GreenStone Farm Credit Services, ACA

Quarterly Report
September 30, 2019

MANAGEMENT'S DISCUSSION AND ANALYSIS

The following commentary reviews the consolidated financial condition and consolidated results of operations of GreenStone Farm Credit Services, ACA and its subsidiaries GreenStone Farm Credit Services, FLCA and GreenStone Farm Credit Services, PCA. This discussion should be read in conjunction with both the unaudited consolidated financial information and related notes included in this Quarterly Report as well as Management's Discussion and Analysis included in our Annual Report for the year ended December 31, 2018 (2018 Annual Report).

Due to the nature of our financial relationship with AgriBank, FCB (AgriBank), the financial condition and results of operations of AgriBank materially impact our members' investment. To request free copies of AgriBank financial reports or additional copies of our report, contact us at:

GreenStone Farm Credit Services, ACA
3515 West Road
East Lansing, MI 48823
(800) 968-0061
www.greenstonefcs.com
Travis.Jones@greenstonefcs.com

AgriBank, FCB
30 East 7th Street, Suite 1600
St. Paul, MN 55101
(651) 282-8800
www.agribank.com
financialreporting@agribank.com

FORWARD-LOOKING INFORMATION

Any forward-looking statements in this Quarterly Report are based on current expectations and are subject to uncertainty and changes in circumstances. Actual results may differ materially from expectations due to a number of risks and uncertainties. More information about these risks and uncertainties is contained in our 2018 Annual Report. We undertake no duty to update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise.

AGRICULTURAL AND ECONOMIC CONDITIONS

Real gross domestic product (GDP) increased at an annual rate of 1.9% in the third quarter of 2019 according to the "advance" estimate released by the Bureau of Economic Analysis. The increase reflected positive contributions from personal consumption expenditures, federal government spending, residential fixed investment, state and local government spending, and exports. This was partially offset by negative contributions from nonresidential fixed investment and private inventory investment. Imports, which are a subtraction form GDP, increased.

On October 30th, the Federal Open Market Committee (FOMC) opted to cut its target interest rate range by an additional 0.25%, bringing it to the 1.50%-1.75% range. This represents the third 0.25% rate cut since late July. Although most major economic indicators have remained solid, inflation continues to run below the 2% target. The FOMC cited global uncertainty for the economic outlook, as well as muted inflation for voting to cut the rates.

Much of the uncertainty that is said to be hindering growth in recent months stems from trade tensions, largely between China and the U.S. Evidence of this uncertainty can be found in financial market volatility, which has increased due to, among other things, earnings concerns for multinational corporations with a heavy international presence. On October 11, 2019, President Trump announced China and the U.S. had reached a tentative agreement for the "first phase" of a trade deal, with China agreeing to purchase up to $50 billion in American farm products, and agreeing to accept more financial services in their market, with the U.S. agreeing to suspend new tariffs scheduled later in October. As a result of this announcement, markets have renewed optimism a permanent trade deal will be reached.

Sales of new and existing homes fell modestly and mortgage applications declined in September compared to August. The pace of home buying has picked up in recent months, so the modest decline left sales at a fairly high level. Sales of new single-family homes in September were at a seasonally adjusted annual rate of 701,000. This is 0.7% below August but is 15.5% more than September 2018.

The United States Department of Agriculture (USDA) forecast for 2019 total net farm income is $88.0 billion, a 4.8% increase over 2018 (2.9% if adjusted for inflation). If realized, in inflation-adjusted terms, 2019 projected net farm income of $88.0 billion would be 35.5 percent below the peak net farm income of $136.5 billion reported in 2013. It would also be below its 2000-2018 average of $90.1 billion. Much of the rise in forecasted net farm income for 2019 can be attributed to production expenses only rising 0.4% (a 1.3% decline on an inflation-adjusted basis). More specifically, rising costs of feed and labor are expected to be offset by reduced spending on seed, pesticides, fuel/oil, and interest. Farm sector equity is also trending upward, with the USDA forecasting 1.8% growth, to $2.67 trillion by the end of 2019. Much of this reflects a projected 1.9% rise in farm-sector real estate values during 2019. Total farm debt in nominal terms is forecast to increase by $13.7 billion (3.4%) in 2019, led by an expected 4.6% rise in real estate debt. The farm sector debt-to-asset ratio is

expected to rise from 13.3% in 2018 to 13.5% in 2019. Working capital, which measures the amount of current assets available to cover current liabilities, is forecast to decline 18.7% from 2018.

