BerryDunn

CHAMPLAIN BANK CORPORATION AND SUBSIDIARY

CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2017 and 2016

With Independent Auditor's Report

BerryDunn

INDEPENDENT AUDITOR'S REPORT

The Board of Directors
Champlain Bank Corporation and Subsidiary

We have audited the accompanying consolidated financial statements of Champlain Bank Corporation and Subsidiary (the Company), which comprise the consolidated balance sheets as of December 31, 2017 and 2016, and the related consolidated statements of income, comprehensive income, changes in stockholders' equity and cash flows for the years then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

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

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

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

The Board of Directors
Champlain Bank Corporation and Subsidiary

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Champlain Bank Corporation and Subsidiary as of December 31, 2017 and 2016, and the consolidated 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.

Berry Dunn McNeil & Parker (NY), LLC

Portland, Maine
April 4, 2018

CHAMPLAIN BANK CORPORATION
AND SUBSIDIARY

Consolidated Balance Sheets

December 31, 2017 and 2016

ASSETS

	2017	2016
Cash and due from banks	**$ 6,700,611**	$ 5,754,362
Federal funds sold	**36,791**	99,548
Securities available-for-sale	**64,178,201**	85,779,957
Securities held-to-maturity	**6,165,620**	6,007,145
Loans receivable, net of allowance for loan losses of $3,509,631 in 2017 and $3,172,667 in 2016	**232,507,239**	187,753,073
Accrued interest receivable	**908,048**	904,035
Federal Home Loan Bank stock, at cost	**301,200**	374,600
Premises and equipment, net	**3,833,894**	3,841,384
Other real estate owned	**98,536**	3,536
Other assets	**16,301,361**	15,538,701
	$ 331,031,501	$ 306,056,341

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

LIABILITIES AND STOCKHOLDERS' EQUITY

	2017	2016
Liabilities		
Deposits	**$ 296,477,081**	$ 273,474,324
Advances from Federal Home Loan Bank	**1,000,000**	2,000,000
Accrued expenses and other liabilities	**8,066,626**	8,158,343
Total liabilities	**305,543,707**	283,632,667
Stockholders' equity		
Preferred stock, $1 par value; 100,000 shares authorized; none issued	**-**	-
Common stock, $1 par value; 200,000 shares authorized; 28,284 shares issued; 24,139 shares outstanding at December 31, 2017 and 24,131 shares outstanding at December 31, 2016	**28,284**	28,284
Surplus	**1,070,883**	1,070,883
Retained earnings	**27,776,463**	25,679,855
Accumulated other comprehensive loss		
Net unrealized depreciation on securities available-for-sale, net of deferred income taxes	**(15,897)**	(764,780)
Net unrecognized loss on pension and other postretirement benefit costs, net of deferred income taxes	**(2,035,285)**	(2,164,747)
Net unrealized loss on derivative instrument, net of deferred income taxes	**-**	(84,567)
Treasury stock, at cost, 4,145 shares in 2017 and 4,153 shares in 2016	**(1,336,654)**	(1,341,254)
Total stockholders' equity	**25,487,794**	22,423,674
	$ 331,031,501	$ 306,056,341

CHAMPLAIN BANK CORPORATION
AND SUBSIDIARY

Consolidated Statements of Income

Years Ended December 31, 2017 and 2016

	2017	2016
Interest and dividend income		
Loans	**$ 9,903,618**	$ 8,230,300
Investment securities		
Taxable	**1,738,885**	1,755,531
Tax-exempt	**630,348**	708,879
Other interest-earning assets	**6,875**	2,010
Total interest and dividend income	**12,279,726**	10,696,720
Interest expense		
Deposits	**721,361**	549,116
Borrowed funds	**13,489**	4,853
Total interest expense	**734,850**	553,969
Net interest income	**11,544,876**	10,142,751
Provision for loan losses	**661,000**	180,000
Net interest income after provision for loan losses	**10,883,876**	9,962,751
Noninterest income		
Service charges and fees	**1,457,344**	1,285,140
Loan servicing fees	**358,436**	255,338
Net (loss) gain on sales of securities available-for-sale	**(119,275)**	126,410
Net loss on sale of derivative instrument	**(96,300)**	-
Other	**227,567**	466,945
Total noninterest income	**1,827,772**	2,133,833
Noninterest expenses		
Salaries and employee benefits	**5,458,968**	5,654,748
Occupancy	**656,384**	607,235
Other	**3,516,022**	3,379,815
Total noninterest expenses	**9,631,374**	9,641,798
Income before income taxes	**3,080,274**	2,454,786
Income tax expense	**982,508**	547,274
Net income	**$ 2,097,766**	$ 1,907,512
Basic and diluted earnings per share	**$ 86.91**	$ 78.80

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

CHAMPLAIN BANK CORPORATION
AND SUBSIDIARY

Consolidated Statements of Comprehensive Income

Years Ended December 31, 2017 and 2016

	2017	2016
Net income	**$ 2,097,766**	$ 1,907,512
Other comprehensive income (loss), net of tax		
Unrealized gain (loss) on available-for-sale securities:		
Unrealized holding gains (losses) arising during the period	**1,133,836**	(1,954,400)
Reclassification adjustment for loss (gain) included in net income(1)	**119,275**	(126,410)
	1,253,111	(2,080,810)
Tax effect	**(501,244)**	832,324
	751,867	(1,248,486)
Pension and other postretirement plans:		
Unrecognized gain on pension and other post retirement plans	**852,502**	816,907
Tax effect	**(341,002)**	(326,762)
	511,500	490,145
Derivative instrument:		
Unrealized gain on derivative instrument	**44,645**	36,906
Reclassification adjustment for loss included in net income(2)	**96,300**	-
	140,945	36,906
Tax effect	**(56,378)**	(14,762)
	84,567	22,144
Total other comprehensive income (loss)	**1,347,934**	(736,197)
Total comprehensive income	**$ 3,445,700**	$ 1,171,315

(1) Reclassified into the consolidated statements of income in net loss (gain) on sales of securities available-for-sale.
(2) Reclassified into the consolidated statements of income in net loss on sale of derivative instrument.

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

CHAMPLAIN BANK CORPORATION
AND SUBSIDIARY

Consolidated Statements of Changes in Stockholders' Equity

Years Ended December 31, 2017 and 2016

	Common Stock	Surplus	Retained Earnings	Net Unrealized Appreciation (Depreciation) on Securities Available-for-Sale	Net Unrecognized Loss on Pension and Other Postretirement Benefit Costs	Net Unrealized Loss on Derivative Instrument	Treasury Stock	Total
Balance, December 31, 2015	$ 28,284	$ 1,070,883	$ 24,145,080	$ 483,706	$ (2,654,892)	$ (106,711)	$ (1,286,412)	$ 21,679,938
Net income	-	-	1,907,512	-	-	-	-	1,907,512
Other comprehensive loss	-	-	-	(1,248,486)	490,145	22,144	-	(736,197)
Purchase of treasury stock (97 shares)	-	-	-	-	-	-	(55,775)	(55,775)
Issuance of treasury stock (2 shares)	-	-	-	-	-	-	933	933
Cash dividends declared	-	-	(372,737)	-	-	-	-	(372,737)
Balance, December 31, 2016	28,284	1,070,883	25,679,855	(764,780)	(2,164,747)	(84,567)	(1,341,254)	22,423,674
Net income	-	-	**2,097,766**	-	-	-	-	**2,097,766**
Other comprehensive income	-	-	-	**751,867**	**511,500**	**84,567**	-	**1,347,934**
Issuance of treasury stock (8 shares)	-	-	-	-	-	-	**4,600**	**4,600**
Cash dividends declared	-	-	**(386,180)**	-	-	-	-	**(386,180)**
Reclassification for tax rate change	-	-	**385,022**	**(2,984)**	**(382,038)**	-	-	-
Balance, December 31, 2017	**$ 28,284**	**$ 1,070,883**	**$ 27,776,463**	**$ (15,897)**	**$ (2,035,285)**	**$ -**	**$ (1,336,654)**	**$ 25,487,794**

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

CHAMPLAIN BANK CORPORATION
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Consolidated Statements of Cash Flows

Years Ended December 31, 2017 and 2016

	2017	2016
Cash flows from operating activities		
Net income	**$ 2,097,766**	$ 1,907,512
Adjustments to reconcile net income to net cash provided by operating activities		
Depreciation and amortization	**430,141**	487,101
Amortization of discounts and premiums on investments	**273,415**	382,251
Provision for loan losses	**661,000**	180,000
Net realized loss (gain) on sales of securities available-for-sale	**119,275**	(126,410)
Loss on disposal of bank premises	**10,528**	1,339
Net loss on sale of derivative instrument	**96,300**	-
Gain on sale of other real estate owned	**-**	(15,283)
Deferred income tax expense	**230,205**	349,060
Increase in accrued interest receivable	**(4,013)**	(89,238)
Increase in other assets	**(994,342)**	(1,743,250)
(Decrease) increase in accrued expenses and other liabilities	**(91,717)**	382,505
Net cash provided by operating activities	**2,828,558**	1,715,587
Cash flows from investing activities		
Additions to premises and equipment	**(433,179)**	(248,973)
Loan originations and principal collections, net	**(45,510,166)**	(18,703,255)
Net decrease (increase) in federal funds sold	**62,757**	(18,311)
Redemption (purchase) of Federal Home Loan Bank stock	**73,400**	(46,100)
Purchase of securities available-for-sale	**(9,587,813)**	(19,970,687)
Proceeds from sales of securities available-for-sale	**20,563,314**	1,916,289
Proceeds from sale of other real estate owned	**-**	250,283
Purchase of life insurance policies	**-**	(300,000)
Proceeds from life insurance policies	**-**	310,489
Maturities of securities available-for-sale	**11,486,676**	13,729,558
Purchase of securities held-to-maturity	**(5,527,783)**	(5,067,932)
Maturities of securities held-to-maturity	**5,369,308**	3,127,720
Net cash used by investing activities	**(23,503,486)**	(25,020,919)
Cash flows from financing activities		
Net increase in deposits	**23,002,757**	24,004,130
Net (decrease) increase in short-term borrowings	**(1,000,000)**	300,000
Issuance of treasury stock	**4,600**	933
Purchase of treasury stock	**-**	(55,775)
Cash dividends paid on common stock	**(386,180)**	(372,737)
Net cash provided by financing activities	**21,621,177**	23,876,551
Net increase in cash and cash equivalents	**946,249**	571,219
Cash and cash equivalents, beginning of year	**5,754,362**	5,183,143
Cash and cash equivalents, end of year	**$ 6,700,611**	$ 5,754,362
Supplementary cash flow information:		
Interest paid on deposits and borrowed funds	**$ 730,887**	$ 547,172
Noncash transactions:		
Transfer from loans to other real estate owned	**$ 95,000**	$ 235,000

