDA approved RBIC. This investment was made under the USDA's Rural Business Investment Program, which is authorized by the FSRIA. It permits the USDA to license RBICs and provide guarantees and grants to promote rural economic development and job opportunities and meet equity capital investment needs of small rural enterprises. FSRIA authorizes System institutions to establish and invest in RBICs, provided that such investments are not greater than 5 percent of the capital and surplus of the System institution.

Over the years, the Associations purchased total equity investments in the RBIC of $1.6 million. There are no outstanding commitments to make additional equity purchases beyond this amount.

Beginning in 2013, analyses indicated that decreases in value of the investment had occurred that were other than temporary, due to a series of losses and other factors. As a result, the Associations ultimately wrote the investment value down to $0. Impairment Losses in the Statements of Income includes $251 thousand for the year ended December 31, 2015 related to this investment.

Investment Securities

District investments consist primarily of mortgage-backed securities (MBSs) collateralized by U.S. government or U.S. agency guaranteed residential and commercial mortgages. They are held to maintain a liquidity reserve, manage short-term surplus funds, and manage interest rate risk. These securities meet the applicable FCA regulatory guidelines related to government agency guaranteed investments.

Non-agency ABSs are included in available-for-sale investments. These securities must meet the applicable FCA regulatory guidelines, which require them to be high quality, senior class, and rated in the top category (AAA/Aaa) by Nationally Recognized Statistical Rating Organizations (NRSROs) at the time of purchase. To achieve these ratings, the securities may have a guarantee of timely payment of principal and interest, credit enhancements achieved through over-collateralization or other means, priority of payments for senior classes over junior classes, or bond insurance. All of the non-agency securities owned have one or more credit enhancement features.

The FCA considers a non-agency security ineligible if it falls below the AAA/Aaa credit rating criteria and requires System institutions to provide notification to the FCA when a security becomes ineligible. In August, 2016, the Bank disposed of its non-agency CMO and ABS securities not rated in the top category by at least one of the NRSROs.

Held-to-maturity investments consist of Mission Related Investments acquired primarily under the Rural Housing Mortgage-Backed Securities (RHMS) and Rural America Bond (RAB) pilot programs. RHMS must be fully guaranteed by a government agency or government sponsored enterprise. RABs are private placement securities which generally have some form of credit enhancement.

Held-to-maturity securities also include ABSs issued through the Small Business Administration and guaranteed by the full faith and credit of the United States government. They are held for managing short-term surplus funds and reducing interest rate risk. These securities meet the applicable FCA regulatory guidelines related to government agency guaranteed investments.

In its Conditions of Approval for the program, the FCA considers an RAB ineligible if its investment rating, based on the internal 14-point risk rating scale used to also grade loans, falls below 9. The FCA requires System institutions to provide notification when a security becomes ineligible. At December 31, 2017, the District held three RABs whose credit quality had deteriorated beyond the program limits.

Effective December 31, 2014, the FCA ended each pilot program approved after 2004 as part of the Investment in Rural America initiative. Each institution participating in such programs may continue to hold its investment through the maturity dates for the investments, provided the institution continues to meet all approval conditions. The FCA can consider future participation in these programs on a case-by-case basis.

An agreement with a commercial bank requires AgFirst to maintain $50.0 million as a compensating balance. At December 31, 2017, the Bank held $42.4 million in U.S. Treasury securities for that purpose. The remainder of the compensating balance is held in cash in a demand deposit account. These securities are excluded when calculating the amount of eligible liquidity investments.

The Bank also holds certain equity investments in Money Market funds. These funds are accounted for as investment securities but are classified as Cash Equivalents in the Balance Sheets and Statements of Cash Flows.

Available-for-sale

At December 31, 2017, the Bank held 100 percent of the District's available-for-sale investments.

A summary of the amortized cost and fair value of District debt securities held as available-for-sale investments at each period end follows:

	December 31, 2017				
(dollars in thousands)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Yield
U.S. Govt. Treasury Securities	$ 490,570	$ 2	$ (475)	$ 490,097	1.31%
U.S. Govt. Guaranteed	4,536,232	35,601	(36,620)	4,535,213	2.06
U.S. Govt. Agency Guaranteed	2,022,077	6,618	(21,852)	2,006,843	1.90
Non-Agency ABSs	634,752	84	(3,384)	631,452	1.60
Total	$ 7,683,631	$ 42,305	$ (62,331)	$ 7,663,605	1.93%

	December 31, 2016				
(dollars in thousands)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Yield
U.S. Govt. Treasury Securities	$ 342,171	$ 12	$ (235)	$ 341,948	0.56%
U.S. Govt. Guaranteed	4,255,293	41,462	(22,469)	4,274,286	1.61
U.S. Govt. Agency Guaranteed	2,265,945	10,763	(26,085)	2,250,623	1.37
Non-Agency ABSs	624,870	163	(1,049)	623,984	1.20
Total	$ 7,488,279	$ 52,400	$ (49,838)	$ 7,490,841	1.46%

	December 31, 2015				
(dollars in thousands)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Yield
U.S. Govt. Treasury Securities	$ 42,405	$ –	$ –	$ 42,405	0.68%
U.S. Govt. Guaranteed	3,924,073	55,715	(9,198)	3,970,590	1.69
U.S. Govt. Agency Guaranteed	2,123,526	16,050	(7,688)	2,131,888	0.98
Non-Agency CMOs (a)	140,516	51	(13,707)	126,860	0.75
Non-Agency ABSs	653,606	25,084	(1,321)	677,369	1.24
Total	$ 6,884,126	$ 96,900	$ (31,914)	$ 6,949,112	1.40%

(a) Gross unrealized losses included non-credit related other-than-temporary impairment included in AOCI of $9.2 million for Non-Agency CMOs.

Held-to-maturity

At December 31, 2017, the amortized cost and fair value of debt securities held by the Bank as held-to-maturity investments were $458.6 million (87.83 percent) and $463.3 million (87.64 percent), respectively, of the District total amounts.

A summary of the amortized cost and fair value of District debt securities held as held-to-maturity investments at each period end follows:

	December 31, 2017				
(dollars in thousands)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Yield
U.S. Govt. Guaranteed	$ 15,964	$ 287	$ (76)	$ 16,175	1.93%
U.S. Govt. Agency Guaranteed	401,810	7,438	(6,166)	403,082	3.25
RABs and Other (a)	104,374	6,011	(929)	109,456	6.26
Total	$ 522,148	$ 13,736	$ (7,171)	$ 528,713	3.81%

	December 31, 2016				
(dollars in thousands)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Yield
U.S. Govt. Guaranteed	$ 23,521	$ 366	$ (94)	$ 23,793	1.90%
U.S. Govt. Agency Guaranteed	462,888	10,553	(8,505)	464,936	2.98
RABs and Other (b)	134,273	5,537	(2,559)	137,251	5.87
Total	$ 620,682	$ 16,456	$ (11,158)	$ 625,980	3.56%

	December 31, 2015				
(dollars in thousands)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Yield
U.S. Govt. Guaranteed	$ 31,739	$ 523	$ (119)	$ 32,143	1.45%
U.S. Govt. Agency Guaranteed	465,073	14,891	(5,978)	473,986	3.50
RABs and Other (c)	175,860	8,027	(2,262)	181,625	5.83
Total	$ 672,672	$ 23,441	$ (8,359)	$ 687,754	4.01%

(a) Gross unrealized losses included non-credit related other-than-temporary impairment included in AOCI of $95 thousand for RABs and Other.
(b) Gross unrealized losses included non-credit related other-than-temporary impairment included in AOCI of $95 thousand for RABs and Other.
(c) Gross unrealized losses included non-credit related other-than-temporary impairment included in AOCI of $101 thousand for RABs and Other.

Proceeds from sales and realized gains and losses on all sales of investment securities are as follows:

	Year Ended December 31,		
(dollars in thousands)	2017	2016	2015
Proceeds from sales	$ 77,153	$ 155,342	$ 29,084
Realized gains	–	23,822	1,126
Realized losses	258	–	–

A summary of the contractual maturity, estimated fair value, and amortized cost of investment securities at December 31, 2017 follows:

Available-for-sale

	Due in 1 year or less		Due after 1 year through 5 years		Due after 5 years through 10 years		Due after 10 years		Total	
(dollars in thousands)	Amount	Weighted Average Yield	Amount	Weighted Average Yield	Amount	Weighted Average Yield	Amount	Weighted Average Yield	Amount	Weighted Average Yield
U.S. Govt. Treasury Securities	$ 463,021	1.31 %	$ 27,076	1.29 %	$ –	– %	$ –	– %	$ 490,097	1.31 %
U.S. Govt. Guaranteed	–	–	–	–	99,311	1.99	4,435,902	2.06	4,535,213	2.06
U.S. Govt. Agency Guaranteed	12	1.97	221,811	1.80	187,774	1.77	1,597,246	1.93	2,006,843	1.90
Non-Agency ABSs	–	–	435,397	1.40	196,055	2.03	–	–	631,452	1.60
Total fair value	$ 463,033	1.31 %	$ 684,284	1.53 %	$ 483,140	1.92 %	$ 6,033,148	2.02 %	$ 7,663,605	1.93 %
Total amortized cost	$ 463,180		$ 686,840		$ 484,198		$ 6,049,413		$ 7,683,631	

Held-to-maturity

	Due in 1 year or less		Due after 1 year through 5 years		Due after 5 years through 10 years		Due after 10 years		Total	
(dollars in thousands)	Amount	Weighted Average Yield	Amount	Weighted Average Yield	Amount	Weighted Average Yield	Amount	Weighted Average Yield	Amount	Weighted Average Yield
U.S. Govt. Guaranteed	$ 1,650	2.13 %	$ 9,261	2.05 %	$ 3,464	1.82 %	$ 1,589	1.23 %	$ 15,964	1.93 %
U.S. Govt. Agency Guaranteed	–	–	44	4.27	–	–	401,766	3.25	401,810	3.25
RABs and Other	6,031	5.42	15,999	6.45	19,124	5.99	63,220	6.38	104,374	6.26
Total amortized cost	$ 7,681	4.71 %	$ 25,304	4.83 %	$ 22,588	5.35 %	$ 466,575	3.67 %	$ 522,148	3.81 %
Total fair value	$ 7,732		$ 25,859		$ 23,590		$ 471,532		$ 528,713	

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

An investment is considered impaired if its fair value is less than its cost. This also applies to those securities other-than-temporarily impaired for which a credit loss has been recognized but noncredit-related losses continue to remain unrealized. The following tables show the fair value and gross unrealized losses for investments that have been in a continuous unrealized loss position aggregated by investment category at each reporting period. A continuous unrealized loss position for an investment is measured from the date the impairment was first identified.

