CITIZENS & NORTHERN CORP
Form 10-K
February 15, 2018

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

x **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2017

OR

.. **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____________ to _____________.

Commission file number: 0-16084

CITIZENS & NORTHERN CORPORATION

(Exact name of Registrant as specified in its charter)

PENNSYLVANIA	23-2451943
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

90-92 MAIN STREET, WELLSBORO, PA 16901

(Address of principal executive offices) (Zip code)

570-724-3411

(Registrant's telephone number including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	**Name of Exchange Where Registered**
Common Stock Par Value $1.00	The NASDAQ Stock Market LLC

Securities registered pursuant to section 12(g) of the Act: None

Indicate by check mark whether the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ¨ No x

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ¨ No x

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes x No ¨

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (Section 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes x No ¨

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. x

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

(Check one): Large accelerated filer ¨ Accelerated filer x Non-accelerated filer ¨ Smaller reporting company ¨ Emerging growth company ¨

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ¨

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ¨ No x

The aggregate market value of the registrant's common stock held by non-affiliates at June 30, 2017, the registrant's most recently completed second fiscal quarter, was $274,571,344.

The number of shares of common stock outstanding at February 8, 2018 was 12,246,834.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's proxy statement for the annual meeting of its shareholders to be held April 19, 2018 are incorporated by reference into Parts III and IV of this report.

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PART I

ITEM 1. BUSINESS

Citizens & Northern Corporation ("Corporation") is a holding company whose principal activity is community banking. The Corporation's principal office is located in Wellsboro, Pennsylvania. The largest subsidiary is Citizens & Northern Bank ("C&N Bank" or the "Bank"). The Corporation's other wholly-owned subsidiaries are Citizens & Northern Investment Corporation and Bucktail Life Insurance Company ("Bucktail"). Citizens & Northern Investment Corporation was formed in 1999 to engage in investment activities. Bucktail reinsures credit and mortgage life and accident and health insurance on behalf of C&N Bank.

C&N Bank is a Pennsylvania banking institution that was formed by the consolidation of Northern National Bank of Wellsboro and Citizens National Bank of Towanda on October 1, 1971. Subsequent mergers included: First National Bank of Ralston in May 1972; Sullivan County National Bank in October 1977; Farmers National Bank of Athens in January 1984; and First National Bank of East Smithfield in May 1990. In 2005, the Corporation acquired Canisteo Valley Corporation and its subsidiary, First State Bank, a New York State chartered commercial bank with offices in Canisteo and South Hornell, NY. In 2010, the First State Bank operations were merged into C&N Bank and Canisteo Valley Corporation was merged into the Corporation. On May 1, 2007, the Corporation acquired Citizens Bancorp, Inc. ("Citizens"), with banking offices in Coudersport, Emporium and Port Allegany, Pennsylvania. Citizens Trust Company, the banking subsidiary of Citizens, was merged with and into C&N Bank as part of the transaction. C&N Bank has held its current name since May 6, 1975, at which time C&N Bank changed its charter from a national bank to a Pennsylvania bank.

C&N Bank provides an extensive range of banking services, including deposit and loan products for personal and commercial customers. The Bank also maintains a trust division that provides a wide range of financial services, such as 401(k) plans, retirement planning, estate planning, estate settlements and asset management. In January 2000, C&N Bank formed a subsidiary, C&N Financial Services Corporation ("C&NFSC"). C&NFSC is a licensed insurance agency that provides insurance products to individuals and businesses. In 2001, C&NFSC added a broker-dealer division, which offers mutual funds, annuities, educational savings accounts and other investment products through registered agents. C&NFSC's operations are not significant in relation to the total operations of the Corporation.

In December 2017, C&N Bank established a new entity, Northern Tier Holding LLC, for the purpose of acquiring, holding and disposing of real property acquired by the Bank. C&N Bank is the sole member of Northern Tier Holding LLC, which had no transactions in 2017.

All phases of the Bank's business are competitive. The Bank primarily competes in Tioga, Bradford, Sullivan, Lycoming, Potter, Cameron and McKean counties in Pennsylvania, and Steuben and Chemung counties in New York. The Bank competes with local commercial banks headquartered in our market area as well as other commercial banks with branches in our market area. Some of the banks that have branches in our market area are larger in overall size. With respect to lending activities and attracting deposits, the Bank also competes with savings banks, savings and loan associations, insurance companies, regulated small loan companies and credit unions. Also, the Bank competes with mutual funds for deposits. C&N Bank competes with insurance companies, investment counseling firms, mutual funds and other business firms and individuals for trust, investment management, brokerage and insurance services. The Bank is generally competitive with all financial institutions in our service area with respect to interest rates paid on time and savings deposits, service charges on deposit accounts and interest rates charged on loans. The Bank serves a diverse customer base, and is not economically dependent on any small group of customers or on any individual industry.