Many Michigan agricultural producers have faced uncertainty of their own given the cold and wet conditions that lasted through much of the spring. As a result, days suitable for fieldwork throughout the planting season were limited and, given the widespread impact of the historically wet planting season, December corn futures rose sharply from the range of $3.65-3.75 per bushel up to as high as $4.73 per bushel in June. Much of this market reaction was due to the expectation that many farmers would plant soybeans instead of corn, driving planted acreage and the overall harvest lower for the year. Throughout the summer, however, the USDA provided upward revisions for both planted corn acreage and yields, which indicated a larger harvest than was originally anticipated. According to the USDA, trade tensions with China (historically the largest purchaser of U.S. soybeans) may have influenced many farmers' decision to plant corn instead of soybeans. As such, soybean production is now forecast to be down nearly 900 million bushels, or 19%, from 2018. In total, the trade impasse with China, and subsequently lower soybean prices, led to 12.5 million fewer soybean acres being planted this year in the U.S.

Michigan-based milk producers continue to face mailbox milk prices ($16.90 per cwt) well below the national average ($18.03 per cwt) due to a shortage of processing capacity in the state. That being said, the overall dairy market trend is favorable, as Michigan producers were receiving mailbox milk prices of $13.43 per cwt in July 2018 and $16.90 per cwt in July 2019, while Wisconsin producers were receiving $15.10 in July 2018 and $18.52 in July 2019. Milk prices have rebounded as several months of herd reduction driven by rising cull rates has put downward pressure on production levels. As this rally continues, it is important to track the industry's appetite for capacity expansion, which may drive prices lower once again.

LOAN PORTFOLIO

Loan Portfolio

Total loans were $9.0 billion at September 30, 2019, an increase of $372.2 million from December 31, 2018.

Total owned and managed loan volume, including serviced volume on the real estate loans sold to AgriBank was $9.1 billion at September 30, 2019, a $350.8 million increase from December 31, 2018. Our combined mortgage portfolio increased $384.8 million, or 5.8% from December 31, 2018, while our short-term commercial loan portfolio decreased $34.0 million, or 1.6% from December 31, 2018. When compared to September 30, 2018, owned and managed mortgage volume is up 3.1% and commercial loan volume is up 2.6%. These increases were driven by growth in all market segments and led by our capital markets and country living segments that have increased 10.1% and 7.6% since September 30, 2018, respectively. Our current volume reflects an asset growth rate year over year that is running slightly above our 2019 Business Plan.

Portfolio Credit Quality

The credit quality of our loan portfolio slowly declined throughout 2018 and continued this trend during the first nine months of 2019. Acceptable loan credit quality, as measured under the Uniform Classification System, was 91.5% which decreased from 92.2% at December 31, 2018. Year over year, acceptable credit quality decreased 1.8% from 93.3% at September 30, 2018. Portfolio assets criticized as being less than acceptable was comprised of 4.9% other assets especially mentioned (OAEM) and 3.6% adversely classified. OAEM increased 0.6% and adversely classified increased 0.1% from December 31, 2018.

Adversely classified loans are identified as having material credit weaknesses which, if left uncorrected, result in a greater than normal risk. Portfolio credit quality is considered when assessing the reasonableness of our allowance for loan losses. Weaker borrowers in our dairy and cash crop portfolios continued to be challenged financially during the first nine months of 2019.

The resulting level of credit quality, when combined with our earnings and addition to capital surplus, resulted in an adverse assets to regulatory capital ratio of 19.4%. This ratio has decreased 0.1% since December 31, 2018.

In certain circumstances, Federal Agricultural Mortgage Corporation and other government agency guarantee programs are used to reduce the risk of loss. At September 30, 2019, $347.6 million of our loans were, to some level, guaranteed under these programs. The guaranteed loan volume increased from $308.4 million at December 31, 2018.

Risk Assets

Components of Risk Assets

(dollars in thousands) As of:	**September 30 2019**	December 31 2018
Loans:		
Nonaccrual	**$82,720**	$97,884
Accruing restructured	**3,308**	3,331
Accruing loans 90 days or more past due	**13**	79
Total risk loans	**86,041**	101,294
Acquired property	**1,784**	1,766
Total risk assets	**$87,825**	$103,060
Total risk loans as a percentage of total loans	**1.0%**	1.2%
Nonaccrual loans as a percentage of total loans	**0.9%**	1.1%
Current nonaccrual loans as a percentage of total nonaccrual loans	**45.9%**	91.2%
Total delinquencies as a percentage of total loans	**0.6%**	0.3%

Note: Accruing loans include accrued interest receivable.

Our risk assets decreased from December 31, 2018 and remained at acceptable levels. Total risk loans as a percentage of total loans remained well within our established risk management guidelines.

Nonaccrual loans decreased from $97.9 million at December 31, 2018 to $82.7 million at September 30, 2019 and remained at acceptable levels. The decrease in nonaccrual loan volume was primarily due to some large dairy customers that sold their dairy operations in 2019. As of September 30, 2019, 55.8% of the nonaccrual loan portfolio was comprised of dairy loans.