	December 31, 2017					
	Less than 12 Months		12 Months Or Greater		Total	
(dollars in thousands)	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
U.S. Govt. Treasury Securities	$ 413,053	$ (182)	$ 27,193	$ (293)	$ 440,246	$ (475)
U.S. Govt. Guaranteed	1,357,768	(14,066)	1,418,523	(22,630)	2,776,291	(36,696)
U.S. Govt. Agency Guaranteed	334,739	(1,454)	1,380,697	(26,564)	1,715,436	(28,018)
Non-Agency ABSs	438,392	(2,569)	162,935	(815)	601,327	(3,384)
RABs and Other	682	(1)	11,896	(928)	12,578	(929)
Total	$ 2,544,634	$ (18,272)	$ 3,001,244	$ (51,230)	$ 5,545,878	$ (69,502)

	December 31, 2016					
	Less than 12 Months		12 Months Or Greater		Total	
(dollars in thousands)	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
U.S. Govt. Treasury Securities	$ 142,097	$ (235)	$ –	$ –	$ 142,097	$ (235)
U.S. Govt. Guaranteed	2,071,499	(18,861)	449,688	(3,702)	2,521,187	(22,563)
U.S. Govt. Agency Guaranteed	1,273,491	(26,423)	694,614	(8,167)	1,968,105	(34,590)
Non-Agency ABSs	374,745	(1,049)	–	–	374,745	(1,049)
RABs and Other	14,565	(665)	18,119	(1,894)	32,684	(2,559)
Total	$ 3,876,397	$ (47,233)	$ 1,162,421	$ (13,763)	$ 5,038,818	$ (60,996)

	December 31, 2015					
	Less than 12 Months		12 Months Or Greater		Total	
(dollars in thousands)	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
U.S. Govt. Guaranteed	$ 1,112,369	$ (5,613)	$ 454,694	$ (3,704)	$ 1,567,063	$ (9,317)
U.S. Govt. Agency Guaranteed	925,228	(6,849)	478,018	(6,817)	1,403,246	(13,666)
Non-Agency CMOs	753	(2)	121,417	(13,705)	122,170	(13,707)
Non-Agency ABSs	600,067	(955)	2,064	(366)	602,131	(1,321)
RABs and Other	49,318	(1,658)	10,761	(604)	60,079	(2,262)
Total	$ 2,687,735	$ (15,077)	$ 1,066,954	$ (25,196)	$ 3,754,689	$ (40,273)

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

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

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

Significant inputs used to estimate the amount of credit loss include, but are not limited to, performance indicators of the underlying assets in the security (including default rates, delinquency rates, and percentage of nonperforming assets), loan-to-collateral value ratios, third-party guarantees, current levels of subordination, vintage, geographic concentration, and credit ratings. The District obtains assumptions for the default rate, prepayment rate, and loss severity rate from an independent third party.

Based on the credit reviews discussed above, none of the securities held in the District's portfolio were determined to be other-than-temporarily impaired at December 31, 2017 or 2016. Following are the impairment assumptions used for securities held at December 31, 2015. These securities were sold during 2016.

Assumptions Used	Non-Agency CMOs	Non-Agency ABSs
December 31, 2015		
Default rate by range	1.24% to 25.28%	24.03% to 39.76%
Prepayment rate by range	3.11% to 15.56%	2.35% to 10.41%
Loss severity by range	4.37% to 59.66%	86.04% to 100.65%

When the District does not intend to sell other-than-temporarily impaired debt securities and is not more likely than not to be required to sell before recovery, the total OTTI is reflected in the Statements of Income with: (1) a net other-than-temporary impairment amount related to estimated credit loss, and (2) an amount relating to all other factors, recognized as a reclassification to or from Other Comprehensive Income.

Because the District changed its intention to sell its ineligible available-for-sale securities, $14.9 million of credit-related OTTI was recognized for 2016, and is included in Net Other-than-temporary Impairment Losses in the Statements of Income.

For 2017, net unrealized losses of $22.6 million were recognized in other comprehensive income on available-for-sale investments that are not other-than-temporarily impaired.

The following schedule details the activity related to cumulative credit losses on investments recognized in earnings for which a portion of an other-than temporary impairment was recognized in other comprehensive income:

	For the Year Ended December 31,		
(dollars in thousands)	2017	2016	2015
Amount related to credit loss-beginning balance	$ 2,024	$ 59,226	$ 60,217
Additions for initial credit impairments	–	4,665	–
Additions for subsequent credit impairments	–	10,282	1,658
Reductions for increases in expected cash flows	–	(2,324)	(2,649)
Reductions for securities sold/settled/matured	–	(69,825)	–
Amount related to credit loss-ending balance	$ 2,024	$ 2,024	$ 59,226
Life to date incurred credit losses	–	–	(21,026)
Remaining unrealized credit losses	$ 2,024	$ 2,024	$ 38,200

For all other impaired investments, the Bank has not recognized any credit losses as the impairments are deemed temporary and result from non-credit related factors. The Bank has the ability and intent to hold these investments until a recovery of unrealized losses occurs, which may be at maturity, and at this time expects to collect the full principal amount and interest due on these securities. Substantially all of these investments were in U.S. government agency securities and the Bank expects these securities would not be settled at a price less than their amortized cost.

The following table summarizes gains (losses) for the period related to equity securities:

	For the Year Ended December 31,		
(dollars in thousands)	2017	2016	2015
Net gains (losses) on equity securities			
Net gains (losses) recognized	$ 256	$ –	$ –
Less realized net gains (losses)	167	–	–
Unrealized gains (losses)	$ 89	$ –	$ –

Note 5 — Real Estate and Other Property

Premises and Equipment

Premises and equipment consisted of the following:

	December 31,		
(dollars in thousands)	2017	2016	2015
Land	$ 46,938	$ 45,968	$ 43,316
Buildings and improvements	182,243	181,773	171,729
Furniture and equipment	112,132	113,736	125,670
Work in progress	9,810	2,799	3,173
	351,123	344,276	343,888
Less: accumulated depreciation	153,631	149,993	154,430
Total	$ 197,492	$ 194,283	$ 189,458

Other Property Owned

Net losses (gains) from other property owned and held for sale consisted of the following:

	December 31,		
(dollars in thousands)	2017	2016	2015
Losses (gains) on sale, net	$ 2,325	$ (2,721)	$ (1,809)
Carrying value adjustments	3,574	2,289	4,047
Operating (income) expense, net	931	1,679	1,101
Total	$ 6,830	$ 1,247	$ 3,339

Deferred gains on sales of other property owned totaled $312 thousand, $410 thousand, and $756 thousand at December 31, 2017, 2016, and 2015, respectively. Gains were deferred as the sales involved financing from the Bank and/or District Associations and did not meet the criteria for immediate recognition. At December 31, 2017, total deferred gains are included in Other Liabilities in the Combined Balance Sheets.

Note 6 — Debt

Bonds and Notes

AgFirst, unlike commercial banks and other depository institutions, obtains funds for its lending operations primarily from the sale of Systemwide Debt Securities issued jointly by the System banks through the Funding Corporation. Certain conditions must be met before AgFirst can participate in the issuance of Systemwide Debt Securities. As one condition of participation, AgFirst is required by the Farm Credit Act and FCA regulations to maintain specified eligible assets, at least equal in value to the total amount of debt obligations outstanding for which it is primarily liable. This requirement does not provide holders of Systemwide Debt Securities with a security interest in any assets of the banks. The System banks and the Funding Corporation have entered into the Third Amended and Restated Market Access Agreement (MAA), which establishes criteria and procedures for the banks to provide certain information and, under certain circumstances, for restricting or prohibiting an individual bank's participation in Systemwide debt issuances, thereby reducing other System banks' exposure to statutory joint and several liabilities. At December 31, 2017, AgFirst was in compliance with the conditions of participation for the issuances of Systemwide Debt Securities.

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

The following table provides a summary of AgFirst's recorded liability for outstanding Systemwide Debt Securities by maturity. Weighted average interest rates include the effect of any related derivative financial instruments. The table does not include $1.016 billion of intra-system obligations.

	December 31, 2017					
	Bonds		Discount Notes		Total	
Maturities	Amortized Cost	Weighted Average Interest Rate	Amortized Cost	Weighted Average Interest Rate	Amortized Cost	Weighted Average Interest Rate
			(dollars in thousands)			
2018	$ 7,036,715	1.29%	$ 4,933,312	1.32%	$ 11,970,027	1.30%
2019	5,819,914	1.35	–	–	5,819,914	1.35
2020	3,165,817	1.49	–	–	3,165,817	1.49
2021	1,984,470	1.75	–	–	1,984,470	1.75
2022	1,552,510	1.84	–	–	1,552,510	1.84
2023 and after	5,270,253	2.60	–	–	5,270,253	2.60
Total	$ 24,829,679	1.68%	$ 4,933,312	1.32%	$ 29,762,991	1.62%

Discount notes are issued with maturities of one year or less. The weighted average maturity of discount notes at period end was 151 days.

Systemwide debt includes callable bonds consisting of the following:

Amortized Cost	First Call Date	Year of Maturity
(dollars in thousands)		
$ 15,448,208	2018	2018 – 2032
4,987	2022	2027
$ 15,453,195	Total	

Most callable debt may be called on the first call date and any time thereafter.

As described in Note 1, the Insurance Fund is available to ensure the timely payment of principal and interest on Systemwide Debt Securities (Insured Debt) of System banks to the extent net assets are available in the Insurance Fund and not designated for specific use. All other liabilities on the financial statements are uninsured.

The Bank has sold participating pro-rata interests in District Association Direct Notes to another System bank which are accounted for as secured borrowings. At December 31, 2017, 2016, and 2015, the balance of these secured borrowings of $1.016 billion, $694.4 million, and $449.7 million, respectively, was included in Systemwide and Other Notes Payable in the Combined Balance Sheets. These borrowings bear interest at an annual variable rate of one month LIBOR plus 60 basis points with maturity on January 31, 2019.

Note 7 — Shareholders' Equity

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

A. **Protected Stock:** Protection of certain borrower equity is provided under the Farm Credit Act which requires AgFirst and District Associations to retire such capital at par or stated value regardless of its book value. Protected borrower equity includes capital stock, participation certificates, and allocated equities which were outstanding as of January 6, 1988, or were issued or allocated prior to October 6, 1988. If a Bank or an Association is unable to retire protected borrower stock at par value or stated value, amounts required to retire this stock would be obtained from the Insurance Fund.

B. **Perpetual Preferred Stock:** On June 8, 2007, AgFirst issued $250.0 million of Class B Perpetual Non-Cumulative Fixed-to-Floating Rate Subordinated Preferred Stock, Series 1. Dividends on the stock are non-cumulative and are payable semi-annually in arrears on the 15th day of June and December in each year, commencing December 15, 2007, and ending on June 15, 2012, at an annual rate equal to 6.585 percent of the par value of $1 thousand per share, and will thereafter, commencing September 15, 2012, be payable quarterly in arrears on the 15th day of March, June, September, and December in each year, at an annual rate equal to 3-Month U.S. dollar (USD) LIBOR plus 1.13 percent. In the event dividends are not declared on the Class B, Series 1 Preferred Stock for payment on any dividend payment date, then such dividends shall not accumulate and shall cease to accrue and be payable. The stock may be redeemed on June 15th on any five-year anniversary of its year of issuance at a price of $1 thousand per share plus accrued and unpaid dividends for the then current dividend period to the date of redemption.