Major initiatives within the last 5 years included the following:

- in 2013, worked with consultants on projects which resulted in ongoing increases in revenues from service charges on deposit accounts, starting primarily in the fourth quarter 2013, and ongoing reductions in electronic funds processing expenses;

- in 2014, approved a treasury stock repurchase program for repurchase of up to 622,500 shares of the Corporation's common stock, or approximately 5% of the Corporation's outstanding shares at July 16, 2014. In total, 622,500 shares were repurchased for a total cost of $12,140,000, at an average price of $19.50 per share;

- in 2015, began an organization-wide effort to enhance customer relationships, growth and profitability, including working with consultants on enhanced employee engagement and customer service training, and hiring additional lending personnel to provide more access to commercial and mortgage lending opportunities;

- in 2016, approved a new treasury stock repurchase program authorizing repurchase of up to 600,000 shares of the Corporation’s common stock. Through December 31, 2017, there have been no repurchases of shares under this program; and

- in March 2017, opened a loan production office in Elmira, New York.

Virtually all of the Corporation’s banking offices are located in the “Marcellus Shale,” an area extending across portions of New York State, Pennsylvania, Ohio, Maryland, West Virginia and Virginia. In recent years, most of the Pennsylvania counties in which the Corporation operates were significantly affected by an upsurge in natural gas exploration, as technological developments made exploration of the Marcellus Shale commercially feasible. After a surge of activity in 2009 through most of 2011, the market price of natural gas declined, causing Marcellus Shale natural gas exploration activity to slow, though some activity has continued to occur throughout the Corporation’s market area. Through December 31, 2017, the Corporation has not experienced significant credit issues as a result of the expansion and subsequent reduction in Marcellus Shale-related activity.

At December 31, 2017, C&N Bank had total assets of $1,262,642,000, total deposits of $1,016,035,000, net loans outstanding of $806,857,000 and 296 full-time equivalent employees.

Most activities of the Corporation and its subsidiaries are regulated by federal or state agencies. The primary regulatory relationships are described as follows:

- The Corporation is a bank holding company formed under the provisions of Section 3 of the Federal Reserve Act. The Corporation is under the direct supervision of the Federal Reserve and must comply with the reporting requirements of the Federal Bank Holding Company Act.

- C&N Bank is a state-chartered, nonmember bank, supervised by the Federal Deposit Insurance Corporation and the Pennsylvania Department of Banking and Securities.

- C&NFSC is a Pennsylvania corporation. The Pennsylvania Department of Insurance regulates C&NFSC’s insurance activities. Brokerage products are offered through third party networking agreements.

- Bucktail is incorporated in the state of Arizona and supervised by the Arizona Department of Insurance.

A copy of the Corporation’s annual report on Form 10-K, quarterly reports on Form 10-Q, current events reports on Form 8-K, and amendments to these reports, will be furnished without charge upon written request to the Corporation’s

Treasurer at P.O. Box 58, Wellsboro, PA 16901. Copies of these reports will be furnished as soon as reasonably possible, after they are filed electronically with the Securities and Exchange Commission. The information is also available through the Corporation's web site at www.cnbankpa.com.

ITEM 1A. RISK FACTORS

The Corporation is subject to the many risks and uncertainties applicable to all banking companies, as well as risks specific to the Corporation's geographic locations. Although the Corporation seeks to effectively manage risks, and maintains a level of equity that exceeds the banking regulatory agencies' thresholds for being considered "well capitalized" (see Note 18 to the consolidated financial statements), management cannot predict the future and cannot eliminate the possibility of credit, operational or other losses. Accordingly, actual results may differ materially from management's expectations. Some of the Corporation's significant risks and uncertainties are discussed below.

Credit Risk from Lending Activities – A significant source of risk is the possibility that losses will be sustained because borrowers, guarantors and related parties may fail to perform in accordance with the terms of their loan agreements. Most of the Corporation's loans are secured, but some loans are unsecured. With respect to secured loans, the collateral securing the repayment of these loans may be insufficient to cover the obligations owed under such loans. Collateral values may be adversely affected by changes in economic, environmental and other conditions, including declines in the value of real estate, changes in interest rates, changes in monetary and fiscal policies of the federal government, wide-spread disease, terrorist activity, environmental contamination and other external events. In addition, collateral appraisals that are out of date or that do not meet industry recognized standards may create the impression that a loan is adequately collateralized when it is not. The Corporation has adopted underwriting and credit monitoring procedures and policies, including regular reviews of appraisals and borrower financial statements, that management believes are appropriate to mitigate the risk of loss. Also, as discussed further in the "Provision and Allowance for Loan Losses" section of Management's Discussion and Analysis, the Corporation attempts to estimate the amount of losses that may be inherent in the portfolio through a quarterly evaluation process that includes several members of management and that addresses specifically identified problem loans, as well as other quantitative data and qualitative factors. Such risk management and accounting policies and procedures, however, may not prevent unexpected losses that could have a material adverse effect on the Corporation's financial condition, results of operations or liquidity.