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

Nature of Business

Champlain Bank Corporation (the Company) is a one-bank holding company organized in 1986 and headquartered in Willsboro, New York. The Company maintains offices in Essex and Clinton Counties of New York from which it provides a variety of financial services to individuals and small businesses in Northeastern New York, Western New York and Northern Vermont. Its primary deposit products are demand, savings and term certificate accounts and its primary lending products are consumer and commercial mortgage loans. The Company is subject to the regulations of certain federal and state agencies as well as examinations by those regulatory authorities.

1. Summary of Significant Accounting Policies

Basis of Presentation and Consolidation

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiary, Champlain National Bank (the Bank). All significant intercompany balances and transactions have been eliminated in consolidation.

The Company follows accounting standards as set by the Financial Accounting Standards Board (FASB). FASB sets accounting principles generally accepted in the United States of America (GAAP) that management follows to help ensure they consistently report the Company's financial condition, results of operations and cash flows.

Use of Estimates

In preparing consolidated financial statements in conformity with GAAP, management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the balance sheet and reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Material estimates that are particularly susceptible to significant change in the near term relate to the determination of the allowance for loan losses, other real estate owned, other-than-temporary impairment losses on securities and the accumulated benefit obligation for the defined benefit plan. In connection with the determination of the allowance for loan losses and the carrying value of other real estate owned, management obtains independent appraisals for significant properties.

Significant Group Concentrations of Credit Risk

The Company's loans are collateralized by real estate in the Essex and Clinton Counties of New York, Western New York and Northern Vermont. Accordingly, the ultimate collectability of a substantial portion of the Company's loan portfolio is susceptible to changes in economic conditions in these areas.

Cash and Cash Equivalents

For purposes of the consolidated statements of cash flows, cash and cash equivalents include cash and due from banks.

The Company's due from bank accounts, at times, may exceed federally insured limits. The Company has not experienced any losses in such accounts. The Company believes it is not exposed to any significant risk on cash and cash equivalents.

Securities

Debt securities that management has the positive intent and ability to hold to maturity are classified as "held-to-maturity" and recorded at amortized cost. Securities not classified as held-to-maturity are classified as "available-for-sale" and recorded at fair value, with unrealized gains and losses excluded from earnings and reported in other comprehensive income or loss, net of related income taxes.

Declines in the fair value of individual equity securities below their cost that are deemed to be other than temporary are reflected in earnings as realized losses. For declines in the fair value of individual debt securities available-for-sale below their cost that are deemed to be other than temporary, where the Company does not intend to sell the security and it is more-likely-than-not that the Company will not be required to sell the security before recovery of its amortized cost basis, the other-than-temporary decline in the fair value of the debt security related to 1) credit loss is recognized in earnings, and 2) other factors is recognized in other comprehensive income or loss. Credit loss is deemed to exist if the present value of expected future cash flows using the effective rate at acquisition is less than the amortized cost basis of the debt security. For individual debt securities where the Company intends to sell the security or more-likely-than-not will be required to sell the security before recovery of its amortized cost, the other-than-temporary impairment is recognized in earnings equal to the entire difference between the security’s cost basis and its fair value at the balance sheet date.

Gains and losses on the sale of securities are recorded on the trade date and are determined using the specific identification method.

Purchase premiums and discounts are recognized in interest income using the interest method over the terms of the securities.

Nonmarketable equity securities, such as Federal Home Loan Bank of New York (FHLB) stock and Federal Reserve Bank of New York (FRB) stock, are stated at cost. FRB stock is included in other assets on the consolidated balance sheets. These securities are periodically evaluated for impairment. The investments in FHLB stock and FRB stock are required for membership.

Loans

Loans that management has the intent and ability to hold for the foreseeable future or until maturity or pay-off are generally reported at their outstanding unpaid principal balances adjusted for charge-offs, the allowance for loan losses, and any deferred fees or costs on originated loans. Interest income is accrued on the unpaid principal balance. Loan origination fees, net of certain direct origination costs, are deferred and recognized as an adjustment of the related loan yield using a method that approximates the interest method.

Loans past due 30 days or more are considered delinquent. The accrual of interest on residential real estate, commercial real estate and commercial loans is discontinued at the time the loan is 90 days delinquent unless the credit is well secured and in process of collection. Residential real estate loans are generally written down to the collectible amount when the loan is delinquent for 180 consecutive days. Commercial and commercial real estate loans are charged off in part or in full if they are considered uncollectible. Consumer loans are typically charged off no later than 180 days past due. In all cases, loans are placed on nonaccrual or charged off at an earlier date if collection of principal or interest is considered doubtful.

For all loan segments, interest accrued but not collected for loans that are placed on nonaccrual or charged-off is reversed against interest income. Cash payments representing interest income are reported as such. Other cash payments are reported as reductions in carrying value. Increases or decreases in the carrying value, due to changes in estimates of future payments and due to the passage of time, are reported as provision for loan losses. Loans are returned to accrual status when all the principal and interest amounts contractually due are brought current and future payments are reasonably assured.

Allowance for Loan Losses

The allowance for loan losses is based on estimates and ultimate losses may vary from the current estimates. The adequacy of the allowance is evaluated regularly by management. This evaluation is inherently subjective as it requires estimates that are susceptible to significant revision as more information becomes available. As adjustments become necessary, they are reported in operations for the period in which they become known. Factors considered in evaluating the adequacy of the allowance include previous loss experience, current economic conditions and their effect on borrowers, the performance of individual loans in relation to contract terms, and the estimated fair values of properties to be foreclosed. Loan losses are charged against the allowance when management believes the uncollectibility of a loan balance is confirmed. Subsequent recoveries, if any, are credited to the allowance.

Key elements of the above estimates, including those used in independent appraisals, are dependent on the economic conditions prevailing at the time of the estimates. The inherent uncertainties in the assumptions relative to projected sale prices or rental rates of properties may result in the ultimate realization of amounts on certain loans which are different from the amounts reflected in these consolidated financial statements.

The allowance consists of general, allocated and unallocated components, as further described below.

General Component

The general component of the allowance for loan losses is based on historical loss experience adjusted for qualitative factors stratified by the following portfolio segments: residential real estate, commercial real estate, commercial and consumer. Management does not further segregate loan segments into loan classes. Management considers historical losses based on a time frame appropriate to capture relevant loss data for each portfolio segment. Management deems 60 months to be an appropriate time frame on which to base historical losses for each portfolio segment. The 60 months may be adjusted to use the most recent 12 months or the maximum 12 months within the 60 month period, whichever is greater. This historical loss factor is adjusted for qualitative factors for each portfolio segment including, but not limited to: levels/trends in delinquencies; trends in volume and terms of loans; effects of changes in risk selection and changes in lending policies; experience, ability, depth of lending management and staff; and national and local economic conditions. Management follows a similar process to estimate its liability for off-balance-sheet commitments to extend credit.

The qualitative factors are determined based on the various risk characteristics of each portfolio segment. Risk characteristics relevant to each portfolio segment are as follows:

Residential real estate: All loans in this segment are collateralized by owner-occupied residential real estate and repayment is dependent on the credit quality of the individual borrower. The overall health of the economy, including unemployment rates and housing prices, will have an effect on the credit quality of this segment.

Commercial real estate: Loans in this segment are primarily income-producing properties or properties occupied by businesses. The underlying cash flows generated by the properties are adversely impacted by a downturn in the economy as evidenced by increased vacancy rates or a general slowdown in business which, in turn, will have an effect on the credit quality of this segment. Management obtains rent rolls and business financial statements on an annual basis at least and continually monitors the cash flows of these loans.

Commercial: Loans in this segment are made to businesses and are generally secured by assets of the business. Repayment is expected from the cash flows of the business. A weakened economy, and resultant decreased consumer spending, will have an effect on the credit quality in this segment.

Consumer: Repayment of loans in this segment is generally dependent on the credit quality of the individual borrower.

Allocated Component

The allocated component relates to loans that are classified as impaired. Impairment is measured on a loan-by-loan basis for residential real estate, commercial real estate and commercial loans by either the present value of expected future cash flows discounted at the loan's effective interest rate or the fair value of the collateral if the loan is collateral dependent. An allowance is established when the discounted cash flows or collateral value of the impaired loan is lower than the carrying value of that loan. The Company recognizes the change in present value attributable to the passage of time as provision for loan losses. Large groups of smaller balance homogenous loans are collectively evaluated for impairment, and the resulting allowance is reported as the general component, as described above.