Our accounting policy requires accruing loans past due 90 days to be transferred into nonaccrual status unless adequately secured and in the process of collection. Based on our analysis, all loans 90 days or more past due and still accruing interest were eligible to remain in accruing status.

Allowance for Loan Losses

The allowance for loan losses is an estimate of losses on loans inherent in our portfolio as of the financial statement date. We determine the appropriate level of allowance for loan losses based on periodic evaluation of factors such as loan loss history, estimated probability of default, estimated loss severity, portfolio quality, and current economic and environmental conditions.

Allowance Coverage Ratios

As of:	**September 30 2019**	December 31 2018
Allowance as a percentage of:		
Loans	**1.0%**	1.0%
Nonaccrual loans	**107.1%**	85.9%
Total risk loans	**103.0%**	83.0%

The allowance for loan losses increased $4.5 million from December 31, 2018 to $88.6 million at September 30, 2019. During the first nine months of 2019, a provision for loan losses of $5.7 million was recorded. Included in our allowance is additional general industry reserves for our dairy and cash grain portfolios due to expected low commodity prices in the near future. The additional general industry reserve for the dairy portfolio increased from $31.5 million at December 31, 2018 to $39.9 million at September 30, 2019. The additional general industry reserve for the cash grain portfolio increased from $9.5 million at December 31, 2018 to $11.1 million at September 30, 2019. The industry reserve increases were partially offset by the reversal of specific loan loss reserves on nonaccrual loans.

Under certain circumstances, credit losses may be recorded to establish a reserve on unfunded loan commitments. The “Provision for credit losses” in the Consolidated Statements of Income for the nine months ended September 30, 2019 included a reversal of credit losses on unfunded loan commitments of $524 thousand. The accrued credit losses are recorded in “Other liabilities” in the Consolidated Statements of Condition. The accrued credit losses related to unfunded loan commitments were $3.6 million and $4.2 million as of September 30, 2019 and December 31, 2018, respectively.

In our opinion, the allowance for loan losses was reasonable in relation to the risk in our loan portfolio at September 30, 2019.

RESULTS OF OPERATIONS

Profitability Information

(dollars in thousands) For the nine months ended September 30	2019	2018
Net income	**$151,477**	$126,308
Return on average assets	**2.2%**	2.0%
Return on average members' equity	**11.8%**	10.4%

Changes presented in the chart above relate to:

- Changes in income discussed below
- Changes in assets discussed in the Loan Portfolio section
- Changes in capital discussed in the Funding, Liquidity, and Capital section

Changes in Significant Components of Net Income

(in thousands) For the nine months ended September 30	2019	2018	Increase (decrease) in net income
Net interest income	**$174,266**	$164,284	**$9,982**
Provision for credit losses	**(5,150)**	(12,227)	**7,077**
Patronage income	**34,941**	23,539	**11,402**
Financially related services income	**6,413**	6,070	**343**
Fee income	**14,287**	10,899	**3,388**
Allocated Insurance Reserve Accounts distribution	**1,997**	4,779	**(2,782)**
Acquired property income, net	**225**	359	**(134)**
Miscellaneous income, net	**848**	806	**42**
Operating expenses	**(72,708)**	(70,004)	**(2,704)**
Provision for income taxes	**(3,642)**	(2,197)	**(1,445)**
Net income	**$151,477**	$126,308	**$25,169**

Changes in Net Interest Income

(in thousands) For the nine months ended September 30	2019 vs 2018
Changes in volume	**$8,007**
Changes in interest rates	**1,699**
Changes in nonaccrual income and other	**276**
Net change	**$9,982**

The decrease in provision for credit losses from 2018 is primarily due to some large commercial dairy relationships that were downgraded in 2018. There have been no significant downgrades in 2019.

Patronage Income

(in thousands) For the nine months ended September 30	2019	2018
Wholesale patronage:		
Cash	**$10,292**	$17,958
Stock	**17,110**	--
Pool program patronage	**5,410**	3,368
AgDirect partnership distribution	**2,065**	2,158
Other Farm Credit Institutions	**64**	55
Total patronage income	**$34,941**	$23,539

The increase in patronage income was primarily due to an increase in wholesale patronage, which was primarily due to a higher patronage rate for the first nine months of 2019 compared to the same period of 2018. Wholesale patronage may be paid in cash or AgriBank stock. All pool program patronage and AgDirect partnership distributions are paid in cash.

The increase in fee income was primarily due to an increase in loan origination fees along with an increase in loan conversion fees, which was due to opportunities created by lower long-term interest rates in 2019 compared to 2018.