During 2016 and 2015, the Bank repurchased through privately negotiated transactions, and subsequently cancelled, Class B Perpetual Non-Cumulative Fixed-to-Floating Rate Subordinated Preferred Stock with a par value totaling $65.8 million and $10.3 million, respectively. The effect of the repurchases on shareholders' equity was to reduce preferred stock outstanding by $65.8 million and $10.3 million, respectively, and to increase additional paid-in capital by $18.9 million and $3.4 million, respectively. At December 31, 2017, $49.3 million of this issuance remained outstanding.

Payment of dividends or redemption price on the Preferred Stock may be restricted if the Bank fails to satisfy applicable minimum capital adequacy, surplus, and collateral requirements.

C. **Capital Stock, Participation Certificates and Retained Earnings:** In accordance with the Farm Credit Act, borrowers are generally required to invest in their respective associations as a condition of borrowing. The District Associations' capital stock requirements are generally the lesser of 2.00 percent of the amount of the loan or $1 thousand. Some District Associations have dollar maximums, which range from $1 thousand to $5 thousand. Loans designated for sale or sold into the Secondary Market have no voting stock or participation certificate purchase requirement if sold within 180 days following the date of designation. Association capitalization plans presently establish stock requirements in accordance with the Farm Credit Act and their respective bylaws.

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

District Associations

The District Associations are generally authorized to issue or have outstanding Preferred stock, Common stock, Participation Certificates, and such other classes of equity as may be provided for in the bylaws. All classes of stock and participation certificates have a par or face value of five dollars ($5.00) per share.

The District Associations had the following shares outstanding at December 31, 2017:

		Shares Outstanding (dollars in thousands)	
Class	Protected Status	Number	Aggregate Par Value
Common Nonvoting	Yes	100,371	$ 502
Common Voting	No	16,974,793	84,874
Common Nonvoting	No	254,662	1,273
Participation Certificates	Yes	84	–
Participation Certificates	No	1,555,495	7,778
Preferred	No	9,398,887	46,994
Total Association Capital Stock, Participation Certificates and Protected Borrower Equity		28,284,292	$ 141,421

Protected common stock and participation certificates are retired at par or face value in the normal course of business. At-risk common stock and participation certificates are retired at the sole discretion of the respective boards of directors (Boards) at book value not to exceed par or face amounts, provided the minimum capital adequacy standards established by the Boards are met.

Participation Certificates are nonvoting and may be issued as a condition for obtaining a loan to rural home borrowers, to persons or organizations furnishing farm-related services, to persons or organizations who are eligible to borrow or participate in loans, but who are not eligible to hold voting stock, and to persons or organizations eligible to borrow for the purpose of qualifying them for technical assistance, financially related services, and/or leasing services offered by the Association.

Preferred Stock may be issued to such persons or investors as may be permitted under a plan adopted by each Board. Retirement will be at the sole discretion of each Board provided that the minimum capital adequacy standards established by the Board are met. If retired, Preferred Stock will be retired at its book value, not to exceed its par value. Preferred Stock is nonvoting and generally has preference over common stock and participation certificates as to dividends, and priority in the event of liquidation of an Association.

Retained Earnings

The Associations maintain unallocated retained earnings accounts and allocated retained earnings accounts. The minimum aggregate amounts of these two accounts are determined by each 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 an 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.

The Associations maintain allocated retained earnings accounts consisting of earnings held and allocated to borrowers on a patronage basis. In the event of a net loss by an Association 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 Associations have 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, an Association, upon approval of its 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, however, that minimum capital standards established by FCA and the Board are met. All nonqualified distributions are tax deductible only when redeemed.

At December 31, 2017, combined allocated retained earnings consisted of $116.6 million of qualified surplus, $472.0 million of nonqualified allocated surplus and $1.509 billion of nonqualified retained surplus.

Dividends

An Association may declare dividends on its capital stock and participation certificates. Such dividends generally may be paid solely on Preferred Stock, or on all classes of stock and participation certificates.

Patronage Distributions

Prior to the beginning of any fiscal year, each Board, by adoption of a resolution, may obligate its Association to distribute to borrowers on a patronage basis all or any portion of available net earnings for such fiscal year or for that and subsequent fiscal years. Patronage distributions, if made by that Association, are based on the proportion of the borrower's interest to the amount of interest earned by that Association on its total loans unless another proportionate patronage basis is approved by the Board.

If an Association will meet 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 retained earnings account, or combinations 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.

Amounts not distributed are retained as unallocated retained earnings.

Transfer

Equities may generally be transferred to persons or entities eligible to purchase or hold such equities under an Association's bylaws.

Impairment

Any net losses recorded by an Association shall first be applied against unallocated retained earnings. To the extent that such losses would exceed unallocated retained earnings, resulting in impairment of the Association's allocated retained earnings or capital stock, such losses would be applied pro rata to each share and/or unit outstanding, provided applications shall be made to allocated retained earnings by annual series, with the most recent allocations applied first.

Liquidation

In the event of the liquidation or dissolution of an Association, any assets of the Association remaining after payment or retirement of all liabilities may be distributed either to the holders of the outstanding stock and participation certificates or on a patronage basis, dependent upon the bylaws of the Association.

AgFirst

Capital Stock and Allocated Retained Earnings — District Associations are required to invest in the capital stock of AgFirst. Associations fund stock purchases through direct note advances. These intercompany balances and transactions are eliminated in combination. Additionally, AgFirst has issued and has outstanding $20.6 million in Class D Common stock, which is a nonvoting class of stock with a $5.00 par value.

Other Equity — OFIs make cash purchases of participation certificates and are required to capitalize their loans at the same level as the District Associations. At December 31, 2017, AgFirst had $8.2 million of participation certificates outstanding to OFIs at a face value of $5.00 per share.

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 District has not been called upon to initiate any transfers and is not aware of any proposed action under this regulation.

All nineteen District Associations are organized as ACAs with FLCA and PCA subsidiaries. These subsidiaries and the ACA operate under a common board of directors and joint management. As a result, these District Associations are jointly obligated on each other's liabilities and are evaluated on a consolidated basis for capital adequacy and other regulatory purposes.

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 regulatory capital risk-based capital ratios. The new regulations also include a tier 1 leverage ratio and an unallocated retained earnings (URE) and URE equivalents 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 regulatory 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 PCR is all at-risk borrower stock, any allocated excess stock, unallocated retained earnings, paid-in capital, subordinated debt and preferred stock subject to certain limitations, less certain 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 URE equivalents 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 Bank's regulatory capital ratios:

Ratio	Minimum Requirement	Capital Conservation Buffer*	Minimum Requirement with Capital Conservation Buffer	Capital Ratios as of December 31, 2017
Risk-adjusted ratios:				
CET1 Capital Ratio	4.50%	2.50%	7.00%	21.73%
Tier 1 Capital Ratio	6.00%	2.50%	8.50%	22.18%
Total Regulatory Capital Ratio	8.00%	2.50%	10.50%	22.31%
Permanent Capital Ratio	7.00%	0.00%	7.00%	22.21%
Non-risk-adjusted:				
Tier 1 Leverage Ratio	4.00%	1.00%	5.00%	7.67%
URE and URE Equivalents Leverage Ratio	1.50%	0.00%	1.50%	6.72%

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

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.

D. **Accumulated Other Comprehensive Income:** The following presents activity related to AOCI for the periods presented:

Changes in Accumulated Other Comprehensive Income by Component *(a)*

(dollars in thousands)	For the Years Ended December 31, 2017	2016	2015
Investment Securities:			
Balance at beginning of period	$ 3,013	$ 65,906	$ 108,886
OCI before reclassifications	(22,845)	(53,549)	(43,194)
Amounts reclassified from AOCI	197	(9,344)	214
Net current period OCI	(22,648)	(62,893)	(42,980)
Balance at end of period	$ (19,635)	$ 3,013	$ 65,906
Cash Flow Hedges:			
Balance at beginning of period	$ (838)	$ (957)	$ (548)
OCI before reclassifications	(115)	34	103
Amounts reclassified from AOCI	971	85	(512)
Net current period OCI	856	119	(409)
Balance at end of period	$ 18	$ (838)	$ (957)
Employee Benefit Plans:			
Balance at beginning of period	$ (376,498)	$ (389,812)	$ (405,649)
OCI before reclassifications	(15,803)	(21,687)	(21,037)
Amounts reclassified from AOCI	29,866	35,001	36,874
Net current period OCI	14,063	13,314	15,837
Balance at end of period	$ (362,435)	$ (376,498)	$ (389,812)
Total AOCI:			
Balance at beginning of period	$ (374,323)	$ (324,863)	$ (297,311)
OCI before reclassifications	(38,763)	(75,202)	(64,128)
Amounts reclassified from AOCI	31,034	25,742	36,576
Net current period OCI	(7,729)	(49,460)	(27,552)
Balance at end of period	$ (382,052)	$ (374,323)	$ (324,863)

Reclassifications Out of Accumulated Other Comprehensive Income *(b)*

(dollars in thousands)	2017	2016	2015	Income Statement Line Item
Investment Securities:				
Sales gains & losses	$ (258)	$ 23,822	$ 1,126	Gains (losses) on investments, net
Holding gains & losses	–	(14,947)	(1,658)	Net other-than-temporary impairment
Amortization	61	469	318	Interest income on investments
Amounts reclassified	(197)	9,344	(214)	
Cash Flow Hedges:				
Interest income	(856)	(119)	409	See Note 14.
Gains (losses) on other transactions	(115)	34	103	See Note 14.
Amounts reclassified	(971)	(85)	512	
Employee Benefit Plans:				
Periodic pension costs	(29,866)	(35,001)	(36,874)	See Note 9.
Amounts reclassified	(29,866)	(35,001)	(36,874)	
Reclassifications for the period	$ (31,034)	$ (25,742)	$ (36,576)	

(a) Amounts in parentheses indicate debits to AOCI.
(b) Amounts in parentheses indicate debits to profit/loss.

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. See Note 2, *Summary of Significant Accounting Policies*, Section K, *Valuation Methodologies*, for further information.

Estimating the fair value of Investments in Other Farm Credit Institutions is not practicable because the stock is not traded. The net investment is carried at cost plus allocated equities.

The classifications within the fair value hierarchy are as follows:

Level 1
Level 1 assets consist of assets held in trust funds related to deferred compensation and supplemental retirement plans. The trust funds include investments in securities that are actively traded and have quoted net asset value prices that are directly observable in the marketplace.

For cash and cash equivalents, the carrying value is primarily utilized as a reasonable estimate of fair value.