A loan is considered impaired when, based on current information and events, it is probable that the Company will be unable to collect the scheduled payments of principal or interest when due according to the contractual terms of the loan agreement. Factors considered by management in determining impairment include payment status, collateral value, and the probability of collecting scheduled principal and interest payments when due. Loans that experience insignificant payment delays and payment shortfalls generally are not classified as impaired. Management determines the significance of payment delays and payment shortfalls on a case-by-case basis, taking into consideration all of the circumstances surrounding the loan and the borrower, including the length of the delay, the reasons for the delay, the borrower's prior payment record, and the amount of the shortfall in relation to the principal and interest owed.

The Company periodically may agree to modify the contractual terms of loans. When a loan is modified and a concession is made to a borrower experiencing financial difficulty, the modification is considered a troubled debt restructuring (TDR). All TDRs are classified as impaired and measured using the present value of expected future cash flows or appraised value if the property is collateral dependent.

Unallocated Component

An unallocated component is maintained to cover uncertainties that could affect management's estimate of probable losses. The unallocated component of the allowance reflects the margin of imprecision inherent in the underlying assumptions used in the methodologies for estimating allocated and general reserves in the portfolio.

There were no changes in the Company's accounting policies or methodology pertaining to the allowance for loan losses during the current period.

Credit-Related Financial Instruments

In the ordinary course of business, the Company has entered into commitments to extend credit, including commitments under lines-of-credit. Such financial instruments are recorded when they are funded.

Other Real Estate Owned

Assets acquired through, or in lieu of, loan foreclosure are held-for-sale and are initially recorded at fair value at the date of foreclosure, establishing a new cost basis. Losses arising from the acquisition of such property are charged against the allowance for loan losses. After foreclosure, these assets are carried at the lower of their new cost basis or fair value less cost to sell.

Revenues and expenses from operations and changes in the valuation allowance are included in net expenses from other real estate owned in other noninterest expenses.

Premises and Equipment

Land is carried at cost. Buildings and equipment are carried at cost, less accumulated depreciation computed on the straight-line and various accelerated methods over the estimated useful lives of the assets. Leasehold improvements are amortized over the lesser of the life of the improvement or the related lease term.

Earnings per Share

Basic earnings per share is computed by dividing income available to common stockholders by the weighted average number of common shares outstanding for the period. The Company has a simple capital structure with no dilutive or potentially dilutive instruments outstanding as of December 31, 2017 and 2016. The weighted average number of shares outstanding, for both basic and diluted earnings per share, were 24,136 in 2017 and 24,207 in 2016.

Derivative Financial Instruments

The Company recognizes derivatives in the consolidated balance sheets at fair value. On the date the Company enters into the derivative contract, the Company designates the derivative as a hedge of either a forecasted transaction or the variability of cash flows to be received or paid related to a recognized asset or liability (cash flow hedge) or a hedge of the fair value of a recognized asset or liability or of an unrecognized firm commitment (fair value hedge). The Company formally documents relationships between hedging instruments and hedged items, as well as its risk management objective and strategy for undertaking various hedge transactions. The Company also assesses, both at the hedge’s inception and on an ongoing basis, whether the derivatives that are used in hedging transactions are effective in offsetting changes in cash flows or fair values of hedged items. Changes in fair value of a derivative that is effective and that qualifies as a cash flow hedge are recorded in other comprehensive income or loss and are reclassified into earnings when the forecasted transaction or related cash flows affect earnings. The Company discontinues hedge accounting when it determines that the derivative is no longer effective in offsetting changes in the cash flows of the hedged item, that it is unlikely that the forecasted transaction will occur, or that the designation of the derivative as a hedging instrument is no longer appropriate. The Company does not have any fair value hedges.

Income Taxes

Deferred income tax assets and liabilities are determined using the liability (or balance sheet) method. Under this method, the net deferred tax asset or liability is determined based on the tax effects of the temporary differences between the book and tax bases of the various balance sheet assets and liabilities and gives current recognition to changes in tax rates and laws.

FASB Accounting Standards Codification (ASC) 740, *Income Taxes*, defines the criteria that an individual tax position must satisfy for some or all of the benefits of that position to be recognized in a company's financial statements. ASC 740 prescribes a recognition threshold of more-likely-than-not, and a measurement attribute for all tax positions taken or expected to be taken on a tax return, in order for those tax positions to be recognized in the financial statements. The Company is currently open to audit under the statute of limitations by the Internal Revenue Service for the years ended December 31, 2014 through 2016. The Company's 2017 income tax return has yet to be filed. It is the Company's policy to record interest and penalties to income tax expense.

Comprehensive Income or Loss

Accounting principles generally require that recognized revenue, expenses, gains and losses be included in net income. Although certain changes in assets and liabilities, such as unrealized appreciation and depreciation on securities available-for-sale, are reported as a separate component of the equity section of the consolidated balance sheet, such items, along with net income, are components of comprehensive income or loss.

Recently Issued Accounting Pronouncements

In January 2016, the FASB issued Accounting Standards Update (ASU) No. 2016-01, *Financial Instruments*—Overall (Subtopic 825-10): *Recognition and Measurement of Financial Assets and Financial Liabilities*. This guidance changes how entities account for equity investments that do not result in consolidation and are not accounted for under the equity method of accounting. This guidance also changes certain disclosure requirements and other aspects of current GAAP. Public business entities must use the exit price notion when measuring the fair value of financial instruments for disclosure purposes. This guidance is effective for fiscal years beginning after December 15, 2017, including interim periods within the fiscal year. The Company is currently evaluating the impact of the adoption of ASU 2016-01 on its consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, *Leases* (Topic 842). The ASU was issued to increase transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements. The ASU is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Management is reviewing the guidance in the ASU to determine whether it will have a material effect on the Company's consolidated financial condition and results of operations.

In June 2016, the FASB issued ASU No. 2016-13, *Measurement of Credit Losses on Financial Instruments*. The ASU requires entities to measure credit losses on loans receivable using a current expected credit loss model, instead of the incurred loss model used in current accounting principles. The ASU is effective for fiscal years beginning after December 15, 2020, and interim periods within fiscal years beginning after December 15, 2021. Management is currently reviewing the ASU to assess its effect on the Company's consolidated financial condition and results of operations, which could be significant.

In February 2018, FASB issued ASU No. 2018-02, *Income Statement – Reporting Comprehensive Income* (Topic 220): *Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income*. This ASU was issued to allow a reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the Tax Cuts and Jobs Act. Consequently, the amendments eliminate the stranded tax effects resulting from the Tax Cuts and Jobs Act and will 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 ASU is effective for fiscal years beginning after December 15, 2018, with early adoption permitted for financial statements which have not yet been issued. The Company adopted the ASU for the December 31, 2017 consolidated financial statements and made the required disclosures regarding stranded tax effects.

2. Cash and Due from Banks

The Company is required to maintain certain reserves of vault cash or deposits with the Federal Reserve Bank. The amount of this reserve requirement, included in cash and due from banks, was approximately $592,000 and $766,000 as of December 31, 2017 and 2016, respectively.

3. Securities

The amortized cost and fair value of securities as of December 31 are as follows:

	2017			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Securities Available-for-Sale				
Debt securities				
State and municipal	**$ 18,761,756**	**$ 294,172**	**$ 203,887**	**$ 18,852,041**
Corporate	**949,230**	**-**	**19,230**	**930,000**
Mortgage-backed securities	**44,486,737**	**301,273**	**464,305**	**44,323,705**
Collateralized mortgage obligations	**2,000**	**70,455**	**-**	**72,455**
Total securities available-for-sale	**$64,199,723**	**$ 665,900**	**$ 687,422**	**$64,178,201**
Securities Held-to-Maturity				
Debt securities				
State and municipal	**$ 6,165,620**	**$ 163,263**	**$ 619**	**$ 6,328,264**
Total securities held-to-maturity	**$ 6,165,620**	**$ 163,263**	**$ 619**	**$ 6,328,264**

	2016			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Securities Available-for-Sale				
Debt securities				
State and municipal	$30,083,306	$ 491,203	$ 735,208	$29,839,301
Corporate	945,398	-	40,398	905,000
Mortgage-backed securities	54,972,774	393,500	1,424,578	53,941,696
Collateralized mortgage obligations	1,053,112	82,215	41,367	1,093,960
Total securities available-for-sale	$87,054,590	$ 966,918	$ 2,241,551	$85,779,957
Securities Held-to-Maturity				
Debt securities				
State and municipal	$ 6,007,145	$ 159,785	$ -	$ 6,166,930
Total securities held-to-maturity	$ 6,007,145	$ 159,785	$ -	$ 6,166,930

At December 31, 2017 and 2016, securities with a carrying value of $52,538,624 and $77,541,704, respectively, were pledged to secure public deposits and for other purposes required or permitted by law.

The amortized cost and fair value of debt securities by contractual maturity at December 31, 2017, are shown below. Expected maturities may differ from contractual maturities because borrowers may have the right to call or prepay obligations with or without penalties.

	Available-for-Sale		Held-to-Maturity	
	Amortized Cost	Fair Value	Amortized Cost	Fair Value
Within 1 year	$ 270,000	$ 270,127	$ 5,131,783	$ 5,135,800
Over 1 year through 5 years	1,534,795	1,537,962	149,956	158,544
Over 5 years through 10 years	8,415,225	8,582,790	100,000	122,320
Over 10 years	9,490,966	9,391,162	783,881	911,600
Mortgage-backed securities and collateralized mortgage obligations	44,488,737	44,396,160	-	-
	$64,199,723	$64,178,201	$ 6,165,620	$ 6,328,264

For the years ended December 31, 2017 and 2016, proceeds from sales of securities available-for-sale amounted to $20,563,314 and $1,916,289, respectively. Gross realized gains amounted to $195,943 and $126,410 for 2017 and 2016, respectively. There were $315,218 in realized losses from sales of securities during 2017 and no realized losses from sales of securities during 2016.