The change in allocated insurance reserve accounts distribution was due to our share of distributions from Allocated Insurance Reserve Accounts (AIRA) of $2.0 million received in March of 2019, compared to $4.8 million received in March of 2018. The AIRA was established by the Farm Credit System Insurance

Corporation (FCSIC) when premiums collected increased the level of the Insurance Fund beyond the required 2% of insured debt. Refer to our 2018 Annual Report for additional information about the FCSIC.

The change in operating expenses was primarily due to an increase in salaries and employee benefits.

The increase in provision for income taxes was primarily due to more income generated by the ACA taxable entity.

FUNDING, LIQUIDITY, AND CAPITAL

We borrow from AgriBank, under a note payable, in the form of a line of credit. Our note payable matures on December 31, 2021, at which time the note will be renegotiated. The repricing attributes of our line of credit generally correspond to the repricing attributes of our loan portfolio, which significantly reduces our market interest rate risk. Due to the cooperative structure of the Farm Credit System and as we are a stockholder of AgriBank, we expect this borrowing relationship to continue into the foreseeable future. Our other source of lendable funds is from equity.

The components of cost of funds associated with our note payable include:

- A marginal cost of debt component
- A spread component, which includes cost of servicing, cost of liquidity, and bank profit
- A risk premium component, if applicable

We were not subject to a risk premium at September 30, 2019, or December 31, 2018.

Total members' equity increased $91.1 million from December 31, 2018, primarily due to net income for the period partially offset by patronage distribution accruals**.** The change in accumulated other comprehensive loss is the amortization impact of prior service cost and unamortized actuarial gain/loss related to the Pension Restoration Plan. Refer to Note 10 in our 2018 Annual Report for more information on the Pension Restoration Plan.

The Farm Credit Administration (FCA) Regulations require us to maintain minimums for our common equity tier 1, tier 1 capital, total regulatory capital, and permanent capital risk-based capital ratios. In addition, the FCA requires us to maintain minimums for our non-risk-adjusted ratios of tier 1 leverage and unallocated retained earnings and equivalents leverage. Refer to Note 8 in our 2018 Annual Report for a more complete description of these ratios.

Regulatory Capital Requirements and Ratios

As of:	**September 30 2019**	December 31 2018	Regulatory Minimums	Capital Conservation Buffer	Total
Risk-adjusted:					
Common equity tier 1 ratio	**16.5%**	16.4%	4.5%	2.5%*	7.0%
Tier 1 capital ratio	**16.5%**	16.4%	6.0%	2.5%*	8.5%
Total regulatory capital ratio	**17.4%**	17.3%	8.0%	2.5%*	10.5%
Permanent capital ratio	**16.7%**	16.6%	7.0%	N/A	7.0%
Non-risk-adjusted:					
Tier 1 leverage ratio	**17.5%**	17.6%	4.0%	1.0%	5.0%
Unallocated retained earnings and equivalents leverage ratio	**18.6%**	18.6%	1.5%	N/A	1.5%

*The 2.5% capital conservation buffer over risk-adjusted ratio minimums is being phased in over three years under the FCA capital requirements. The phase in period ends on December 31, 2019.

The capital adequacy ratios are directly impacted by the changes in capital as more fully explained in this section and the changes in assets as discussed in the Loan Portfolio section.

CERTIFICATION

The undersigned have reviewed the September 30, 2019, Quarterly Report of GreenStone Farm Credit Services, ACA, which has been prepared under the oversight of the Audit Committee and in accordance with all applicable statutory or regulatory requirements. The information contained herein is true, accurate, and complete to the best of our knowledge and belief.

Edward L. Reed
Chair of the Board
GreenStone Farm Credit Services, ACA

David B. Armstrong
Chief Executive Officer
GreenStone Farm Credit Services, ACA

Travis D. Jones
Executive Vice President – Chief Financial Officer
GreenStone Farm Credit Services, ACA

November 7, 2019

CONSOLIDATED STATEMENTS OF CONDITION

GreenStone Farm Credit Services, ACA
(in thousands)
(Unaudited)

As of:	**September 30 2019**	December 31 2018
ASSETS		
Loans	**$8,991,806**	$8,619,585
Allowance for loan losses	**88,602**	84,064
Net loans	**8,903,204**	8,535,521
Investment in AgriBank, FCB	**218,488**	196,566
Investment securities	**10,254**	7,715
Accrued interest receivable	**81,988**	65,449
Premises and equipment, net	**49,532**	46,579
Acquired property	**1,784**	1,766
Deferred tax assets, net	**4,411**	4,809
Other assets	**51,129**	60,905
Total assets	**$9,320,790**	$8,919,310
LIABILITIES		
Note payable to AgriBank, FCB	**$7,398,105**	$7,072,973
Accrued interest payable	**52,292**	48,402
Patronage distribution payable	**61,050**	82,000
Other liabilities	**46,206**	43,858
Total liabilities	**7,557,653**	7,247,233
Contingencies and commitments (Note 4)		
MEMBERS' EQUITY		
Protected members' equity	**1**	1
Capital stock and participation certificates	**22,880**	22,400
Unallocated surplus	**1,741,961**	1,651,528
Accumulated other comprehensive loss	**(1,705)**	(1,852)
Total members' equity	**1,763,137**	1,672,077
Total liabilities and members' equity	**$9,320,790**	$8,919,310