Level 2
The fair value of substantially all investment securities is determined from third-party valuation services that estimate current market prices. Inputs and assumptions related to third-party market valuation services are typically observable in the marketplace. Such services incorporate prepayment assumptions and underlying mortgage- or asset-backed collateral information to generate cash flows that are discounted using appropriate benchmark interest rate curves and volatilities. Third-party valuations also incorporate information regarding broker/dealer quotes, available trade information, historical cash flows, credit ratings, and other market information. Such valuations represent an estimated exit

price, or price to be received by a seller in active markets to sell the investment securities to a willing participant.

Level 2 assets include investments in U.S. government and agency mortgage-backed securities and U.S. agency debt securities, all of which use unadjusted values from third parties or internal pricing models. The underlying loans for these investment securities are residential mortgages or commercial loans.

Also included are non-agency ABSs, federal funds sold, securities purchased under resale agreements, and other highly-liquid funds, all of which are non-exchange-traded instruments. The market value of these federal funds sold and other instruments is generally their face value, plus accrued interest, as these instruments are highly-liquid, readily convertible to cash, and short-term in nature.

The fair value of derivative financial instruments is the estimated amount to be received to sell a derivative asset or paid to transfer a derivative liability in active markets among willing participants at the reporting date. Estimated fair values are determined through internal valuation models which use an income approach. Interest rate derivative models incorporate benchmark interest rate curves, primarily the LIBOR swap and Overnight Index Swap (OIS) curves, potential volatilities of future interest rate movements, and other inputs which are observable directly or indirectly in the marketplace. The models used for other types of derivatives may take inputs such as market price changes, exchange rates, benchmark interest rates, and other inputs observable directly or indirectly in the marketplace. The District compares internally calculated derivative valuations to broker/dealer quotes to substantiate the results.

Collateral liabilities may also be considered Level 2. The majority of derivative contracts are supported by bilateral collateral agreements with counterparties requiring the posting of collateral in the event certain dollar thresholds of credit exposure are reached. Face value approximates the fair value of collateral liabilities.

Level 3

Because no active market exists for the District's loans, fair value is estimated by discounting the expected future cash flows using interest rates at which similar loans would currently be made to borrowers with similar credit risk. For purposes of determining fair value of accruing loans, the 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.

In 2009, the Bank began adjusting the pricing it received for the non-agency ABS and CMO securities from the third party pricing service with that obtained from an investment analysis consultant due to the inherent illiquidity and dislocation in the market for these bonds. At that time, these securities were also reclassified and reported as Level 3 fair value measurements because of this market unobservable pricing input. Over time, this valuation input was discontinued because of a reduction in volatilities and risk, as measured by the pricing differences and changes over time, for these bonds. Documentation from the third party pricing service indicated market observable inputs, which would be considered Level 2, were used in their valuations of these securities. On June 30, 2015, the non-agency ABS and CMO bonds were transferred to Level 2 of the fair value hierarchy.

On December 31, 2016, U.S. government and U.S. government agency guaranteed investment securities, with a fair value of $27.6 million, were transferred into Level 3 to reflect a change in valuation technique. The modeling technique previously used to value them was no longer available, the bonds were nearing end of life, and third-party valuation services generally would not provide prices for them. The Bank began employing a valuation technique based on multiple factors including information obtained from broker-dealers using Level 3 inputs.

For other investments, fair value is estimated by discounting expected future cash flows using prevailing rates for similar instruments at the measurement date. There are no observable market values for the District's RBIC investments. Management must estimate the fair value based on an assessment of the operating performance of the company and available capital to operate the venture. This analysis requires significant judgment and actual sales values could differ materially from those estimated.

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 primarily 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 District'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.

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

The following tables present the changes in Level 3 assets and liabilities measured at fair value on a recurring basis for the periods presented. Except as described above, the District had no other transfers of assets or liabilities measured on a recurring basis into or out of Level 1 or Level 2 during the reporting period.

(dollars in thousands)	**U.S. Govt. Guaranteed**	**U.S. Govt. Agency Guaranteed**
Balance at December 31, 2016	$ 25,047	$ 2,535
Gains/(losses) included in earnings	(437)	(9)
Gains/(losses) included in OCI	598	36
Purchases	–	–
Sales	(23,095)	(1,886)
Settlements	(2,113)	(676)
Transfers in and/or out of Level 3	–	–
Balance at December 31, 2017	$ –	$ –

(dollars in thousands)	U.S. Govt. Guaranteed	U.S. Govt. Agency Guaranteed
Balance at December 31, 2015	$ –	$ –
Gains/(losses) included in earnings	–	–
Gains/(losses) included in OCI	–	–
Purchases	–	–
Sales	–	–
Settlements	–	–
Transfers in and/or out of Level 3	25,047	2,535
Balance at December 31, 2016	$ 25,047	$ 2,535

(dollars in thousands)	Non-Agency ABSs	Non-Agency CMOs
Balance at December 31, 2014	$ 34,783	$ 153,011
Gains (losses) included in earnings	–	(213)
Gains (losses) included in OCI	(153)	1,910
Purchases	–	–
Sales	–	–
Settlements	(1,088)	(13,909)
Transfers in and/or out of Level 3	(33,542)	(140,799)
Balance at December 31, 2015	$ –	$ –

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, 2017				
(dollars in thousands)	Total Carrying Amount	Level 1	Level 2	Level 3	Total Fair Value
Recurring Measurements					
Assets:					
Investments available-for-sale:					
U.S. Govt. Treasury Securities	$ 490,097	$ –	$ 490,097	$ –	$ 490,097
U.S. Govt. Guaranteed	4,535,213	–	4,535,213	–	4,535,213
U.S. Govt. Agency Guaranteed	2,006,843	–	2,006,843	–	2,006,843
Non-Agency ABSs	631,452	–	631,452	–	631,452
Total investments available-for-sale	7,663,605	–	7,663,605	–	7,663,605
Federal funds sold, securities purchased under resale agreements, and other	150,000	–	150,000	–	150,000
Interest rate swaps and other derivative instruments	–	–	–	–	–
Money Market funds	122,519	122,519	–	–	122,519
Assets held in trust funds	31,496	31,496	–	–	31,496
Recurring Assets	$ 7,967,620	$ 154,015	$ 7,813,605	$ –	$ 7,967,620
Liabilities:					
Interest rate swaps and other derivative instruments	$ –	$ –	$ –	$ –	$ –
Collateral liabilities	–	–	–	–	–
Recurring Liabilities	$ –	$ –	$ –	$ –	$ –
Nonrecurring Measurements					
Assets:					
Impaired loans	$ 62,492	$ –	$ –	$ 62,492	$ 62,492
Other property owned	14,655	–	–	15,942	15,942
Nonrecurring Assets	$ 77,147	$ –	$ –	$ 78,434	$ 78,434
Other Financial Instruments					
Assets:					
Cash	$ 499,451	$ 499,451	$ –	$ –	$ 499,451
Investments held to maturity	522,148	–	419,257	109,456	528,713
Loans	28,210,294	–	–	28,032,271	28,032,271
Other Financial Assets	$ 29,231,893	$ 499,451	$ 419,257	$ 28,141,727	$ 29,060,435
Liabilities:					
Systemwide debt securities	$ 30,779,186	$ –	$ –	$ 30,635,868	$ 30,635,868
Other Financial Liabilities	$ 30,779,186	$ –	$ –	$ 30,635,868	$ 30,635,868

(dollars in thousands)	December 31, 2016 Total Carrying Amount	Level 1	Level 2	Level 3	Total Fair Value
Recurring Measurements					
Assets:					
Investments available-for-sale:					
U.S. Govt. Treasury Securities	$ 341,948	$ –	$ 341,948	$ –	$ 341,948
U.S. Govt. Guaranteed	4,274,286	–	4,249,239	25,047	4,274,286
U.S. Govt. Agency Guaranteed	2,250,623	–	2,248,088	2,535	2,250,623
Non-Agency ABSs	623,984	–	623,984	–	623,984
Total investments available-for-sale	7,490,841	–	7,463,259	27,582	7,490,841
Federal funds sold, securities purchased under resale agreements, and other	262,624	–	262,624	–	262,624
Interest rate swaps and other derivative instruments	92	–	92	–	92
Assets held in trust funds	24,435	24,435	–	–	24,435
Recurring Assets	$ 7,777,992	$ 24,435	$ 7,725,975	$ 27,582	$ 7,777,992
Liabilities:					
Interest rate swaps and other derivative instruments	$ –	$ –	$ –	$ –	$ –
Collateral liabilities	–	–	–	–	–
Recurring Liabilities	$ –	$ –	$ –	$ –	$ –
Nonrecurring Measurements					
Assets:					
Impaired loans	$ 63,682	$ –	$ –	$ 63,682	$ 63,682
Other property owned	30,281	–	–	33,283	33,283
Nonrecurring Assets	$ 93,963	$ –	$ –	$ 96,965	$ 96,965
Other Financial Instruments					
Assets:					
Cash	$ 591,491	$ 591,491	$ –	$ –	$ 591,491
Investments held to maturity	620,682	–	488,729	137,251	625,980
Loans	27,229,245	–	–	27,042,499	27,042,499
Other Financial Assets	$ 28,441,418	$ 591,491	$ 488,729	$ 27,179,750	$ 28,259,970
Liabilities:					
Systemwide debt securities	$ 30,103,245	$ –	$ –	$ 29,980,436	$ 29,980,436
Other Financial Liabilities	$ 30,103,245	$ –	$ –	$ 29,980,436	$ 29,980,436

(dollars in thousands)	December 31, 2015 Total Carrying Amount	Level 1	Level 2	Level 3	Total Fair Value
Recurring Measurements					
Assets:					
Investments available-for-sale:					
U.S. Govt. Treasury Securities	$ 42,405	$ –	$ 42,405	$ –	$ 42,405
U.S. Govt. Guaranteed	3,970,590	–	3,970,590	–	3,970,590
U.S. Govt. Agency Guaranteed	2,131,888	–	2,131,888	–	2,131,888
Non-Agency CMOs	126,860	–	126,860	–	126,860
Non-Agency ABSs	677,369	–	677,369	–	677,369
Total investments available-for-sale	6,949,112	–	6,949,112	–	6,949,112
Federal funds sold, securities purchased under resale agreements, and other	211,554	–	211,554	–	211,554
Interest rate swaps and other derivative instruments	5,174	–	5,174	–	5,174
Assets held in trust funds	21,730	21,730	–	–	21,730
Recurring Assets	$ 7,187,570	$ 21,730	$ 7,165,840	$ –	$ 7,187,570
Liabilities:					
Interest rate swaps and other derivative instruments	$ –	$ –	$ –	$ –	$ –
Collateral liabilities	–	–	–	–	–
Recurring Liabilities	$ –	$ –	$ –	$ –	$ –
Nonrecurring Measurements					
Assets:					
Impaired loans	$ 93,980	$ –	$ –	$ 93,980	$ 93,980
Other property owned	48,462	–	–	53,850	53,850
Nonrecurring Assets	$ 142,442	$ –	$ –	$ 147,830	$ 147,830
Other Financial Instruments					
Assets:					
Cash	$ 506,456	$ 506,456	$ –	$ –	$ 506,456
Investments held to maturity	672,672	–	506,129	181,625	687,754
Loans	25,894,338	–	–	25.798,679	25,798,679
Other Financial Assets	$ 27,073,466	$ 506,456	$ 506,129	$ 25,980,304	$ 26,992,889
Liabilities:					
Systemwide debt securities	$ 28,423,499	$ –	$ –	$ 28,406,558	$ 28,406,558
Other Financial Liabilities	$ 28,423,499	$ –	$ –	$ 28,406,558	$ 28,406,558

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.