Interest Rate Risk – Business risk arising from changes in interest rates is an inherent factor in operating a banking organization. The Corporation's assets are predominantly long-term, fixed-rate loans and debt securities. Funding for these assets comes principally from shorter-term deposits and borrowed funds. Accordingly, there is an inherent risk of lower future earnings or decline in fair value of the Corporation's financial instruments when interest rates change. Significant fluctuations in interest rates could have a material adverse effect on the Corporation's financial condition, results of operations or liquidity. For additional information regarding interest rate risk, see Part II, Item 7A, "Quantitative and Qualitative Disclosures About Market Risk."

Breach of Information Security and Technology Dependence – The Corporation relies on software, communication, and information exchange on a variety of computing platforms and networks and over the Internet. Despite numerous safeguards, the Corporation cannot be certain that all of its systems are entirely free from vulnerability to attack or other technological difficulties or failures. The Corporation relies on the services of a variety of vendors to meet its data processing and communication needs. If information security is breached or other technology difficulties or failures occur, information may be lost or misappropriated, services and operations may be interrupted and the Corporation could be exposed to claims from customers. Any of these results could have a material adverse effect on the Corporation's financial condition, results of operations or liquidity.

Limited Geographic Diversification – The Corporation grants commercial, residential and personal loans to customers primarily in the Pennsylvania counties of Tioga, Bradford, Sullivan, Lycoming, Potter, Cameron and McKean, and in Steuben and Chemung Counties in New York State. Although the Corporation has a diversified loan portfolio, a significant portion of its debtors' ability to honor their contracts is dependent on the local economic conditions within the region. Deterioration in economic conditions could adversely affect the quality of the Corporation's loan portfolio and the demand for its products and services, and accordingly, could have a material adverse effect on the Corporation's financial condition, results of operations or liquidity.

Competition – All phases of the Corporation's business are competitive. Some competitors are much larger in total assets and capitalization than the Corporation, have greater access to capital markets and can offer a broader array of financial services. There can be no assurance that the Corporation will be able to compete effectively in its markets. Furthermore, developments increasing the nature or level of competition could have a material adverse effect on the Corporation's financial condition, results of operations or liquidity.

Government Regulation and Monetary Policy – The Corporation and the banking industry are subject to extensive regulation and supervision under federal and state laws and regulations. The requirements and limitations imposed by such laws and regulations limit the manner in which the Corporation conducts its business, undertakes new investments and activities and obtains financing. These regulations are designed primarily for the protection of the deposit insurance funds and consumers and not to benefit the Corporation's shareholders. Financial institution regulation has been the subject of significant legislation in recent years and may be the subject of further significant legislation in the future, none of which is in the control of the Corporation. Significant new laws or changes in, or repeals of, existing laws could have a material adverse effect on the Corporation's financial condition, results of operations or liquidity. Further, federal monetary policy, particularly as implemented through the Federal Reserve System, significantly affects short-term interest rates and credit conditions, and any unfavorable change in these conditions could have a material adverse effect on the Corporation's financial condition, results of operations or liquidity.

Mortgage Banking – Since 2009, the Corporation has originated and sold residential mortgage loans to the secondary market through the MPF Xtra program. Since 2014, the Corporation has also originated and sold residential mortgage loans to the secondary market through the MPF Original program. Both of these programs are administered by the Federal Home Loan Banks of Pittsburgh and Chicago. At December 31, 2017, the total outstanding balance of residential mortgages sold and serviced through the two programs amounted to $169,725,000. The Corporation must strictly adhere to the MPF Xtra and MPF Original program guidelines for origination, underwriting and servicing loans, and failure to do so may result in the Corporation being forced to repurchase loans or being dropped from the program. As of December 31, 2017, the total outstanding balance of residential mortgage loans the Corporation has repurchased as a result of identified instances of noncompliance amounted to $1,805,000. If the volume of such forced repurchases of loans were to increase significantly, or if the Corporation were to be dropped from the programs, it could have a material adverse effect on the Corporation's financial condition, results of operations or liquidity.

Securities Markets – The fair value of the Corporation’s available-for-sale securities, as well as the revenues the Corporation earns from its Trust and Financial Management and brokerage services, are sensitive to price fluctuations and market events.

Declines in the values of the Corporation’s securities holdings, combined with adverse changes in the expected cash flows from these investments, could result in other-than-temporary impairment charges.

For additional information regarding debt securities, see the “Securities” section of Management’s Discussion and Analysis and Note 7 to the consolidated financial statements.