The accompanying notes are an integral part of these Consolidated Financial Statements.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

GreenStone Farm Credit Services, ACA
(in thousands)
(Unaudited)

	Three Months Ended		Nine Months Ended	
For the period ended September 30	**2019**	2018	**2019**	2018
Interest income	**$111,971**	$102,890	**$329,075**	$291,179
Interest expense	**52,265**	45,705	**154,809**	126,895
Net interest income	**59,706**	57,185	**174,266**	164,284
Provision for credit losses	**3,230**	7,664	**5,150**	12,227
Net interest income after provision for credit losses	**56,476**	49,521	**169,116**	152,057
Non-interest income				
Patronage income	**12,301**	7,898	**34,941**	23,539
Financially related services income	**2,500**	2,172	**6,413**	6,070
Fee income	**6,182**	4,076	**14,287**	10,899
Allocated Insurance Reserve Accounts distribution	**--**	--	**1,997**	4,779
Acquired property income, net	**52**	77	**225**	359
Miscellaneous income, net	**231**	148	**848**	806
Total non-interest income	**21,266**	14,371	**58,711**	46,452
Operating expenses				
Salaries and employee benefits	**16,633**	15,606	**50,081**	47,034
Other operating expenses	**7,950**	7,437	**22,627**	22,970
Total operating expenses	**24,583**	23,043	**72,708**	70,004
Income before income taxes	**53,159**	40,849	**155,119**	128,505
Provision for income taxes	**1,132**	423	**3,642**	2,197
Net income	**$52,027**	$40,426	**$151,477**	$126,308
Other comprehensive income				
Employee benefit plans activity	**$49**	$58	**$147**	$174
Total other comprehensive income	**49**	58	**147**	174
Comprehensive income	**$52,076**	$40,484	**$151,624**	$126,482

The accompanying notes are an integral part of these Consolidated Financial Statements.

CONSOLIDATED STATEMENTS OF CHANGES IN MEMBERS' EQUITY

GreenStone Farm Credit Services, ACA
(in thousands)
(Unaudited)

	Protected Members' Equity	Capital Stock and Participation Certificates	Unallocated Surplus	Accumulated Other Comprehensive Loss	Total Members' Equity
Balance at December 31, 2017	$1	$22,141	$1,548,350	($1,846)	$1,568,646
Net income	--	--	126,308	--	126,308
Other comprehensive income	--	--	--	174	174
Unallocated surplus designated for patronage distributions	--	--	(37,864)	--	(37,864)
Capital stock and participation certificates issued	--	1,511	--	--	1,511
Capital stock and participation certificates retired	--	(1,332)	--	--	(1,332)
Balance at September 30, 2018	$1	$22,320	$1,636,794	($1,672)	$1,657,443
Balance at December 31, 2018	$1	$22,400	$1,651,528	($1,852)	$1,672,077
Net income	**--**	**--**	**151,477**	**--**	**151,477**
Other comprehensive income	**--**	**--**	**--**	**147**	**147**
Unallocated surplus designated for patronage distributions	**--**	**--**	**(61,038)**	**--**	**(61,038)**
Cumulative effect of change in accounting principle	**--**	**--**	**(6)**	**--**	**(6)**
Capital stock and participation certificates issued	**--**	**1,637**	**--**	**--**	**1,637**
Capital stock and participation certificates retired	**--**	**(1,157)**	**--**	**--**	**(1,157)**
Balance at September 30, 2019	**$1**	**$22,880**	**$1,741,961**	**($1,705)**	**$1,763,137**

The accompanying notes are an integral part of these Consolidated Financial Statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1: ORGANIZATION AND SIGNIFICANT ACCOUNTING POLICIES

The Consolidated Financial Statements contain all adjustments necessary for a fair presentation of the interim Consolidated Statements of Condition and Consolidated Statements of Comprehensive Income. Our accounting policies conform to accounting principles generally accepted in the United States of America (GAAP) and the prevailing practices within the financial services industry. This interim Quarterly Report is prepared based upon statutory and regulatory requirements and in accordance with GAAP. However, certain disclosures required by GAAP are omitted. The results of the nine months ended September 30, 2019, are not necessarily indicative of the results to be expected for the year ending December 31, 2019. The interim financial statements and the related notes in this Quarterly Report should be read in conjunction with the Consolidated Financial Statements and related notes included in our Annual Report for the year ended December 31, 2018 (2018 Annual Report).