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

Generally, a change in the assumption used for defaults is accompanied by a directionally similar change in the risk premium component of the discount rate (specifically, the portion related to credit risk) and a directionally opposite change in the assumption used for prepayments. Unobservable inputs for loss severities do not normally increase or decrease based on movements in the other significant unobservable inputs for these Level 3 assets.

Derivative Instruments
Level 3 derivative instruments consist of forward contracts that represent a hedge of an unrecognized firm commitment to purchase agency securities at a future date. The value of the forward is the difference between the fair value of the security at inception of the forward and the measurement date. Significant inputs for these valuations would be discount rate and volatility. These Level 3 derivatives would decrease (increase) in value based upon an increase (decrease) in the discount rate.

Generally, for derivative instruments which are subject to changes in the value of the underlying referenced instrument, change in the assumption used for default rate is accompanied by directionally similar change in the risk premium component of the discount rate (specifically, the portion related to credit risk) and a directionally opposite change in the assumption used for prepayment rates.

Unobservable inputs for discount rate and volatility do not increase or decrease based on movements in other significant unobservable inputs for these Level 3 instruments.

Inputs to Valuation Techniques
Management determines the District's valuation policies and procedures. Internal valuation processes are calibrated annually by an independent consultant. Fair value measurements are analyzed on a periodic basis. Documentation is obtained for third party information, such as pricing, and periodically evaluated alongside internal information and pricing.

Quoted market prices are generally not available for the instruments presented 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

(dollars in thousands)	Fair Value	Valuation Technique(s)	Unobservable Input	Range
Impaired loans and other property owned	$ 78,434	Appraisal	Income and expense	*
			Comparable sales	*
			Replacement cost	*
			Comparability adjustments	*

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

Information about Recurring and Nonrecurring Level 2 Fair Value Measurements

	Valuation Technique(s)	Input
Investments available-for-sale	Discounted cash flow	Constant prepayment rate
		Probability of default
		Loss severity
	Quoted prices	Price for similar security
	Vendor priced	**
Federal funds sold, securities purchased under resale agreements and other	Carrying value	Par/principal and appropriate interest yield
Interest rate swaps	Discounted cash flow	Annualized volatility
		Counterparty credit risk
		Own credit risk

*** The inputs used to estimate fair value for assets and liabilities that are obtained from third party vendors are not included in the table as the specific inputs applied are not provided by the vendor.*

Information about Other Financial Instrument Fair Value Measurements

	Valuation Technique(s)	Input
Loans	Discounted cash flow	Prepayment forecasts
		Probability of default
		Loss severity
Cash and cash equivalents	Carrying value	Par/principal and appropriate interest yield
RABs and Other	Discounted cash flow	Risk adjusted spread
		Prepayment rates
		Probability of default
		Loss severity
Systemwide debt securities	Discounted cash flow	Benchmark yield curve
		Derived yield spread
		Own credit risk
Cash collateral	Carrying value	Par/principal and appropriate interest yield

Note 9 — Employee Benefit Plans

The Bank and certain District Associations participate in two District sponsored defined benefit pension plans. These plans include the multiemployer AgFirst Farm Credit Retirement Plan which is a final average pay plan (FAP Plan) and the multiemployer Independent Associations' Retirement Plan (IAR Plan), which is a final average pay plan. In addition, the Bank and 18 District Associations participate in a multiemployer defined benefit other postretirement benefits plan (OPEB Plan), the Farm Credit Benefits Alliance Retiree and Disabled Medical and Dental Plan, and the Bank and all 19 District Associations participate in a multiemployer defined contribution 401(k) plan. In addition to the multiemployer defined benefit plans above, one Association also sponsors a single employer defined benefit plan, the First South Farm Credit, ACA Retirement Plan (FS Plan).

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

1. Assets contributed to multiemployer 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 a participating employer chooses to stop participating in some of its multiemployer plans, that employer may be required to contribute to eliminate the underfunded status of the plan related to its participants.

The District previously participated in a separate multiemployer plan, the AgFirst Farm Credit Cash Balance Retirement Plan which is a cash balance plan (CB Plan). In November 2014, the AgFirst Plan Sponsor Committee approved and executed amendments to the CB Plan that included the following changes:

1. The CB Plan was closed to new participants effective as of December 31, 2014. Based on the plan's eligibility provisions, this change affected employees hired on or after November 4, 2014.
2. Employer contributions were discontinued effective as of January 1, 2015.
3. All participants who were not already fully vested in the CB Plan became fully vested as of December 31, 2014.
4. The CB Plan was terminated effective as of December 31, 2015.

Curtailment accounting, as prescribed in ASC 715 "Compensation – Retirement Benefits," was initiated upon execution of the plan amendments and did not have a material impact on the District's financial condition or results of operations.

A favorable determination letter was received from the Internal Revenue Service, and as a result of the termination of the CB Plan, vested benefits were distributed to participants in 2017.

Beginning on January 1, 2015, for participants in the CB Plan and eligible employees hired on or after November 4, 2014, additional employer contributions are made to the 401(k) Plan equal to 3.00 percent of the participants' eligible compensation.

The District's multiemployer plans are not subject to ERISA and no Form 5500 is required to be filed. 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).

During 2017, the method of recording expenses for the multiemployer FAP and IAR pension Plans and multiemployer OPEB Plan was modified for participating District entities. 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 participating entity's Balance Sheets. Adjusting entries were recorded at the District-only level in the combination of the AgFirst District to record the unamortized benefit costs to present the total benefit obligations at the District in accordance with multiemployer accounting. For 2017 and future years, participating entities will record expense to employee benefit costs based on the actual contributions to the Plans. This change caused the Bank and District Associations 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 for the OPEB Plan resulted in the reduction of Other Liabilities by $145.8 million on the Balance Sheets, and a reduction of employee benefit costs on the Statements of Income of $145.8 million.

This change also caused the District to re-evaluate the proper reporting entity for the multiemployer FAP, IAR and OPEB Plans. The FAP and IAR Plans include the Bank and AgFirst District Associations only; therefore, the reporting entity continues to be the AgFirst District and all required disclosures are presented within this note. However, the multiemployer OPEB plan includes entities from another Farm Credit District. Thus, the proper reporting entity was concluded to be the combined System since the Financial Statements at this reporting level include both the AgFirst District and the other participating Farm Credit District. In order to correct the Balance Sheets an additional $41.1 million, $39.2 million, and $1.9 million was removed in 2017 from Other Liabilities, AOCI, and Unallocated Retained Earnings, respectively. Management has concluded that the 2016 and 2015 financial statements, which have not been adjusted, are not materially misstated.

The District's participation in the multiemployer defined benefit plans for the annual periods ended December 31, 2017, 2016 and 2015 is outlined in the table below:

Pension Plan	**Percentage Funded to Projected Benefit Obligation**			**Contributions**		
(dollars in thousands)	**2017**	**2016**	**2015**	**2017**	**2016**	**2015**
AgFirst Farm Credit Retirement Plan	86.41%	86.96%	85.73%	$38,191	$28,521	$57,779
Independent Associations' Retirement Plan	81.82%	83.70%	83.07%	$4,241	$2,895	$8,658

The FAP Plan covers eligible employees of 15 Associations and AgFirst hired prior to January 1, 2003. The IAR Plan covers eligible employees of three ACAs whose employment date is prior to January 1, 2009. The FS Plan covers eligible employees of a single ACA whose employment date is prior to January 1, 2009. Each plan is noncontributory. The "Projected Unit Credit" actuarial method is used for financial reporting purposes. Pension benefits are primarily based on eligible compensation and years of service. The District entities funded $45.4 million, $33.8 million, and $68.9 million into these retirement plans for each of the three years ended December 31, 2017, 2016, and 2015, respectively. The expenses of these retirement plans included in postretirement benefits were $42.7 million for 2017, $46.1 million for 2016, and $42.4 million for 2015. The plans' respective prepaid retirement expenses or liabilities are reflected in Other Assets or Other Liabilities in the District's Combined Balance Sheets.

In addition to providing pension benefits, the District provides certain medical and dental benefits for eligible retired employees through the OPEB Plan. Substantially all of the District employees may become eligible for the benefits if they reach early retirement age while working for the Bank or District Associations. 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 Bank or District and is accounted for as a multiemployer plan. The related net benefit plan obligations are not included in the District'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 postretirement benefit costs on the District's Statements of Income were $7.0 million for 2017, $13.1 million for 2016, and $17.0 million for 2015. At December 31, 2017, the total AgFirst District liability balance for the OPEB Plan presented in the Farm Credit System Combined Statement of Condition is $216.3 million.

The District also participates in the defined contribution 401(k) Plan, as described in Note 2, which qualifies as a 401(k) plan as defined by the Internal Revenue Code. The District contributes $0.50 or $1.00 for each $1.00 of the employee's first 6.00 percent of contribution (based on total compensation) up to the maximum employer contribution of 3.00 or 6.00 percent of total compensation, dependent upon each District entity's policy. See above for a discussion of changes in the 401(k) Plan. 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 postretirement benefit costs were $13.3 million, $12.3 million, and $11.3 million for the years ended December 31, 2017, 2016, and 2015, respectively. Beginning in 2015, contributions include additional amounts related to the discontinuation of the CB Plan as discussed above.

In addition to the multiemployer plans above, AgFirst and certain District Associations individually sponsor defined benefit and defined contribution retirement plans and offer a FCBA supplemental 401(k) plan for certain key employees. These plans are nonqualified; therefore, the associated liabilities are included in the District's Combined Balance Sheets in Other Liabilities. The District entities contributed $1.2 million for the year ended December 31, 2017, and $1.1 million and $1.0 million for the years ended December 31, 2016 and 2015, respectively, into these supplemental retirement plans. The supplemental retirement plans are unfunded and had a projected benefit obligation of $27.8 million and a net under-funded status of $27.8 million at December 31, 2017. Assumptions used to determine the projected benefit obligation as of December 31, 2017 included a discount rate of 3.75 percent and a rate of compensation increase of 4.25 percent. The expenses of these nonqualified plans included in the District's postretirement benefit costs were $2.4 million, $2.5 million, and $2.0 million for the years ended December 31, 2017, 2016, and 2015, respectively.