There were no sales of securities held-to-maturity during 2017 and 2016.

Investments with continuous unrealized losses for a period of less than twelve months and twelve months or greater as of December 31, 2017 are as follows:

	Less than 12 months		12 months or greater		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
State and municipal	**$ 5,418,647**	**$ 22,642**	**$ 5,902,047**	**$ 181,864**	**$11,320,694**	**$ 204,506**
Corporate	**930,000**	**19,230**	**-**	**-**	**930,000**	**19,230**
Mortgage-backed securities	**15,185,056**	**82,798**	**16,452,733**	**381,507**	**31,637,789**	**464,305**
	$21,533,703	**$ 124,670**	**$22,354,780**	**$ 563,371**	**$43,888,483**	**$ 688,041**

Investments with continuous unrealized losses for a period of less than twelve months and twelve months or greater as of December 31, 2016 are as follows:

	Less than 12 months		12 months or greater		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
State and municipal	$ 7,624,023	$ 510,939	$ 5,015,032	$ 224,269	$12,639,055	$ 735,208
Corporate	-	-	905,000	40,398	905,000	40,398
Mortgage-backed securities	37,201,705	1,250,212	4,232,115	174,366	41,433,820	1,424,578
Collateralized mortgage obligations	-	-	948,817	41,367	948,817	41,367
	$ 44,825,728	$ 1,761,151	$11,100,964	$ 480,400	$55,926,692	$ 2,241,551

Management evaluates securities for other-than-temporary impairment when economic or market concerns warrant such evaluation. Consideration is given to (1) the length of time and the extent to which the fair value has been less than cost, (2) the financial condition and near-term prospects of the issuer, and (3) the intent and ability of the Company to retain its investment in the issuer for a period of time sufficient to allow for any anticipated recovery in fair value.

As of December 31, 2017, the Company had 32 securities that had been in a continuous unrealized loss position for 12 months or more. As of December 31, 2016, the Company had 15 securities that had been in a continuous unrealized loss position for 12 months or more.

Management believes the unrealized loss positions are primarily due to the changes in the interest rate environment relative to the time of purchase, and general market conditions and there is little risk of loss or default from the counterparties. Because the decline is not attributable to credit quality and the Company has the ability and intent to hold the securities for the foreseeable future to allow for recovery, management has determined the unrealized loss positions are not other than temporarily impaired.

4. Loans and Allowance for Loan Losses

A summary of loans as of December 31 is as follows:

	2017	2016
Commercial	**$ 33,645,105**	$ 26,082,672
Commercial real estate	**122,399,636**	106,127,356
Residential real estate	**57,596,853**	53,497,708
Consumer	**21,009,690**	4,307,026
	234,651,284	190,014,762
Allowance for loan losses	**(3,509,631)**	(3,172,667)
Net deferred loan costs	**1,365,587**	910,978
Loans, net	**$ 232,507,239**	$ 187,753,073

The following summarizes changes in the allowance for loan losses, by portfolio segment, for the year ended December 31, 2017:

	Commercial	Commercial Real Estate	Residential Real Estate	Consumer	Unallocated	Total
Balance at beginning of year	**$ 596,196**	**$ 1,255,484**	**$ 364,990**	**$ 356,556**	**$ 599,441**	**$ 3,172,667**
Loans charged off	**(45,923)**	**(230,884)**	**-**	**(70,613)**	**-**	**(347,420)**
Recoveries of loans previously charged off	**2,764**	**-**	**2,583**	**18,037**	**-**	**23,384**
Provision (reduction) for loan losses	**237,750**	**858,923**	**(79,904)**	**243,672**	**(599,441)**	**661,000**
Balance at end of year	**$ 790,787**	**$ 1,883,523**	**$ 287,669**	**$ 547,652**	**$ -**	**$ 3,509,631**

The following summarizes changes in the allowance for loan losses, by portfolio segment, for the year ended December 31, 2016:

	Commercial	Commercial Real Estate	Residential Real Estate	Consumer	Unallocated	Total
Balance at beginning of year	$ 486,493	$ 1,196,565	$ 384,735	$ 281,252	$ 651,539	$ 3,000,584
Loans charged off	-	-	-	(58,039)	-	(58,039)
Recoveries of loans previously charged off	22,525	-	1,431	26,166	-	50,122
Provision (reduction) for loan losses	87,178	58,919	(21,176)	107,177	(52,098)	180,000
Balance at end of year	$ 596,196	$ 1,255,484	$ 364,990	$ 356,556	$ 599,441	$ 3,172,667

The following table presents the allowance for loan losses and select loan information for the year ended December 31, 2017:

	Commercial	Commercial Real Estate	Residential Real Estate	Consumer	Unallocated	Total
Allowance for loan losses						
Individually evaluated for impairment	**$ 548,344**	**$ -**	**$ 11,415**	**$ 30,049**	**$ -**	**$ 589,808**
Collectively evaluated for impairment	**242,443**	**1,883,523**	**276,254**	**517,603**	**-**	**2,919,823**
Ending balance	**$ 790,787**	**$ 1,883,523**	**$ 287,669**	**$ 547,652**	**$ -**	**$ 3,509,631**
Loans						
Individually evaluated for impairment	**$ 1,210,761**	**$ 308,700**	**$ 76,513**	**$ 65,662**		**$ 1,661,636**
Collectively evaluated for impairment	**32,434,344**	**122,090,936**	**57,520,340**	**20,944,028**		**232,989,648**
Ending balance	**$ 33,645,105**	**$ 122,399,636**	**$ 57,596,853**	**$ 21,009,690**		**$ 234,651,284**

The following table presents the allowance for loan losses and select loan information for the year ended December 31, 2016:

	Commercial	Commercial Real Estate	Residential Real Estate	Consumer	Unallocated	Total
Allowance for loan losses						
Individually evaluated for impairment	$ 205,719	$ 70,395	$ 12,018	$ 30,126	$ -	$ 318,258
Collectively evaluated for impairment	390,477	1,185,089	352,972	326,430	599,441	2,854,409
Ending balance	$ 596,196	$ 1,255,484	$ 364,990	$ 356,556	$ 599,441	$ 3,172,667
Loans						
Individually evaluated for impairment	$ 603,497	$ 435,972	$ 129,268	$ 68,209		$ 1,236,946
Collectively evaluated for impairment	25,479,175	105,691,384	53,368,440	4,238,817		188,777,816
Ending balance	$ 26,082,672	$ 106,127,356	$ 53,497,708	$ 4,307,026		$ 190,014,762

Management's judgment of the likelihood of a loss is demonstrated by the internal risk rating assigned to each loan in the commercial, commercial real estate, residential real estate, and consumer portfolios.

The commercial, commercial real estate and residential real estate loans are monitored for quality and the likelihood of loss. Based on current information surrounding the facts and circumstances of the loan, an internal credit rating is assigned. Credit ratings 1-3W are deemed to be a performing loan with no significant likelihood of loss. The ratings are further measured as follows: 4 – special mention, 5 – substandard, 6 – doubtful, and 7 – loss. Each of these ratings is supported by the facts and circumstances surrounding the loan that would cause a higher probability of some loss and thus, as the rating progresses up the scale, a higher reserve for loan loss is allocated to the particular group mentioned.

Loans rated 1 - Loans in this category are secured by cash or cash equivalent securities held by the Bank. In the event of default, the instrument would be liquidated to satisfy any unpaid balance.

Loans rated 2 - Loans in this category include borrowers of unquestioned credit standing and a consistently strong financial condition as evidenced by earnings, liquidity, leverage and cash flow.

Loans rated 3 - These loans include borrowers that have most of the characteristics of a loan rated 2, but the financial condition, management, or industry is not quite as strong.

Loans rated 3W - These loans are considered “watch list.” While these loans are creditworthy, they exhibit some characteristics which require special attention by the loan officer. This is the lowest permissible rating for a new loan. Loans rated as 3W are closely monitored as any deterioration may be cause for prompt re-rating to 4 or lower. Principal areas of concern may be management problems, industry stress, financial deterioration, operating losses, inadequate cash flow, highly cyclical industries, or any other area that would negatively affect the borrower's ability to repay the obligation in full on a timely basis.

Loans rated 4 - Loans in this category are considered “special mention.” These loans are considered protected but may have potential weaknesses, which may weaken the asset or inadequately protect the Bank's credit position at some future date.

Loans rated 5 - Loans in this category are considered “substandard.” These loans might be inadequately protected by the current net worth and paying capacity of the borrower or of the collateral pledged, if any. Assets so classified often have well-defined weaknesses that jeopardize the liquidation of the debt. They are characterized by the distinct possibility that the Bank will sustain some loss if the deficiencies are not corrected.

Loans rated 6 - Loans in this category are considered “doubtful.” Loans classified as doubtful have all the weaknesses inherent in a loan classified as substandard with the added characteristic that the weaknesses may make collection in full improbable on the basis of currently existing facts, conditions and values. The possibility of loss is extremely high, but because of certain important and reasonably specific pending factors, which may strengthen the asset; its rating as 7 is deferred until its more exact status may be determined. Pending factors include proposed merger, acquisition, or liquidation procedures, capital injection, perfecting liens on additional collateral and refinancing plans.

Loans rated 7 - Loans in this category are considered “loss” or uncollectible. For these loans it is not practical or desirable to defer writing off the loan even though partial recovery may be affected in the future.

Consumer loans are credit rated as either a pass or substandard. A loan is typically rated substandard when it becomes 90 days past due or in circumstances such as bankruptcy or excessive tax liens. Higher reserves are allocated to substandard consumer loans as there would be a higher probability of loss. Consumer loans that reach 180 days delinquent are charged off.