The Consolidated Financial Statements present the consolidated financial results of GreenStone Farm Credit Services, ACA (the Association) and its subsidiaries GreenStone Farm Credit Services, FLCA and GreenStone Farm Credit Services, PCA. All material intercompany transactions and balances have been eliminated in consolidation.

Significant Accounting Policies

Leases: We are the lessee in operating leases. We evaluate arrangements at inception to determine if it is a lease. Leases with an initial term of 12 months or less are not recorded on the balance sheet with lease expense recognized on a straight-line basis over the lease term. For operating leases with terms greater than 12 months the right-of-use (ROU) assets are included in “Other assets” in the Consolidated Statements of Condition and the lease liabilities are included in “Other liabilities” in the Consolidated Statements of Condition.

The ROU assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease. Operating lease ROU assets and liabilities are recognized based on the present value of lease payments over the lease term. As most of our leases do not provide an implicit rate, we use our incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments. We use the implicit rate when readily determinable. Our lease terms may include options to extend or terminate the lease. The length of the lease term is modified to include the option when it is reasonably certain that we will exercise that option. Operating lease expense for lease payments is recognized on a straight-line basis over the lease term.

Recently Issued or Adopted Accounting Pronouncements

We have assessed the potential impact of accounting standards that have been issued by the Financial Accounting Standards Board (FASB) and have determined the following standards to be applicable to our business. While we are a nonpublic entity, our financial results are closely related to the performance of the combined Farm Credit System. Therefore, we typically adopt accounting pronouncements on the public business entities effective date or aligned with other System institutions.

Standard and effective date	Description	Adoption status and financial statement impact
In February 2016, the FASB issued Accounting Standards Update (ASU) 2016-02 “Leases.” In July 2018, the FASB issued ASU 2018-11 “Leases (Topic 842): Targeted Improvements.” The guidance is effective for public business entities in its first quarter of 2019 and early adoption is permitted.	The guidance modifies the recognition and accounting for lessees and lessors and requires expanded disclosures regarding assumptions used to recognize revenue and expenses related to leases. Upon adoption, a liability for lease obligations and a corresponding right-of-use asset is recognized on the Consolidated Statements of Condition for all lease arrangements spanning more than 12 months. The guidance includes an optional transition method where an entity is permitted to apply the guidance as of the adoption date and recognize a cumulative-effect adjustment to the opening balance of retained earnings.	We adopted this guidance on January 1, 2019. The adoption of this guidance did not have a material impact on our financial condition, results of operations, and financial statement disclosures, and had no impact on cash flows.

Standard and effective date	Description	Adoption status and financial statement impact
In June 2016, the FASB issued ASU 2016-13 "Financial Instruments – Credit Losses." This guidance is effective for public business entities for non-U.S. Securities Exchange Commission filers for the first quarter of 2021 and early adoption is permitted.	The guidance replaces the current incurred loss impairment methodology with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. Credit losses relating to available-for-sale securities would also be recorded through an allowance for credit losses.	On October 16, 2019, the FASB voted to defer effective dates for various standards for certain entities, which includes ASU 2016-13. We have determined we qualify for the delay in the required adoption date for this standard. We are evaluating the deferral and have not yet determined if we will early adopt the standard. We have reviewed the accounting standard, selected and substantially completed development of our system, and are in the process of drafting disclosures. Significant implementation matters yet to be addressed include system testing, drafting of accounting policies and designing processes and controls. We are currently unable to estimate the impact on our financial statements.

NOTE 2: LOANS AND ALLOWANCE FOR LOAN LOSSES

Loans by Type

(dollars in thousands)

As of:	**September 30, 2019**		December 31, 2018	
	Amount	**Percentage**	Amount	Percentage
Real estate mortgage	**$5,452,351**	**60.6%**	$5,265,017	61.1%
Production and intermediate-term	**1,886,079**	**21.0**	2,035,886	23.6
Agribusiness	**1,164,892**	**13.0**	907,425	10.5
Other	**488,484**	**5.4**	411,257	4.8
Total	**$8,991,806**	**100.0%**	$8,619,585	100.0%

The other category is primarily composed of rural infrastructure and rural residential real estate related loans.