FASB guidance further requires the determination of the fair value of plan assets and recognition of actuarial gains and losses, prior service costs or credits, and transition assets or obligations as a component of AOCI. Under the guidance, these amounts are subsequently recognized as components of net periodic benefit costs over time. For 2017, 2016, and 2015, $14.1 million, $13.3 million and $15.8 million, respectively, has been recognized as net credits to AOCI to reflect these elements.

Actuarial assumptions are updated periodically. There was a decrease in the discount rate assumption from December 31, 2015 to December 31, 2016. This change in discount rates resulted in an increase of $40.4 million to the District's pension plans' projected benefit obligations and $6.7 million to the District's retiree welfare plans' projected benefit obligations at December 31, 2016. At December 31, 2016, the mortality improvement assumption was updated to reflect recent mortality studies indicating a lower degree of mortality improvement and thus shorter life expectancies. This change resulted in a decrease of $7.1 million to the District's pension plans' projected benefit obligations and $2.5 million to the District's retiree welfare plans' projected benefit obligations at December 31, 2016.

There was a decrease in the discount rate assumption from December 31, 2016 to December 31, 2017. This change in discount rates resulted in an increase of $97.4 million to the District's pension plans' projected benefit obligations at December 31, 2017. At December 31, 2017, the mortality improvement assumption was updated to reflect recent mortality studies indicating a lower degree of mortality improvement and thus shorter life expectancies. This change resulted in a decrease of $5.2 million to the District's pension plans' projected benefit obligations at December 31, 2017.

The funding status and the amounts recognized in the District's Combined Balance Sheets for all defined benefit retirement plans as of December 31 follow:

	Pension Benefits		
(dollars in thousands)	2017	2016	2015
Change in projected benefit obligation			
Projected benefit obligation at beginning of year	$ 1,120,527	$ 1,061,317	$ 1,058,110
Service cost	17,705	17,669	19,460
Interest cost	46,725	47,356	43,173
Plan amendments	5,453	–	–
Actuarial loss (gain)	115,170	41,436	(19,749)
Benefits paid	(62,205)	(47,112)	(39,542)
Liability (gain)/loss due to curtailment	–	–	–
Other	(149)	(139)	(135)
Projected benefit obligation at end of year	$ 1,243,226	$ 1,120,527	$ 1,061,317
Change in plan assets			
Fair value of plan assets at beginning of year	$ 937,436	$ 878,635	$ 860,798
Actual return on plan assets	114,761	71,856	(11,832)
Employer contributions	46,647	34,923	69,976
Transfers	–	–	–
Benefits and premiums paid	(62,205)	(47,112)	(39,542)
Expenses paid	(777)	(866)	(765)
Fair value of plan assets at end of year	1,035,862	937,436	878,635
Funded status	$ (207,364)	$ (183,091)	$ (182,682)
Amounts recognized in the balance sheet consist of:			
Pension assets	$ –	$ 26	$ 352
Pension liabilities	(207,364)	(183,117)	(183,034)
Net amount recognized	$ (207,364)	$ (183,091)	$ (182,682)

The following represents the amounts included in accumulated other comprehensive income (pre-tax) as of December 31:

	Pension Benefits		
(dollars in thousands)	2017	2016	2015
Net actuarial loss (gain)	$ 355,902	$ 335,777	$ 347,362
Prior service costs (credit)	6,536	1,505	2,894
Net transition obligation (asset)	–	–	–
Total amount recognized in AOCI	$ 362,438	$ 337,282	$ 350,256

The accumulated benefit obligation for all defined benefit pension plans was $1.132 billion at December 31, 2017 and $1.020 billion and $962.0 million at December 31, 2016 and 2015, respectively.

Information for pension plans with benefit obligation in excess of plan assets as of December 31 follows:

	Pension Benefits		
(dollars in thousands)	2017	2016	2015
Aggregate PBO > FV plan assets			
Projected benefit obligation	$ 1,243,226	$ 1,120,527	$ 1,061,317
Fair value of plan assets	1,035,862	937,436	878,635
Aggregate ABO > FV plan assets			
Accumulated benefit obligation	$ 1,131,714	$ 1,007,268	$ 949,105
Fair value of plan assets	1,035,862	924,548	865,242

Components of net periodic benefit cost and other amounts for all defined benefit pension plans recognized in the District's other comprehensive income as of December 31 are as follows:

	Pension Benefits		
(dollars in thousands)	2017	2016	2015
Net periodic benefit cost			
Service cost	$ 17,705	$ 17,669	$ 19,460
Interest cost	46,725	47,356	43,173
Expected return on plan assets	(49,869)	(49,835)	(49,740)
Amortization of net (gain) loss	–	–	–
Amortization of prior service cost	421	1,389	1,380
Recognized net actuarial (gain) loss	29,446	31,073	29,592
Settlement/curtailment expense (income)	1,003	–	–
Other	333	655	403
Net periodic benefit cost	$ 45,764	$ 48,307	$ 44,268
Other changes in plan assets and projected benefit obligation recognized in OCI			
Net actuarial loss (gain)	$ 50,573	$ 19,488	$ 42,049
Prior service cost (credit)	5,453	–	–
Amortization of net actuarial loss (gain)	(29,446)	(31,073)	(29,592)
Amortization of prior service cost	(421)	(1,389)	(1,380)
Amortization of transition obligation (asset)	–	–	–
Net actuarial (gain)/loss due to curtailment	(1,003)	–	–
Recognition of net actuarial gain/(loss) due to curtailment	–	–	–
Recognition of prior service (cost)/credit due to curtailment	–	–	–
Total recognized in OCI	$ 25,156	$ (12,974)	$ 11,077
Total recognized in net periodic pension cost and OCI	$ 70,920	$ 35,333	$ 55,345

The estimated net actuarial loss and prior service cost for the defined benefit pension plans that will be amortized from accumulated other comprehensive income into net periodic benefit cost during 2018 are $30.8 million and $1.2 million, respectively.

Weighted average assumptions used to determine benefit obligations as of December 31:

	Pension Benefits		
	2017	2016	2015
Discount rate	3.71%	4.27%	4.57%
Rate of compensation increase	4.09%	4.06%	4.04%

Weighted average assumptions used to determine net periodic benefit cost for the years ended December 31:

	Pension Benefits		
	2017	2016	2015
Discount rate	4.31%	4.57%	4.17%
Expected long-term return on plan assets	5.54%	5.84%	5.92%
Rate of compensation increase	4.08%	4.02%	4.01%

The overall expected long-term rate of return on assets assumption is based on the target asset allocation for plan assets, capital markets forecasts for asset classes employed which are estimated based on analysis of current economic and market conditions and historical market trends, and active management excess return expectations.

Plan Assets

Plan assets are invested in a number of different asset classes, with each asset class further diversified though the engagement of a number of independent investment managers. This approach lowers the likelihood of a significant credit concentration. To further ensure that excessive risk concentrations are avoided, holdings of fund managers are monitored. There were no significant concentrations of credit risk in plan assets as of December 31, 2017. The target asset allocation for the FAP Plan is 40.00 percent growth assets and 60.00 percent liability hedging assets. The target asset allocation for the IAR Plan is 30.00 percent growth assets and 70.00 percent liability hedging assets. The plans' strategic asset allocation was determined by the Plan Fiduciary Committee (PFC) after review and evaluation of an asset/liability study. Performance is monitored quarterly by both the PFC and an outside investment consulting firm.

The target asset allocation for the FS Plan is 60.00 to 70.00 percent equities and 30.00 to 40.00 percent fixed income assets. The PFC does not determine the FS Plan's allocation nor do they monitor or have responsibility for it.

The weighted average allowable asset allocations by category as of December 31 are as follows:

Plan Assets	2017	2016	2015
Allowable Asset Category			
Equity securities	40.88%	40.12%	40.52%
Debt securities	57.82	59.29	59.00
Real Estate	0.00	0.00	0.00
Other	1.30	0.59	0.48
Total	100.00%	100.00%	100.00%

Target allocations for allowable asset categories for 2017 are as follows:

Allowable Asset Category	
Equity securities	41.02%-43.67%
Debt securities	58.27%-60.92%
Real Estate	0.00%

The following tables present the fair values of the District's pension plan assets for the periods presented by asset category. See Note 2, *Summary of Significant Accounting Policies*, Section K, *Valuation Methodologies*, and Note 8, *Fair Value Measurement*, regarding a description of the three levels of inputs and the classification within the fair value hierarchy.

Fair Value Measurements at December 31, 2017

(dollars in thousands)	Level 1	Level 2	Level 3	Total Fair Value
Asset Category				
Cash and cash equivalents	$ 13,488	$ –	$ –	$ 13,488
Mutual funds:				
Equity securities funds	29,855	–	–	29,855
Common stock	1	–	–	1
Total assets in the fair value hierarchy	$ 43,344	$ –	$ –	$ 43,344
Investments measured at net asset value				992,518
Total assets at fair value				$ 1,035,862

Fair Value Measurements at December 31, 2016

(dollars in thousands)	Level 1	Level 2	Level 3	Total Fair Value
Asset Category				
Cash and cash equivalents	$ 5,532	$ –	$ –	$ 5,532
Mutual funds:				
Equity securities funds	25,271	–	–	25,271
Total assets in the fair value hierarchy	$ 30,803	$ –	$ –	$ 30,803
Investments measured at net asset value				906,633
Total assets at fair value				$ 937,436

Fair Value Measurements at December 31, 2015

(dollars in thousands)	Level 1	Level 2	Level 3	Total Fair Value
Asset Category				
Cash and cash equivalents	$ 5,173	$ –	$ –	$ 5,173
Mutual funds:				
Equity securities funds	23,794	–	–	23,794
Total assets in the fair value hierarchy	$ 28,967	$ –	$ –	$ 28,967
Investments measured at net asset value				849,668
Total assets at fair value				$ 878,635

Plan assets include a receivable for investments of $13.5 million, $5.5 million and $5.2 million as of December 31, 2017, 2016 and 2015, respectively.

Contributions

The District expects to contribute $53.0 million to the various pension plans in 2018.

Estimated Future Benefit Payments

The following benefit payments, which reflect expected future service, as appropriate, are expected to be paid:

(dollars in thousands)	Pension Benefits
2018	$ 70,920
2019	74,113
2020	75,099
2021	75,470
2022	75,567
Years 2023 — 2027	385,977

Note 10 — Related Party Transactions

In the ordinary course of business, District entities enter into loan transactions with related parties, including but not limited to officers and directors of AgFirst and Associations, their immediate families and other organizations with which such persons may be affiliated. Total loans to such persons at December 31, 2017 amounted to $359.0 million. These loans totaled $303.2 million and $268.2 million at December 31, 2016 and 2015, respectively. During 2017, 2016, and 2015, $339.1 million, $337.6 million, and $304.7 million of new loans were made and repayments totaled $283.3 million, $324.1 million, and $330.2 million, respectively.