The following table summarizes credit risk indicators by portfolio segment as of December 31, 2017:

Credit Risk Exposure
Credit Risk Profile by Internally Assigned Grade

	Commercial	Commercial Real Estate	Residential Real Estate	Consumer
Pass	**$ 29,854,824**	**$ 118,232,978**	**$ 57,520,341**	**$ 20,967,798**
Special mention	**1,576,518**	**1,109,692**	**32,704**	**-**
Substandard	**2,213,763**	**3,056,966**	**43,808**	**41,892**
Total	**$ 33,645,105**	**$ 122,399,636**	**$ 57,596,853**	**$ 21,009,690**

The following table summarizes credit risk indicators by portfolio segment as of December 31, 2016:

Credit Risk Exposure
Credit Risk Profile by Internally Assigned Grade

	Commercial	Commercial Real Estate	Residential Real Estate	Consumer
Pass	$ 22,876,316	$ 102,821,651	$ 53,368,439	$ 4,264,865
Special mention	849,500	1,883,935	-	-
Substandard	2,356,856	1,421,770	129,269	42,161
Total	$ 26,082,672	$ 106,127,356	$ 53,497,708	$ 4,307,026

The following table presents an aging analysis of loans as of December 31, 2017:

	30-59 Days Past Due	60-89 Days Past Due	90 Days and Greater	Total Past Due	Current	Total Loans	Loans on Nonaccrual
Commercial	**$ 560,621**	**$ 66,406**	**$ 59,605**	**$ 686,632**	**$ 32,958,473**	**$ 33,645,105**	**$ 527,230**
Commercial real estate	**45,865**	**-**	**95,160**	**141,025**	**122,258,611**	**122,399,636**	**308,700**
Residential real estate	**122,167**	**-**	**32,704**	**154,871**	**57,441,982**	**57,596,853**	**32,704**
Consumer	**117,603**	**53,088**	**34,714**	**205,405**	**20,804,285**	**21,009,690**	**63,266**
Total	**$ 846,256**	**$ 119,494**	**$ 222,183**	**$ 1,187,933**	**$ 233,463,351**	**$ 234,651,284**	**$ 931,900**

The following table presents an aging analysis of loans as of December 31, 2016:

	30-59 Days Past Due	60-89 Days Past Due	90 Days and Greater	Total Past Due	Current	Total Loans	Loans on Nonaccrual
Commercial	$ 6,322	$ -	$ -	$ 6,322	$ 26,076,350	$ 26,082,672	$ 7,172
Commercial real estate	-	-	184,373	184,373	105,942,983	106,127,356	218,676
Residential real estate	-	174,684	84,341	259,025	53,238,683	53,497,708	84,341
Consumer	29,909	44,548	8,122	82,579	4,224,447	4,307,026	64,973
Total	$ 36,231	$ 219,232	$ 276,836	$ 532,299	$ 189,482,463	$ 190,014,762	$ 375,162

There were no material loans greater than 90 days past due and still accruing interest at December 31, 2017 and 2016.

The following table presents a summary of information pertaining to impaired loans by loan segment as of and for the years ended December 31:

2017	Recorded Investment	Unpaid Principal Balance	Average Recorded Investment	Related Allowance
With no related allowance recorded:				
Commercial	**$ 321,474**	**$ 321,474**	**$ 232,090**	**$ -**
Commercial real estate	**308,700**	**308,700**	**123,780**	**-**
Residential real estate	**32,704**	**32,704**	**71,431**	**-**
Consumer	**27,249**	**27,249**	**23,530**	**-**
With an allowance recorded:				
Commercial	**$ 889,287**	**$ 889,287**	**$ 913,981**	**$ 548,344**
Commercial real estate	**-**	**-**	**-**	**-**
Residential real estate	**43,809**	**43,808**	**44,368**	**11,415**
Consumer	**38,413**	**38,413**	**42,224**	**30,049**
Total:				
Commercial	**$ 1,210,761**	**$ 1,210,761**	**$ 1,146,071**	**$ 548,344**
Commercial real estate	**308,700**	**308,700**	**123,780**	**-**
Residential real estate	**76,513**	**76,513**	**115,799**	**11,415**
Consumer	**65,662**	**65,662**	**65,754**	**30,049**

2016	Recorded Investment	Unpaid Principal Balance	Average Recorded Investment	Related Allowance
With no related allowance recorded:				
Commercial	$ 7,448	$ 7,448	$ 11,218	$ -
Commercial real estate	74,522	74,522	47,626	-
Residential real estate	84,341	84,341	84,965	-
Consumer	22,812	22,812	25,067	-
With an allowance recorded:				
Commercial	$ 596,049	$ 596,049	$ 642,561	$ 205,719
Commercial real estate	361,450	361,450	363,312	70,395
Residential real estate	44,927	44,927	45,467	12,018
Consumer	45,397	45,397	48,788	30,126
Total:				
Commercial	$ 603,497	$ 603,497	$ 653,779	$ 205,719
Commercial real estate	435,972	435,972	410,938	70,395
Residential real estate	129,268	129,268	130,432	12,018
Consumer	68,209	68,209	73,855	30,126

Interest income recognized on impaired loans is deemed immaterial to the consolidated financial statements. No additional funds are committed to be advanced in connection with impaired loans.

No material loans were restructured during the year ended December 31, 2017 and 2016.

5. Premises and Equipment

A summary of the cost and accumulated depreciation of premises and equipment follows:

	2017	2016
Land and improvements	**$ 550,119**	$ 550,119
Buildings and improvements	**5,570,346**	5,425,950
Furniture and equipment	**4,772,676**	4,536,017
Construction in progress	**981**	12,265
	10,894,122	10,524,351
Accumulated depreciation and amortization	**(7,060,228)**	(6,682,967)
	$ 3,833,894	$ 3,841,384

Depreciation and amortization expense for the years ended December 31, 2017 and 2016 amounted to $430,141 and $487,101, respectively.

Pursuant to the terms of noncancelable lease agreements in effect at December 31, 2017, pertaining to office space for three branches, future minimum rent commitments under various operating leases are as follows:

2018	$ 104,779
2019	51,488
2020	40,000
2021	31,680
2022	10,560
Total	$ 238,507

The leases contain options to renew. The cost of such renewals is not included above. Total rent expense for the years ended December 31, 2017 and 2016, amounted to $117,195 and $98,725, respectively.

6. Deposits

The aggregate amount of time deposits in denominations of $250,000 or more at December 31, 2017 and 2016, was $26,246,104 and $21,990,557, respectively.

At December 31, 2017, the scheduled maturities of time deposits are as follows:

2018	$ 61,262,259
2019	4,978,812
2020	4,687,009
2021	221,994
2022	209,403
Total	$ 71,359,477

7. Advances from Federal Home Loan Bank

Pursuant to collateral agreements with the FHLB, advances are collateralized by all stock in the FHLB, qualifying first mortgages and specific securities available-for-sale.

At December 31, 2017, the Bank had a fixed rate advance of $1,000,000 with an interest rate of 1.51% and a maturity date of January 3, 2018. At December 31, 2016, the Bank had a fixed rate advance of $2,000,000 with an interest rate of .78% and a maturity date of January 4, 2017.

At December 31, 2017, the Bank's total FHLB borrowing capacity was $85,592,170 of which $74,592,170 was unused and available for additional borrowings.

At December 31, 2017, the Bank's total borrowing capacity from the FRB was $61,453,224. The Bank also had $7,000,000 available under long-term lines of credit at December 31, 2017 from two financial institutions. There were no amounts outstanding under these lines of credit at December 31, 2017 or 2016.

8. Income Taxes

Allocation of federal and state income tax expense between current and deferred portions is as follows:

	2017	2016
Current tax expense		
Federal	**$ 629,065**	$ 166,259
State	**123,238**	31,955
	752,303	198,214
Deferred tax expense	**230,205**	349,060
	$ 982,508	$ 547,274

The income tax provision differs from the expense that would result from applying federal statutory rates to income before income taxes, as follows:

	2017	2016
Computed tax expense	**$ 1,047,293**	$ 834,627
Increase (reduction) in income taxes resulting from:		
Tax-exempt interest	**(215,360)**	(253,376)
State taxes, net of federal benefit	**118,947**	21,090
Income from life insurance	**(55,515)**	(115,356)
Deferred tax adjustment for enacted tax rate change	**169,226**	-
Other	**(82,083)**	60,289
	$ 982,508	$ 547,274

The components of the net deferred income tax asset, included in other assets, are as follows:

	2017	2016
Deferred tax assets		
Allowance for loan losses	**$ 880,113**	$ 1,130,176
Deferred compensation plans	**1,357,182**	1,854,546
AMT credit carryforward	**548,875**	733,866
Net unrealized loss on derivative instrument	**-**	56,378
Net unrealized loss on securities available-for-sale	**5,625**	509,853
Other	**45,999**	87,025
	2,837,794	4,371,844
Deferred tax liabilities		
Prepaid pension and other postretirement benefits	**1,644,189**	2,056,142
Depreciation	**293,366**	376,267
Other prepaid expenses	**89,604**	-
	2,027,159	2,432,409
Net deferred income tax asset	**$ 810,635**	$ 1,939,435

9. Financial Instruments with Off-Balance-Sheet Risk

The Company is a party to credit-related financial instruments with off-balance-sheet risk in the normal course of business to meet the financing needs of its customers. These financial instruments include commitments to extend credit and letters of credit. Such commitments involve, to varying degrees, elements of credit and interest rate risk in excess of the amount recognized in the consolidated balance sheets.