Delinquency

Aging Analysis of Loans

(in thousands) **As of September 30, 2019**	30-89 Days Past Due	90 Days or More Past Due	Total Past Due	Not Past Due or Less than 30 Days Past Due	Total	Accruing Loans 90 Days or More Past Due
Real estate mortgage	**$17,734**	**$21,273**	**$39,007**	**$5,466,679**	**$5,505,686**	**$ --**
Production and intermediate-term	**9,348**	**8,296**	**17,644**	**1,891,824**	**1,909,468**	**13**
Agribusiness	**69**	**--**	**69**	**1,168,792**	**1,168,861**	**--**
Other	**1,801**	**100**	**1,901**	**487,460**	**489,361**	**--**
Total	**$28,952**	**$29,669**	**$58,621**	**$9,014,755**	**$9,073,376**	**$13**

As of December 31, 2018	30-89 Days Past Due	90 Days or More Past Due	Total Past Due	Not Past Due or Less than 30 Days Past Due	Total	Accruing Loans 90 Days or More Past Due
Real estate mortgage	$15,678	$2,992	$18,670	$5,287,020	$5,305,690	$79
Production and intermediate-term	4,381	2,351	6,732	2,049,625	2,056,357	--
Agribusiness	--	332	332	910,298	910,630	--
Other	2,649	588	3,237	408,754	411,991	--
Total	$22,708	$6,263	$28,971	$8,655,697	$8,684,668	$79

Note: Accruing loans include accrued interest receivable.

Risk Loans

Risk loans are loans for which it is probable that all principal and interest will not be collected according to the contractual terms.

Risk Loan Information

(in thousands) As of:	**September 30 2019**	December 31 2018
Volume with specific allowance	**$58,221**	$76,625
Volume without specific allowance	**27,820**	24,669
Total risk loans	**$86,041**	$101,294
Total specific allowance	**$20,654**	$25,248
For the nine months ended September 30	**2019**	2018
Income on accrual risk loans	**$156**	$226
Income on nonaccrual loans	**1,422**	906
Total income on risk loans	**$1,578**	$1,132
Average risk loans	**$91,717**	$61,616

Note: Accruing loans include accrued interest receivable.

We had $3.6 million of commitments to lend additional money to borrowers whose loans were classified as risk loans at September 30, 2019.

Troubled Debt Restructurings (TDRs)

In situations where, for economic or legal reasons related to the borrower's financial difficulties, we grant a concession for other than an insignificant period of time to the borrower that we would not otherwise consider, the related loan is classified as a troubled debt restructuring, also known as a restructured loan. A concession is generally granted in order to minimize economic loss and avoid foreclosure. Concessions vary by program and borrower and may include interest rate reductions, term extensions, payment deferrals, or an acceptance of additional collateral in lieu of payments. In limited circumstances, principal may be forgiven. Loans classified as TDRs are considered risk loans. All risk loans are analyzed within our allowance for loan losses. We record a specific allowance to reduce the carrying amount of the restructured loan to the lower of book value or net realizable value of collateral.

TDR Activity

(in thousands) Nine months ended September 30	**2019**		2018	
	Pre-modification	**Post-modification**	Pre-modification	Post-modification
Real estate mortgage	**$4,020**	**$4,020**	$65	$6
Production and intermediate-term	**3,557**	**3,557**	104	104
Agribusiness	**--**	**--**	11,871	11,871
Other	**13**	**15**	--	--
Total	**$7,590**	**$7,592**	$12,040	$11,981

Pre-modification represents the outstanding recorded investment of the loan just prior to restructuring and post-modification represents the outstanding recorded investment of the loan immediately following the restructuring. The recorded investment in the loan is the unpaid principal amount of the receivable increased or decreased by applicable accrued interest and unamortized premium, discount, finance charges, and acquisition costs and may also reflect a previous direct charge-off of the investment.

The primary types of modification included deferral of principal and extension of maturity.

There were no TDRs that defaulted during the nine months ended September 30, 2019, in which the modification was within twelve months of the respective reporting period. We had TDRs in the production and intermediate-term loan category of $8 thousand that defaulted during the nine months ended September 30, 2018, in which the modifications were within twelve months of the respective reporting period.

TDRs Outstanding

(in thousands) As of:	September 30 2019	December 31 2018
Accrual status:		
Real estate mortgage	**$2,730**	$2,650
Production and intermediate-term	**418**	419
Agribusiness	**--**	--
Other	**160**	262
Total TDRs in accrual status	**$3,308**	$3,331
Nonaccrual status:		
Real estate mortgage	**$4,222**	$2,289
Production and intermediate-term	**3,811**	1,337
Agribusiness	**10,628**	10,535
Other	**273**	184
Total TDRs in nonaccrual status	**$18,934**	$14,345
Total TDRs:		
Real estate mortgage	**$6,952**	$4,939
Production and intermediate-term	**4,229**	1,756
Agribusiness	**10,628**	10,535
Other	**433**	446
Total TDRs	**$22,242**	$17,676

Additional commitments to lend to borrowers whose loans have been modified in a TDR were $1.6 million at September 30, 2019.