Note 11 — Commitments and Contingencies

From time to time, legal actions are pending against the District in which claims for money damages are asserted. On at least a quarterly basis, the District 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 and legal counsel are of the opinion that the ultimate liability, if any, from these actions, would not be material in relation to the financial position of the District. Because it is not probable that the District 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 District may participate in credit related financial instruments with off-balance-sheet risk to satisfy the financing needs of its borrowers or the borrowers of the District Associations. These financial instruments may include commitments to extend credit, letters of credit, or various guarantees. 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 financial instruments have off-balance-sheet credit risk because their amounts could be drawn upon at the option of the borrower. The credit risk associated with issuing commitments and letters of credit is substantially the same as that involved in extending loans to borrowers and the same credit policies are applied by management. 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 loan collateral 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, 2017, $6.141 billion of commitments to extend credit were outstanding with a related reserve for unfunded commitments of $4.0 million included in Other Liabilities in the Balance Sheets. In addition, the Bank had outstanding commitments on Association Direct Notes of $1.915 billion which are eliminated in combination.

The District 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, 2017, standby letters of credit outstanding totaled $92.8 million, with expiration dates ranging from January 2018 to May 2023. The maximum potential amount of future payments the District may be required to make under these existing guarantees is $92.8 million.

Under the Farm Credit Act, each System bank is primarily liable for its portion of Systemwide bond and discount note obligations. Additionally, the four banks are jointly and severally liable for the bonds and notes of the other System banks under the terms of the Joint and Several Liability Allocation Agreement. Published in the Federal Register, the agreement prescribes the payment mechanisms to be employed in the event one of the banks is unable to meet its debt obligations.

In the event a bank is unable to timely pay principal or interest on an insured debt obligation for which it is primarily liable, the FCSIC must expend amounts available in the Insurance Fund to ensure the timely payment of principal and interest on the insured debt obligation. The provisions of the Farm Credit Act providing for joint and several liability of the banks on the obligation cannot be invoked until the amounts in the Insurance Fund have been exhausted. At December 31, 2017, the assets of the Insurance Fund totaled $4.848 billion. However, because of other mandatory and discretionary uses of the Insurance Fund, there is no assurance that there will be sufficient funds to pay the principal or interest on the insured debt obligation.

Once the joint and several liability provisions are initiated, the FCA is required to make “calls” to satisfy the liability first on all non-defaulting banks in the proportion that each non-defaulting bank’s available collateral (collateral in excess of the aggregate of the banks’ collateralized obligations) bears to the aggregate available collateral of all non-defaulting banks. If these calls do not satisfy the liability, then a further call would be made in proportion to each non-defaulting bank’s remaining assets. Upon making a call on non-defaulting banks with respect to a Systemwide Debt Security issued on behalf of a defaulting bank, the FCA is required to appoint the FCSIC as the receiver for the defaulting bank. The receiver would be required to expeditiously liquidate the bank.

AgFirst did not anticipate making any payments on behalf of its co-obligors under the Joint and Several Liability Allocation Agreement for any of the periods presented. The total amount outstanding and the carrying amount of the Bank’s liability under the agreement are as follows:

	December 31,		
(dollars in billions)	**2017**	**2016**	**2015**
Total System bonds and notes	$ 265.169	$ 257.782	$ 243.335
AgFirst bonds and notes	29.763	29.408	27.973

Note 12 — Income Taxes

The Associations are generally subject to Federal and certain other income taxes. As previously described, each 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 Associations are 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 either book income or taxable income.

The Bank is exempt from federal and other income taxes as provided in the Farm Credit Act. No deferred taxes have been provided on AgFirst’s unallocated earnings. AgFirst currently has no plans to distribute unallocated earnings and does not contemplate circumstances in which it would.

The provision (benefit) for income taxes follows:

(dollars in thousands)	Year Ended December 31, 2017	2016	2015
Current:			
Federal	$ 1,043	$ 272	$ 760
State	71	54	(165)
	1,114	326	595
Deferred:			
Federal	(9)	–	–
State	–	–	–
	(9)	–	–
Total provision (benefit) for income taxes	$ 1,105	$ 326	$ 595

The provision 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:

(dollars in thousands)	Year Ended December 31, 2017	2016	2015
Federal tax at statutory rate	$ 247,601	$ 196,517	$ 192,561
State tax, net	(16)	24	(115)
Tax-exempt FLCA earnings	(111,146)	(101,077)	(94,404)
Association patronage distributions	(89,409)	(60,439)	(60,733)
Nontaxable Bank income	(14,387)	(34,028)	(35,379)
Change in valuation allowance	(36,810)	3,845	3,391
Impact of tax reform	23,837	–	–
Change in FASB guidance	2,350	(530)	117
Other	(20,915)	(3,986)	(4,843)
Provision for income taxes	$ 1,105	$ 326	$ 595

The District recognizes interest and penalties related to unrecognized tax benefits as a component of income tax expense.

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:

(dollars in thousands)	December 31, 2017	2016	2015
Allowance for loan losses	$ 21,119	$ 31,866	$ 30,925
Nonaccrual loan interest	6,694	10,397	10,726
Postretirement benefits other than pensions	4,488	27,440	25,554
Loss carryforwards	19,903	30,570	30,504
Other	2,342	3,685	3,969
Gross deferred tax asset	54,546	103,958	101,678
Less: valuation allowance	(47,172)	(83,559)	(79,712)
Gross deferred tax assets, net of valuation allowance	7,374	20,399	21,966
Bank patronage	(5,300)	(6,700)	(6,517)
Pensions	–	(9,775)	(12,411)
Depreciation	(253)	(403)	(836)
Other	(1,731)	(3,440)	(2,121)
Gross deferred tax liability	(7,284)	(20,318)	(21,885)
Net deferred tax asset (liability)	$ 90	$ 81	$ 81

In evaluating the ability to recover its deferred income tax asset, an Association considers all available positive and negative evidence, including operating results, ongoing tax planning and forecasts of future taxable income on a jurisdiction-by-jurisdiction basis. The valuation allowance has been provided due to the uncertainty regarding the realizability of certain deferred assets in excess of deferred liabilities.

At December 31, 2017, deferred income taxes have not been provided by District Associations on approximately $125.1 million of patronage refunds received from the Bank prior to January 1, 1993. Such refunds, distributed in the form of stock, are subject to tax only upon conversion to cash. The tax liability related to future conversions is not expected to be material.

The tax years that remain open for federal and major state income tax jurisdictions are 2014 and forward. There were no uncertain tax positions identified related to the current year, and the District has no unrecognized tax benefits at December 31, 2017 for which liabilities have been established.

Note 13 — Additional Financial Information

Quarterly Financial Information (Unaudited)

(dollars in thousands)	2017 First	Second	Third	Fourth	Total
Net interest income	$ 254,964	$ 258,821	$ 264,524	$ 260,497	$ 1,038,806
Provision for (reversal of allowance for) loan losses	1,632	3,556	3,467	4,716	13,371
Noninterest income (expense), net	(115,605)	(116,391)	(114,057)	28,050	(318,003)
Provision (benefit) for income taxes	119	182	343	461	1,105
Net income	$ 137,608	$ 138,692	$ 146,657	$ 283,370	$ 706,327

(dollars in thousands)	2016 First	Second	Third	Fourth	Total
Net interest income	$ 248,498	$ 253,863	$ 264,478	$ 269,348	$ 1,036,187
Provision for (reversal of allowance for) loan losses	1,293	2,728	(5,306)	1,094	(191)
Noninterest income (expense), net	(118,856)	(125,068)	(111,944)	(119,033)	(474,901)
Provision (benefit) for income taxes	261	5	62	(2)	326
Net income	$ 128,088	$ 126,062	$ 157,778	$ 149,223	$ 561,151

(dollars in thousands)	2015 First	Second	Third	Fourth	Total
Net interest income	$ 247,981	$ 250,244	$ 253,956	$ 252,044	$ 1,004,225
Provision for (reversal of allowance for) loan losses	1,713	3,392	(3,136)	(1,964)	5
Noninterest income (expense), net	(110,712)	(110,167)	(111,637)	(121,530)	(454,046)
Provision (benefit) for income taxes	432	505	(88)	(254)	595
Net income	$ 135,124	$ 136,180	$ 145,543	$ 132,732	$ 549,579

Other Assets and Other Liabilities
A summary of other assets and other liabilities follows:

	December 31,		
(dollars in thousands)	**2017**	**2016**	**2015**
Other assets:			
Assets held in trust funds	$ 31,496	$ 24,435	$ 21,730
Derivative assets	–	92	5,174
Prepaid expenses	8,904	7,548	6,872
Other	10,558	8,716	9,024
Total	$ 50,958	$ 40,791	$ 42,800
Other liabilities:			
Postretirement benefits liabilities	$ 207,364	$ 370,023	$ 364,331
Bank drafts payable	84,846	75,188	51,279
Payroll	35,127	34,004	32,353
Other	44,565	36,712	36,996
Total	$ 371,902	$ 515,927	$ 484,959

Offsetting of Financial and Derivative Assets

	December 31,		
(dollars in thousands)	**2017**	**2016**	**2015**
Derivatives	$ –	$ 92	$ 5,174
Reverse repurchase and similar arrangements	150,000	262,624	211,554
Gross Amount of Recognized Assets	150,000	262,716	216,728
Derivatives	–	–	–
Reverse repurchase and similar arrangements	–	–	–
Gross Amounts Offset in the Balance Sheets	–	–	–
Net Amounts of Assets Presented in the Balance Sheets	$ 150,000	$ 262,716	$ 216,728
Financial Instruments	(150,000)	(262,624)	(211,554)
Cash Collateral Received	–	–	–
Gross Amounts Not Offset in the Balance Sheets	(150,000)	(262,624)	(211,554)
Net Amount	$ –	$ 92	$ 5,174

There were no liabilities subject to master netting arrangements or similar agreements during the reporting periods.

A description of the rights of setoff associated with recognized derivative assets and liabilities subject to enforceable master netting arrangements is located in Note 14, *Derivative Financial Instruments and Hedging Activities*.

The reverse repurchase agreements are accounted for as collateralized lending.