The Company's exposure to credit loss is represented by the contractual amount of these commitments. The Company follows the same credit policies in making commitments as it does for on-balance-sheet instruments.

At December 31, 2017 and 2016, the following financial instruments were outstanding whose contract amounts represent credit risk:

	Contract Amount	
	2017	2016
Commitments to grant loans	**$ 7,453,455**	$ 20,105,086
Unfunded commitments under lines of credit	**27,147,400**	26,799,152
Commercial and standby letters of credit	**157,262**	455,902
Commitments to fund deposit account overdrafts	**5,722,704**	1,903,417
Municipal letters of credit	**10,000,000**	-

Commitments to extend credit are agreements to lend to a customer as long as there is no violation of any condition established in the contract. Commitments generally have fixed expiration dates or other termination clauses and may require payment of a fee. The commitments for equity lines of credit may expire without being drawn upon. Therefore, the total commitment amounts do not necessarily represent future cash requirements. The amount of collateral obtained, if it is deemed necessary by the Company, is based on management's credit evaluation of the customer.

Unfunded commitments under revolving credit lines and overdraft protection agreements are commitments for possible future extensions of credit to existing customers. These lines of credit are uncollateralized and usually do not contain a specified maturity date and may not be drawn upon to the total extent to which the Company is committed.

Standby letters of credit are conditional lending commitments issued by the Company to guarantee the performance of a customer to a third party. Those letters of credit are primarily issued to support public and private borrowing arrangements. Essentially all letters of credit issued have expiration dates within one year. The credit risk involved in issuing letters of credit is essentially the same as that involved in extending loan facilities to customers.

To reduce credit risk related to the use of credit-related financial instruments, the Company might deem it necessary to obtain collateral. The amount and nature of the collateral obtained is based on the Company's credit evaluation of the customer. Collateral held varies, but may include cash, securities, accounts receivable, inventory, property, plant and equipment, and real estate.

On May 7, 2014, the Company purchased a 5-year interest rate swap with an effective date of May 5, 2016 and a notional amount of $5,000,000 with a fixed cost of 2.56% and a maturity date of May 2, 2019. The interest rate swap was intended to eliminate the cash flow exposure of interest rate movements on the Company’s variable-rate debt. Beginning in year two of the agreement, the Company swapped the variable cost of debt for the fixed cost of the swap. Because interest rates did not increase as quickly as anticipated at the inception of the swap, the Company elected to eliminate the swap on September 14, 2017. At that time, the Company paid the fair value of the swap, recognizing a loss of $96,300. The fair value of the interest rate swap was a liability in the consolidated balance sheet at December 31, 2016 in the amount of $140,945.

The Company used the interest rate swap as a partial hedge against large fluctuations in interest rates. At least quarterly, the interest rate swap was reviewed as part of the asset/liability management process. The interest rate swap was factored into the Company’s overall interest rate risk position. The Company regularly reviewed the credit quality of the counterparty from which the interest rate swap had been purchased. The Company uses derivative financial instruments for risk management purposes and not for trading or speculative purposes. The Company controls the credit risk of the instrument through collateral, credit approvals and monitoring procedures.

10. Minimum Regulatory Capital Requirements

The Company (on a consolidated basis) and the Bank are subject to various regulatory capital requirements administered by the FRB and Office of the Comptroller of the Currency (OCC). Failure to meet minimum capital requirements can result in mandatory and possible additional discretionary actions by regulators that, if undertaken, could have a direct material effect on the Company’s consolidated financial statements. Under capital adequacy guidelines and the regulatory framework for prompt corrective action, the Company must meet specific capital guidelines that involve quantitative measures of the Company's assets, liabilities, and certain off-balance-sheet items as calculated under regulatory accounting practices. The Company's capital amounts and classification are also subject to qualitative judgments by the regulators about components, risk weightings, and other factors.

Quantitative measures established by regulation to ensure capital adequacy require the Company and the Bank to maintain minimum amounts and ratios (set forth in the following table) of total, Tier 1 capital, and Common Equity Tier 1 (as defined in the regulations) to risk-weighted assets (as defined) and of Tier 1 capital to average assets (as defined). Management believes, as of December 31, 2017 and 2016, that the Company meets all capital adequacy requirements to which it is subject.

Regulatory capital requirements limit a banking organization's capital distributions and certain discretionary bonus payments if the banking organization does not hold a “capital conservation buffer” consisting of 2.5% above its minimum risk-based capital requirements. The final Basel III capital rule became effective for the Company on January 1, 2015. The capital conservation buffer requirement is being phased in from January 1, 2016 through January 1, 2019, when the full capital conservation buffer requirement will be effective. As of December 31, 2017, the Company and the Bank had a capital conservation buffer of 5.25% and 5.19%, respectively, which was in excess of the phased-in regulatory requirement of 1.25%.

As of December 31, 2017, the most recent notification from the OCC categorized the Bank as well-capitalized under the regulatory framework for prompt corrective action under the newly implemented Basel III regulatory capital framework. To be categorized as well capitalized, an institution must maintain minimum total risk-based, Tier 1 risk-based, common equity Tier 1 risk-based and Tier 1 leverage ratios as set forth in the following tables. There are no conditions or events since the notification that management believes have changed the Bank's category.

The Company's and the Bank's actual capital amounts and ratios as of December 31, 2017 and 2016, are also presented in the following table.

	Actual		Minimum Capital Requirement		Minimum to be Well Capitalized under Prompt Corrective Action Provisions	
	Amount	Ratio	Amount	Ratio	Amount	Ratio
December 31, 2017						
Total Capital to Risk-Weighted Assets						
Consolidated	**$ 30,417,534**	**13.25%**	**$ 18,371,553**	**8.00%**	**N/A**	**N/A**
Bank	**30,290,191**	**13.19**	**18,371,553**	**8.00**	**$ 22,964,442**	**10.00%**
Tier 1 Capital to Risk-Weighted Assets						
Consolidated	**27,538,976**	**11.99**	**13,778,665**	**6.00**	**N/A**	**N/A**
Bank	**27,411,633**	**11.94**	**13,778,665**	**6.00**	**18,371,553**	**8.00**
Common Equity Tier 1 Capital to Risk-Weighted Assets						
Consolidated	**27,538,976**	**11.99**	**10,333,999**	**4.50**	**N/A**	**N/A**
Bank	**27,411,633**	**11.94**	**10,333,999**	**4.50**	**14,926,887**	**6.50**
Tier 1 Capital to Average Assets						
Consolidated	**27,538,976**	**8.23**	**13,385,375**	**4.00**	**N/A**	**N/A**
Bank	**27,411,633**	**8.19**	**13,385,375**	**4.00**	**16,731,718**	**5.00**

	Actual		Minimum Capital Requirement		Minimum to be Well Capitalized under Prompt Corrective Action Provisions	
	Amount	Ratio	Amount	Ratio	Amount	Ratio
December 31, 2016						
Total Capital to Risk-Weighted Assets						
Consolidated	$ 27,916,594	14.13%	$ 15,808,974	8.00%	N/A	N/A
Bank	27,835,546	14.09	15,808,974	8.00	$19,761,218	10.00%
Tier 1 Capital to Risk-Weighted Assets						
Consolidated	25,437,768	12.87	11,856,731	6.00	N/A	N/A
Bank	25,356,721	12.83	11,856,731	6.00	15,808,974	8.00
Common Equity Tier 1 Capital to Risk-Weighted Assets						
Consolidated	25,437,768	12.87	8,892,548	4.50	N/A	N/A
Bank	25,356,721	12.83	8,892,548	4.50	12,844,791	6.50
Tier 1 Capital to Average Assets						
Consolidated	25,437,768	8.60	12,166,520	4.00	N/A	N/A
Bank	25,356,721	8.57	12,166,520	4.00	15,208,150	5.00

11. Employee Benefit Plans

401(k) Plan

The Company has a 401(k) plan whereby all employees are eligible to participate in the plan at the first enrollment date after hire. Participants may contribute up to the maximum amount allowed by federal tax laws. The Company made matching contributions equal to 4% of compensation in 2017 and 2016. The Company may also make a profit-sharing contribution to the plan. The additional contribution was 1% of each eligible employee's compensation in 2017 and 2016. For the years ended December 31, 2017 and 2016, expense attributable to the plan amounted to $171,662 and $171,316, respectively.

Supplemental Retirement Plan and Deferred Compensation Plan

The Company sponsors an unfunded, non-qualified supplemental retirement plan for certain officers. The agreement provides supplemental retirement payments payable over 15-20 years upon retirement or death. The costs for this plan are recognized over the service periods of the participating officers. Life insurance policies were acquired for the increase in cash surrender value to help offset the costs for this plan. The cash value of these policies was $2,693,525 and $2,453,901 at December 31, 2017 and 2016, respectively. The expenses of this supplemental plan were $218,280 and $202,643 in 2017 and 2016, respectively. Payments to retirees were $128,500 and $119,750, respectively in 2017 and 2016. As of December 31, 2017 and 2016, the accrued liability of this plan was $ 1,878,676 and $1,788,896, respectively.

The Company also owns split-dollar life insurance policies for certain key employees. The cash value of these policies, net of accumulated life insurance obligations, was $3,289,333 and $3,209,735 at December 31, 2017 and 2016, respectively.

The Company sponsors an unfunded, non-qualified deferred compensation plan for the Company's board of directors. The costs for this plan are recognized over the service periods of the participating board members. The expenses of this plan, including board fees and interest, were $274,338 and $251,527 in 2017 and 2016, respectively. Payments to board members were $14,575 and $14,264 in 2017 and 2016, respectively. As of December 31, 2017 and 2016, the accrued liability of this plan was $3,314,290 and $3,054,526, respectively.