Allowance for Loan Losses

Changes in Allowance for Loan Losses

(in thousands) Nine months ended September 30	2019	2018
Balance at beginning of period	**$84,064**	$72,640
Provision for loan losses	**5,674**	9,571
Loan recoveries	**328**	619
Loan charge-offs	**(1,464)**	(1,923)
Balance at end of period	**$88,602**	$80,907

The "Provision for credit losses" in the Consolidated Statements of Comprehensive Income includes a provision for loan losses as presented in the previous chart, as well as a (reversal of) provision for credit losses on unfunded commitments. The accrued credit losses on unfunded commitments are recorded in "Other liabilities" in the Consolidated Statements of Condition.

Credit Loss Information on Unfunded Commitments

(in thousands) For the nine months ended September 30	2019	2018
(Reversal of) provision for credit losses	**($524)**	$2,656
As of:	**September 30 2019**	December 31 2018
Accrued credit losses	**$3,645**	$4,169

NOTE 3: INVESTMENT SECURITIES

We held investment securities of $10.3 million at September 30, 2019, and $7.7 million at December 31, 2018. Our investment securities consisted of securities backed by pools of loans guaranteed by the Small Business Administration. The investment securities have been classified as held-to-maturity. The investment portfolio is evaluated for other-than-temporary impairment. No investments within the portfolio were impaired as of September 30, 2019, or December 31, 2018.

Additional Investment Securities Information

(dollars in thousands) As of:	**September 30 2019**	December 31 2018
Amortized cost	**$10,254**	$7,715
Unrealized gains	**138**	278
Fair value	**$10,392**	$7,993
Weighted average yield	**5.1%**	4.9%

Investment income is recorded in "Interest income" in the Consolidated Statements of Comprehensive Income and totaled $449 thousand and $375 thousand for the nine months ended September 30, 2019, and 2018, respectively.

NOTE 4: CONTINGENCIES AND COMMITMENTS

In the normal course of business, we have various contingent liabilities and commitments outstanding, primarily commitments to extend credit, which may not be reflected in the Consolidated Financial Statements. We do not anticipate any material losses because of these contingencies or commitments.

We may be named as a defendant in certain lawsuits or legal actions in the normal course of business. At the date of these Consolidated Financial Statements, our management team was not aware of any material actions. However, management cannot ensure that such actions or other contingencies will not arise in the future.

NOTE 5: FAIR VALUE MEASUREMENTS

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date in the principal or most advantageous market for the asset or liability. Accounting guidance also establishes a fair value hierarchy, with three input levels that may be used to measure fair value. Refer to Note 2 in our 2018 Annual Report for a more complete description of the three input levels.

We did not have any assets or liabilities measured at fair value on a recurring basis at September 30, 2019, or December 31, 2018.

Non-Recurring Basis

We may be required, from time to time, to measure certain assets at fair value on a non-recurring basis.

Assets Measured at Fair Value on a Non-recurring Basis

(in thousands)

	As of September 30, 2019			
	Fair Value Measurement Using			Total Fair
	Level 1	Level 2	Level 3	Value
Impaired loans	**$ --**	**$ --**	**$39,446**	**$39,446**
Acquired property	**--**	**--**	**5,110**	**5,110**
	As of December 31, 2018			
	Fair Value Measurement Using			Total Fair
	Level 1	Level 2	Level 3	Value
Impaired loans	$ --	$ --	$53,946	$53,946
Acquired property	--	--	4,891	4,891

Valuation Techniques

Impaired loans: Represents the carrying amount and related write-downs of loans which were evaluated for individual impairment based on the appraised value of the underlying collateral. When the value of the collateral, less estimated costs to sell, is less than the principal balance of the loan, a specific reserve is established. Costs to sell represent transaction costs and are not included as a component of the asset's fair value. If the process uses observable market-based information, they are classified as Level 2. If the process requires significant input based on management's knowledge of and judgment about current market conditions, specific issues relating to the collateral and other matters, they are classified as Level 3.

Acquired property: Represents the fair value and related losses of foreclosed assets that were measured at fair value based on the collateral value, which is generally determined using appraisals, or other indications based on sales of similar properties. Costs to sell represent transaction costs and are not included as a component of the asset's fair value. If the process uses observable market-based information, they are classified as Level 2. If the process requires significant input based on management's knowledge of and judgment about current market conditions, specific issues relating to the property and other matters, they are classified as Level 3.

NOTE 6: SUBSEQUENT EVENTS

We have evaluated subsequent events through November 7, 2019, which is the date the Consolidated Financial Statements were available to be issued. There have been no material subsequent events that would require recognition in our Quarterly Report or disclosure in the Notes to Consolidated Financial Statements.