Bank Only Financial Data
Condensed financial information of the Bank follows:

Balance Sheets	As of December 31,		
(dollars in thousands)	**2017**	**2016**	**2015**
Cash, cash equivalents and investment securities	$ 8,835,515	$ 8,843,943	$ 8,184,432
Loans			
To District Associations	15,838,709	15,480,715	14,890,580
To others	7,520,451	7,433,967	7,250,178
Total loans	23,359,160	22,914,682	22,140,758
Allowance for loan losses	(14,381)	(14,783)	(15,113)
Net loans	23,344,779	22,899,899	22,125,645
Other assets	307,163	313,755	310,523
Total assets	$ 32,487,457	$ 32,057,597	$ 30,620,600
Bonds and notes	$ 29,762,991	$ 29,408,483	$ 27,973,107
Other liabilities	481,651	423,866	392,472
Total liabilities	30,244,642	29,832,349	28,365,579
Perpetual preferred stock	49,250	49,250	115,000
Capital stock and participation certificates	313,752	301,905	307,483
Additional paid-in-capital	58,883	58,883	39,988
Retained earnings	1,845,686	1,817,563	1,732,628
Accumulated other comprehensive income (loss)	(24,756)	(2,353)	59,922
Total shareholders' equity	2,242,815	2,225,248	2,255,021
Total liabilities and shareholders' equity	$ 32,487,457	$ 32,057,597	$ 30,620,600

Statements of Income	Year Ended December 31,		
(dollars in thousands)	2017	2016	2015
Interest income	$ 860,572	$ 780,202	$ 703,141
Interest expense	413,505	315,198	249,080
Net interest income	447,067	465,004	454,061
Provision for (reversal of allowance for) loan losses	(551)	(5,283)	(3,157)
Net interest income after provision for (reversal of allowance for) loan losses	447,618	470,287	457,218
Noninterest income	23,375	3,396	6,639
Noninterest expenses			
Salaries and employee benefits	48,964	46,122	43,324
Postretirement benefits	2,111	13,110	13,292
Occupancy and equipment	22,834	22,098	20,633
Insurance Fund premiums	13,868	16,229	11,677
Other operating expenses	37,905	36,212	37,788
Losses (gains) from other property owned	562	(2,051)	335
Total noninterest expenses	126,244	131,720	127,049
Net income	$ 344,749	$ 341,963	$ 336,808

Note 14 — Derivative Financial Instruments and Hedging Activities

One of the District's goals is to minimize interest rate sensitivity by managing the repricing characteristics of assets and liabilities so that the net interest margin is not adversely affected by movements in interest rates. The District maintains an overall interest rate risk management strategy that may incorporate the use of derivative instruments to achieve that goal. The District has typically utilized interest rate swaps, which convert fixed interest rate debt to a lower floating interest rate than was achievable from issuing floating rate debt with identical repricing characteristics. They may allow the District to lower funding costs, diversify sources of funding, or alter interest rate exposures arising from mismatches between assets and liabilities. Under these arrangements, the District agrees with other parties to exchange, at specified intervals, payment streams calculated on a specified notional principal amount, with at least one stream based on a specified floating rate index.

The District may also purchase interest rate derivatives such as caps, in order to reduce the impact of rising interest rates on its floating-rate debt, and floors, in order to reduce the impact of falling interest rates on its floating-rate assets. In addition, the District may also fix a price to be paid in the future which qualifies as a derivative forward contract.

As a result of interest rate fluctuations, interest income and interest expense related to hedged variable-rate assets and liabilities, respectively, will increase or decrease. Another result of interest rate fluctuations is that hedged fixed-rate assets and liabilities will appreciate or depreciate in market value. The effects of any earnings variability or unrealized changes in market value are expected to be substantially offset by the District's gains or losses on the derivative instruments that are linked to these hedged assets and liabilities. The District considers its strategic use of derivatives to be a prudent method of managing interest rate sensitivity, as it prevents earnings from being exposed to undue risk posed by changes in interest rates.

The primary type of derivative instrument used and the amount of activity for each year ended is summarized in the following table:

Notional Amounts *(dollars in millions)*	2017 Receive-Fixed Swaps	2017 Forward Contracts	2016 Receive-Fixed Swaps	2016 Forward Contracts	2015 Receive-Fixed Swaps	2015 Forward Contracts
Balance at beginning of period	$ 50	$ 1	$ 150	$ –	$ 250	$ 1
Additions	–	9	–	2	–	4
Maturities/amortization	(50)	(10)	(100)	(1)	(100)	(5)
Terminations	–	–	–	–	–	–
Balance at end of period	$ –	$ –	$ 50	$ 1	$ 150	$ –

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

To minimize the risk of credit losses, the District transacts with counterparties that have an investment grade credit rating from a major rating agency and also monitors the credit standing of, and levels of exposure to, individual counterparties. The District typically enters into master agreements that contain netting provisions. These provisions allow the District to require the net settlement of covered contracts with the same counterparty in the event of default by the counterparty on one or more contracts. A number of swaps are supported by collateral arrangements with counterparties.

Counterparty exposure related to derivatives at:

	December 31,		
(dollars in millions)	2017	2016	2015
Estimated Gross Credit Risk	$–	$0.1	$5.2
Percent of Notional	–%	0.18%	3.45%

There was no cash or securities collateral held or posted for the periods presented.

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

Fair Value Hedges

For derivative instruments designated as fair value hedges, the gains or losses on the derivative, as well as the offsetting loss or gain on the hedged item attributable to the hedged risk, are recognized in current earnings. The District includes the gain or loss on the hedged items in the same line item (interest expense) as the offsetting loss or gain on the related interest rate swaps. During the year ended December 31, 2017, there were no gains or losses recognized related to interest rate swaps. Gains and losses on each derivative representing either hedge ineffectiveness or hedge components excluded from the assessment of effectiveness are recognized in current earnings.

Cash Flow Hedges

From time to time, the District may acquire when-issued securities, generally government agency guaranteed bonds. The when-issued transactions are contracts to purchase securities that will not be delivered until 30, or more, days in the future. These purchase commitments are considered derivatives (cash flow hedges) in the form of forward contracts. Any difference in market value of the contracted securities, between the purchase and reporting or settlement dates, represent the value of the forward contracts. These amounts are included in OCI, and Other Liabilities or Other Assets as appropriate, as firm commitments in the District's Balance Sheets for each period end. At December 31, 2017, 2016, and 2015, the District had no commitments to purchase any when-issued bonds.

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

The following tables represent the fair value of derivatives designated as hedging instruments at periods ended:

(dollars in thousands)	Balance Sheet Classification Assets	12/31/17 Fair Value	Balance Sheet Classification Liabilities	12/31/17 Fair Value
Receive-fixed swaps	Other Assets	$ –	Other Liabilities	$ –
Forward contracts	Other Assets	–	Other Liabilities	–
Total		$ –		$ –

(dollars in thousands)	Balance Sheet Classification Assets	12/31/16 Fair Value	Balance Sheet Classification Liabilities	12/31/16 Fair Value
Receive-fixed swaps	Other Assets	$ 92	Other Liabilities	$ –
Forward contracts	Other Assets	–	Other Liabilities	–
Total		$ 92		$ –

(dollars in thousands)	Balance Sheet Classification Assets	12/31/15 Fair Value	Balance Sheet Classification Liabilities	12/31/15 Fair Value
Receive-fixed swaps	Other Assets	$ 5,174	Other Liabilities	$ –
Forward contracts	Other Assets	–	Other Liabilities	–
Total		$ 5,174		$ –

The following table sets forth the amount of net gain (loss) on derivatives recognized in earnings and, for cash flow hedges, the amount of net gain (loss) recognized in AOCI for the periods presented. See Note 7, *Shareholders' Equity*.

(dollars in thousands)	Location of Gain or (Loss) Recognized in, or Reclassified from AOCI into, Income	Amount of Gain or (Loss) Recognized in, or Reclassified from AOCI into, Income *			Amount of Gain or (Loss) Recognized in Income on Derivative (Ineffective Portion and Amount Excluded from Effectiveness Testing)			Amount of Gain or (Loss) Recognized in OCI on Derivative (Effective Portion)		
		2017	2016	2015	2017	2016	2015	2017	2016	2015
Fair Value Hedges:										
Receive-fixed swaps	Noninterest income	$ –	$ –	$ –						
Cash Flow Hedges:										
Firm Commitments	Interest Income	$ (856)	$ (119)	$ 409	$ –	$ –	$ –	$ –	$ –	$ –
Forward Contracts	Gains (Losses) on Other Transactions	(115)	34	103	–	–	–	(115)	34	103

**Represents total gain or loss for fair value hedges and effective portion for cash flow hedges.*

Note 15 — Subsequent Events

The District evaluated subsequent events and determined that there were none requiring disclosure through March 13, 2018, which was the date the financial statements were issued.

Glossary of Certain Acronyms

ABO	Accumulated benefit obligation
ABS	Asset backed security
ACA	Agricultural Credit Association
ACB	Agricultural Credit Bank
ACP	Advance conditional payment
AFS	Available- for- sale
ALCO	Asset/Liability Management Committee
ALM	Asset and liability management
AOCI	Accumulated Other Comprehensive Income
ARM	Adjustable rate mortgage
ASU	Accounting Standards Update
CEO	Chief Executive Officer
CFPB	Consumer Financial Protection Bureau
CFTC	Commodity Futures Trading Commission
CIPA	Contractual Interbank Performance Agreement
CMO	Collateralized Mortgage Obligation
EIN	Employee Identification Number
FAMC	Federal Agricultural Mortgage Corporation (Farmer Mac)
FASB	Financial Accounting Standards Board
FCA	Farm Credit Administration
FCB	Farm Credit Bank
FCBA	Farm Credit Benefits Alliance
FCSIC	Farm Credit System Insurance Corporation
FHA	Federal Housing Administration
FHLMC	Federal Home Loan Mortgage Corporation (Freddie Mac)
FIP	Financial improvement plan
FLCA	Federal Land Credit Association
FNMA	Federal National Mortgage Association (Fannie Mae)
FSRIA	Farm Security and Rural Investment Act
FSA	Farm Service Agency
GAAP	Generally Accepted Accounting Principles
GCFI	Gross cash farm income
GFA	General Financing Agreement
GNMA	Government National Mortgage Association (Ginnie Mae)
GSE	Government-sponsored enterprise
HTM	Held to maturity
IASB	International Accounting Standards Board
IFRS	International Financial Reporting Standards
LIBOR	London Inter-Bank Offered Rate
LLC	Limited liability company
MAA	Market Access Agreement
MBS	Mortgage-backed security
MD&A	Management's Discussion and Analysis
NII	Net interest income
NRSRO	Nationally Recognized Statistical Rating Organization
OAEM	Other Assets Especially Mentioned
OCI	Other Comprehensive Income
OFI	Other financing institution
OPO	Other property owned
OTTI	Other-than-temporary impairment
PBO	Projected benefit obligation
PCA	Production Credit Association
PCI	Purchased credit impaired
PFC	Plan Fiduciary Committee
PPA	Pension Protection Act
RAB	Rural America Bond
RBIC	Rural Business Investment Company
RHMS	Rural Housing Mortgage-Backed Securities
RP	Rehabilitation plan
SEC	Securities and Exchange Commission
SIIC	Successor-in-Interest Contract
TDR	Troubled debt restructuring
UBE	Unincorporated business entity
URE	Unallocated retained earnings
UREE	Unallocated retained earnings equivalents
USD	U.S. dollar
USDA	United States Department of Agriculture
YBS	Young, Beginning, and Small