Defined Benefit Pension Plan

The Company is a member of the New York State Bankers Retirement System (the System) and offers a non-contributory defined benefit pension plan to substantially all full-time employees and part-time employees as required by law. Benefit payments to retired employees are based upon their length of service and a percentage of qualifying compensation during the final years of employment. Contributions are intended to provide not only for benefits attributed to service to date, but also for those expected to be earned in the future. Assets of the plan are primarily invested in equity and debt securities. The costs for this plan are recognized over the service periods of the participating employees.

The System was established in 1938 to provide for the payment of benefits to employees of participating banks. The System is overseen by a Board of Trustees who meet quarterly and set the investment policy guidelines.

The System utilizes two investment management firms and its investment objective is to exceed the investment benchmarks in each asset category. Each firm operates under a separate written investment policy approved by the Trustees. Each firm reports at least quarterly to the Investment Committee of the System and semi-annually to the Board of the System.

The expected long-term rate-of-return on plan assets reflects long-term earnings expectations on existing plan assets and those contributions expected to be received during the current plan year. In estimating that rate, appropriate consideration was given to historical returns earned by plan assets in the fund and the rates of return expected to be available for reinvestment. Average rates of return over the past one-, three-, five-, and ten-year periods were determined and, subsequently, adjusted to reflect current capital market assumptions and changes in investment allocations.

The following table sets forth the plan's funded status and amounts recognized in the Company's consolidated balance sheets as of December 31:

	2017	2016
Benefit obligation at December 31	**$16,052,401**	$14,366,729
Fair value of plan assets at December 31	**23,362,336**	20,886,333
Funded status	**$ 7,309,935**	$ 6,519,604
Accumulated benefit obligation	**$14,438,870**	$12,886,373
Prepaid pension cost included in other assets in the consolidated balance sheet	**$ 7,309,935**	$ 6,519,604
Weighted average assumptions used to determine benefit obligation		
Discount rate	**3.93%**	4.41%
Rate of compensation increase	**3.50%**	3.50%
Weighted average assumptions used to determine net benefit cost		
Discount rate	**4.41%**	4.56%
Expected return on plan assets	**6.50%**	6.50%
Rate of compensation increase	**3.50%**	3.50%

The following table discloses additional information regarding the pension plan for the years ended December 31:

	2017	2016
Employer contributions	**$ -**	$ 1,889,190
Benefits paid	**664,277**	589,865
Benefit cost	**128,052**	338,082

Future benefit payments for the next ten years are expected to be paid as follows:

Years ending December 31:

2018	$ 510,079
2019	600,558
2020	648,418
2021	672,775
2022	711,223
Years 2023 - 2027	4,341,209

The Company expects to make a contribution to the plan in 2018; however, the amount has not been determined.

The Company's pension plan asset allocations by asset category are as follows:

	Plan Assets at December 31	
Asset Category	**2017**	2016
Equity securities	**46%**	39%
Debt securities	**38%**	40%
Other	**16%**	21%
Total	**100%**	100%

Defined Benefit Postretirement Health Care Plan

In addition to the Company's non-contributory defined benefit pension plan, the Company provides a defined benefit postretirement plan which provides medical benefits and life insurance benefits to employees who were hired before January 1, 2005, and have attained 55 years of age with 10 years of service. The postretirement health care portion of the plan is contributory, with participants' contributions adjusted annually, and contains other cost-sharing features such as deductibles and coinsurance. While the amount of a participant's contribution varies depending upon age and service, the Company has set a maximum dollar amount it will pay for medical benefits regardless of age or service. The funding policy of the plan is to pay claims and/or insurance premiums as they come due. The costs for this plan are recognized over the service periods of the participating employees.

The following table presents the amounts recognized in the Company's consolidated balance sheets as of December 31:

	2017	2016
Benefit obligation at December 31	**$ 1,019,865**	$ 934,326
Fair value of plan assets at December 31	**-**	-
Funded status	**$(1,019,865)**	$ (934,326)
Accrued postretirement costs included in accrued expenses and other liabilities in the consolidated balance sheet	**$(1,019,865)**	$ (934,326)
Weighted average assumption used to determine benefit obligation		
Discount rate	**3.93%**	4.41%
Weighted average assumption used to determine net benefit cost		
Discount rate	**4.41%**	4.56%

The following table discloses additional information regarding the postretirement plan for the years ended December 31:

	2017	2016
Employer contributions	**$ 31,201**	$ 38,395
Benefits paid	**31,201**	38,395
Benefit cost	**50,859**	47,851

The Company expects to make a contribution to the plan in 2018; however, the amount has not been determined.

Future benefit payments for the next ten years are expected to be paid as follows:

Years ending December 31:

2018	$ 42,059
2019	46,429
2020	37,956
2021	40,148
2022	42,204
Years 2023 - 2027	241,661

Reclassification adjustments related to the net periodic benefit cost for the defined benefit pension and postretirement plans are presented in salaries and employee benefits in the consolidated statements of income. Amounts not yet reflected in net periodic benefit cost and included in accumulated other comprehensive loss for the defined benefit pension and other postretirement plans at December 31, are as follows:

	2017	2016
Unamortized prior service cost	**$ 3,674**	$ 7,527
Unamortized net actuarial loss	**2,751,737**	3,600,386
	2,755,411	3,607,913
Deferred tax benefit	**720,126**	1,443,166
Net unrecognized loss on pension and other postretirement benefits included in accumulated other comprehensive loss	**$2,035,285**	$2,164,747

The following amounts were recognized in other comprehensive loss during the years ended December 31:

	2017	2016
Net actuarial gain	**$ 649,066**	$ 614,010
Reclassifications to net periodic benefit cost		
Amortization of net unrecognized actuarial loss	**199,583**	199,044
Amortization of prior service cost	**3,853**	3,853
	852,502	816,907
Tax effect	**341,002**	326,762
	$ 511,500	$ 490,145

The following amounts are expected to be reclassified from accumulated other comprehensive loss and recognized in net periodic benefit cost in 2018:

	Pension	Postretirement
Unamortized prior service cost	$ (10)	$ (4,000)
Unamortized net actuarial (loss) gain	(64,791)	1,000
	$ (64,801)	$ (3,000)

12. Other Noninterest Expenses

The components of other noninterest expenses, which are in excess of 1% of total revenues (total interest and dividend income and noninterest income) and not shown separately in the consolidated statements of income, are as follows for the years ended December 31:

	2017	2016
Noninterest income		
Bank-owned life insurance	**$ N/A**	$ 227,693
Noninterest expense		
FDIC fees	**133,908**	152,261
Audit fees	**211,604**	203,219
Software maintenance fees	**560,841**	493,552
Depreciation and amortization expense	**430,141**	487,101
Debit card processing fees and issuance costs	**187,128**	213,307
Director fees	**202,100**	169,800
Other consulting fees	**137,016**	168,470

13. Related Party Transactions

In the ordinary course of business, the Bank has granted loans to principal officers and directors and their affiliates amounting to $409,560 at December 31, 2017 and $314,687 at December 31, 2016. During the years ended December 31, 2017 and 2016, total principal payments were $110,826 and $102,248, respectively. During 2017 and 2016, $205,699 and $31,874, respectively, were added to principal for new advances and change of status.

Deposits from related parties held by the Bank at December 31, 2017 and 2016 amounted to $2,200,690 and $2,040,013, respectively.

14. Restrictions on Dividends

Income earned by the Bank is the primary source of funds available to the Company for payment of dividends to its stockholders and for other working capital needs. Applicable federal and state statutes, regulations, and guidelines impose restrictions on the amount of dividends that may be declared by the Bank. Under these restrictions, the dividends declared by the Bank to the Company in 2017 may not exceed the aggregate of the Bank's net profits in 2017 combined with its retained net profits from the two preceding years of approximately $4,666,000.

In addition, dividends paid by the Bank to the Company would be prohibited if the effect thereof would cause the Bank's capital to be reduced below applicable minimum capital requirements.

15. Legal Contingencies

Various legal claims also arise from time-to-time in the normal course of business which, in the opinion of management, will have no material effect on the Company's consolidated financial statements.

16. Fair Value Measurements

GAAP defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. GAAP 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. The standard describes three levels of inputs that may be used to measure fair value:

Level 1: Quoted prices (unadjusted) for identical assets or liabilities in active markets that the entity has the ability to access as of the measurement date.

Level 2: Significant other observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, and other inputs that are observable or can be corroborated by observable market data.

Level 3: Significant unobservable inputs that reflect an organization's own assumptions about the assumptions that market participants would use in pricing an asset or liability.

In general, fair value is based upon quoted market prices, where available. If such quoted market prices are not available, fair value is based upon model-based techniques incorporating various assumptions including interest rates, prepayment speeds and credit losses. Assets and liabilities valued using model-based techniques are classified as either Level 2 or Level 3, depending on the lowest level classification of an input that is considered significant to the overall valuation. A description of the valuation methodologies used for instruments measured at fair value, as well as the general classification of such instruments pursuant to the valuation hierarchy, is set forth below.

Assets Recorded at Fair Value on a Recurring Basis

Securities available-for-sale: Fair values for securities available-for-sale are determined by obtaining quoted prices on nationally recognized securities exchanges or matrix pricing, which is a mathematical technique used widely in the industry to value debt securities without relying exclusively on quoted market prices for the specific securities, but rather by relying on the securities' relationship to other benchmark quoted securities. The fair values of securities available-for-sale are classified as Level 2.

Assets held by defined benefit pension plan: Fair value of certain equity securities held by the defined benefit pension plan is determined using prices in the active market of each security. Fair value of the debt securities are determined by obtaining quoted prices on nationally recognized securities exchanges or matrix pricing, which is a mathematical technique used widely in the industry to value debt securities without relying exclusively on quoted market prices for the specific securities, but rather by relying on the securities' relationship to other benchmark quoted securities. Other investments and certain equity securities include short-term investment funds and a commingled pension trust fund. Short-term investment funds are based on the net asset value and are classified as Level 2. Commingled pension trust fund assets use a market methodology and rely on unobservable inputs including credit spreads, discount rates, and other financial metrics and are classified as Level 3.

Derivative instrument: The derivative instrument is reported at fair value utilizing Level 2 inputs obtained from third parties.

Assets and liabilities measured at fair value on a recurring basis are summarized below:

	Fair Value Measurements Using			
	Quoted Prices In Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
December 31, 2017				
Assets (market approach):				
Securities available-for-sale				
State and municipal	**$ -**	**$ 18,852,041**	**$ -**	**$18,852,041**
Corporate	**-**	**930,000**	**-**	**930,000**
Mortgage-backed securities	**-**	**44,323,705**	**-**	**44,323,705**
Collateralized mortgage obligations	**-**	**72,455**	**-**	**72,455**
Assets held by defined benefit pension plan				
Equities	**4,263,777**	**6,402,468**	**-**	**10,666,245**
Debt securities	**-**	**8,998,830**	**-**	**8,998,830**
Other	**203,506**	**2,753,454**	**740,301**	**3,697,261**

	Fair Value Measurements Using			
	Quoted Prices In Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
December 31, 2016				
Assets (market approach):				
Securities available-for-sale				
State and municipal	$ -	$ 29,839,301	$ -	$ 29,839,301
Corporate	-	905,000	-	905,000
Mortgage-backed securities	-	53,941,696	-	53,941,696
Collateralized mortgage obligations	-	1,093,960	-	1,093,960
Assets held by defined benefit pension plan				
Equities	3,807,313	4,345,721	-	8,153,034
Debt securities	-	8,337,144	-	8,337,144
Other	27,456	3,636,932	731,767	4,396,155
Liabilities (market approach):				
Derivative instrument	-	140,945	-	140,945

The change in Level 3 assets held by the defined benefit pension plan measured at fair value on a recurring basis is summarized as follows for the year ended December 31, 2017:

Balance at beginning of year	$ 731,767
Purchases	28,948
Realized gain	12,158
Sales	(62,721)
Unrealized gains	30,149
Balance at end of year	$ 740,301

Assets measured at fair value on a nonrecurring basis are summarized below:

	Fair Value Measurements Using			
	Quoted Prices In Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
December 31, 2017				
Assets (market approach):				
Impaired loans, net of related allowance	**$ -**	**$ 381,701**	**$ -**	**$ 381,701**
Other real estate owned	**-**	**98,536**	**-**	**98,536**
December 31, 2016				
Assets (market approach):				
Impaired loans, net of related allowance	$ -	$ 729,565	$ -	$ 729,565
Other real estate owned	-	3,536	-	3,536

Impaired loans: A loan is considered to be impaired when it is probable that all of the principal and interest due under the original underwriting terms of the loan may not be collected. The fair value of collateral-dependent impaired loans is primarily based upon appraisals by third-party appraisers and brokers' opinions by third-party brokers. The appraisals and opinions are based upon comparable prices for similar assets in active markets for residential real estate loans, and less active markets for commercial loans. The fair values of collateral-dependent impaired loans are classified as Level 2.

Certain impaired loans were written down to their value of $381,701 and $729,565 at December 31, 2017 and 2016, respectively, resulting in an impairment charge through the allowance for loan losses.

Other real estate owned: Other real estate owned is initially recorded at fair value based on current market appraisals, and then carried at the lower of the new cost basis or fair value through a provision charge to earnings. The fair values of other real estate owned are classified as Level 2.

GAAP requires disclosures of fair value information about financial instruments, whether or not recognized in the balance sheet, if the fair values can be reasonably determined. Fair value is best determined based upon quoted market prices. However, in many instances, there are no quoted market prices for the Company's various financial instruments. In cases where quoted market prices are not available, fair values are based on estimates using present value or other valuation techniques using observable inputs when available. Those techniques are significantly affected by the assumptions used, including the discount rate and estimates of future cash flows. Accordingly, the fair value estimates may not be realized in an immediate settlement of the instrument. Certain financial instruments and all nonfinancial instruments are excluded from the disclosure requirements. Accordingly, the aggregate fair value amounts presented may not necessarily represent the underlying fair value of the Company. The following methods and assumptions were used by the Company in estimating fair value disclosures for financial instruments:

Cash and due from banks and Federal funds sold: The carrying amounts of cash and due from banks and Federal funds sold approximate fair values.

Securities: The fair values of investment securities, other than FHLB and FRB stock, are based on quoted market prices on nationally recognized securities exchanges, where available, or matrix pricing, which is a mathematical technique used widely in the industry to value debt securities without relying exclusively on quoted prices for the specific securities, but rather relying on the securities' relationship to other benchmark quoted securities. The fair value of FHLB and FRB stock is equal to cost, since there is no secondary market for these instruments.

Loans receivable: For variable-rate loans that reprice frequently and with no significant change in credit risk, fair values are based on carrying values. Fair values for other loans are estimated using discounted cash flow analyses, using interest rates currently being offered for loans with similar terms to borrowers of similar credit quality. The fair value of impaired loans is primarily based upon appraisals by third-party appraisers and brokers' opinions by third-party brokers. The appraisals and opinions are based upon comparable prices for similar assets in active markets for residential real estate loans, and less active markets for commercial loans.

Deposit liabilities: The fair values for demand deposits (e.g., interest and non-interest checking, passbook savings, and certain types of money market accounts) are, by definition, equal to the amount payable on demand at the reporting date (i.e., their carrying amounts). The carrying amounts of variable-rate, fixed-term money market accounts and certificates of deposit approximate their fair values at the reporting date. Fair values for fixed-rate certificates of deposit are estimated using a discounted cash flow calculation that applies interest rates currently being offered on certificates to a schedule of aggregate expected monthly maturities on the certificates.

Advances from FHLB: The fair values of these borrowings are estimated using discounted cash flow analyses based on the Company's current incremental borrowing rates for similar types of borrowing arrangements.

Accrued interest: The carrying amounts of accrued interest approximate fair value.

Derivative instrument: The fair value of interest rate swaps was determined using inputs that were observable in the market place obtained from third parties including yield curves, publicly available volatilities, and floating indexes.

Off-balance-sheet instruments: The Company's off-balance-sheet instruments consist of loan commitments. Fair values for loan commitments have not been presented as the future revenue derived from such financial instruments is not significant.

The estimated fair values, and related carrying or notional amounts, of the Company's financial instruments at December 31 are as follows:

		Fair Value Measurements Using			
December 31, 2017	Carrying Amount	Quoted Prices In Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Financial assets					
Cash and cash equivalents	**$ 6,700,611**	**$ 6,700,611**	**$ -**	**$ -**	**$ 6,700,611**
Federal funds sold	**36,791**	**36,791**	**-**	**-**	**36,791**
Securities available-for-sale	**64,178,201**	**-**	**64,178,201**	**-**	**64,178,201**
Securities held-to-maturity	**6,165,620**	**-**	**6,328,264**	**-**	**6,328,264**
FHLB and FRB stock	**361,200**	**-**	**361,200**	**-**	**361,200**
Loans, net of allowance for loan losses					
Commercial	**32,880,238**	**-**	**340,943**	**32,384,109**	**32,725,052**
Commercial real estate	**120,554,393**	**-**	**-**	**120,613,197**	**120,613,197**
Residential real estate	**58,121,721**	**-**	**32,394**	**58,236,982**	**58,269,376**
Consumer	**20,950,887**	**-**	**8,364**	**20,903,052**	**20,911,416**
Accrued interest receivable	**908,048**	**-**	**908,048**	**-**	**908,048**
Financial liabilities					
Deposits					
Other deposits	**269,043,432**	**-**	**252,634,214**	**-**	**252,634,214**
Brokered deposits	**27,433,649**	**-**	**27,417,873**	**-**	**27,417,873**
Advances from FHLB	**1,000,000**	**-**	**1,000,000**	**-**	**1,000,000**
Accrued interest payable	**36,877**	**-**	**36,877**	**-**	**36,877**

December 31, 2016	Carrying Amount	Fair Value Measurements Using: Quoted Prices In Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Financial assets					
Cash and cash equivalents	$ 5,754,362	$ 5,754,362	$ -	$ -	$ 5,754,362
Federal funds sold	99,548	99,548	-	-	99,548
Securities available-for-sale	85,779,957	-	85,779,957	-	85,779,957
Securities held-to-maturity	6,007,145	-	6,166,930	-	6,166,930
FHLB and FRB stock	434,600	-	434,600	-	434,600
Loans, net of allowance for loan losses					
Commercial	25,374,454	-	603,497	24,970,348	25,573,845
Commercial real estate	104,612,338	-	435,972	105,563,940	105,999,912
Residential real estate	53,844,548	-	129,268	54,519,369	54,648,637
Consumer	3,921,733	-	68,209	3,986,976	4,055,185
Accrued interest receivable	904,035	-	904,035	-	904,035
Financial liabilities					
Deposits					
Other deposits	248,548,972	-	240,387,099	-	240,387,099
Brokered deposits	24,925,352	-	24,925,352	-	24,925,352
Advances from FHLB	2,000,000	-	2,000,000	-	2,000,000
Accrued interest payable	32,914	-	32,914	-	32,914
Derivative instrument	140,945	-	140,945	-	140,945

17. Subsequent Events

Management has considered transactions or events occurring through April 4, 2018, which is the date that the financial statements were available to be issued. Management has not evaluated subsequent events after that date for inclusion in the financial statements.