The Corporation’s Trust and Financial Management revenue is determined, in part, from the value of the underlying investment portfolios. Accordingly, if the values of those investment portfolios decrease, whether due to factors influencing U.S. or international securities markets, in general, or otherwise, the Corporation’s revenue could be negatively impacted. In addition, the Corporation’s ability to sell its brokerage services is dependent, in part, upon consumers’ level of confidence in securities markets.

The Federal Home Loan Bank of Pittsburgh – Through its subsidiary (C&N Bank), the Corporation is a member of the Federal Home Loan Bank of Pittsburgh (FHLB-Pittsburgh), which is one of 11 regional Federal Home Loan Banks. The Corporation has a line of credit with the FHLB-Pittsburgh that is secured by a blanket lien on its loan portfolio. Access to this line of credit is critical if a funding need arises. However, there can be no assurance that the FHLB-Pittsburgh will be able to provide funding when needed, nor can there be assurance that the FHLB-Pittsburgh will provide funds specifically to the Corporation should its financial condition deteriorate and/or regulators prevent that access. The inability to access this source of funds could have a materially adverse effect on the Corporation’s financial flexibility if alternate financing is not available at acceptable interest rates. The failure of the FHLB-Pittsburgh or the FHLB system in general, may materially impair the Corporation’s ability to meet short- and long-term liquidity needs or to meet growth plans.

The Corporation owns common stock of the FHLB-Pittsburgh in order to qualify for membership in the FHLB system and access services from the FHLB-Pittsburgh. The FHLB-Pittsburgh faces a variety of risks in its operations including interest rate risk, counterparty credit risk, and adverse changes in its regulatory framework. In addition, the 11 Federal Home Loan Banks are jointly liable for the consolidated obligations of the FHLB system. To the extent that one FHLB cannot meet its obligations, other FHLBs can be called upon to make required payments. Such risks affecting the FHLB-Pittsburgh could adversely impact the value of the Corporation’s investment in the common stock of the FHLB-Pittsburgh and/or affect its access to credit.

Soundness of Other Financial Institutions – In addition to the FHLB-Pittsburgh, the Corporation maintains other credit facilities that provide it with additional liquidity. These facilities include secured and unsecured borrowings from the Federal Reserve Bank and third-party commercial banks. The Corporation believes that it maintains a strong liquidity position and that it is well positioned to withstand foreseeable market conditions. However, legal agreements with counterparties typically include provisions allowing them to restrict or terminate the Corporation's access to these credit facilities with or without advance notice and at their sole discretion.

Financial institutions are interconnected as a result of trading, clearing, counterparty, and other relationships. Financial market conditions have been negatively impacted in the past and such disruptions or adverse changes in the Corporation's results of operations or financial condition could, in the future, have a negative impact on available sources of liquidity. Such a situation may arise due to circumstances that are outside the Corporation's control, such as general market disruptions or operational problems affecting the Corporation or third parties. The Corporation's efforts to monitor and manage liquidity risk may not be successful or sufficient to deal with dramatic or unanticipated reductions in available liquidity. In such events, the Corporation's cost of funds may increase, thereby reducing net interest income, or the Corporation may need to sell a portion of its securities and/or loan portfolio, which, depending upon market conditions, could necessitate realizing a loss.

FDIC Insurance Assessments – In 2008 and 2009, higher levels of bank failures dramatically increased the resolution costs of the Federal Deposit Insurance Corporation, or the FDIC, and depleted the deposit insurance fund. In addition, the FDIC and the U.S. Congress increased federal deposit insurance coverage, placing additional stress on the deposit insurance fund. In order to maintain a strong funding position and restore reserve ratios of the deposit insurance fund, in 2009 the FDIC increased assessment rates. As a result of lowering assessment levels for the Corporation and other US banks, the Corporation's 2017 FDIC assessment expense decreased to $376,000 from $488,000 in 2016 and from $603,000 in 2015. Although the Corporation's total expenses from FDIC assessments have steadily decreased from $2,092,000 in 2009, the Corporation is generally unable to control the cost of the premiums. If a significant number of bank or financial institution failures occur, the Corporation may be required to pay higher FDIC premiums. Future increases in FDIC insurance premiums or additional special assessments may materially adversely affect the Corporation's results of operations.

Bank Secrecy Act and Related Laws and Regulations – These laws and regulations have significant implications for all financial institutions. In recent years, they have increased due diligence requirements and reporting obligations for financial institutions, created new crimes and penalties, and required the federal banking agencies, in reviewing merger and other acquisition transactions, to consider the effectiveness of the parties to such transactions in combating money laundering activities. Even innocent noncompliance and inconsequential failure to follow the regulations could result in significant fines or other penalties, which could have a material adverse impact on the Corporation's financial condition, results of operations or liquidity.

ITEM 1B. UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 2. PROPERTIES

The Bank owns each of its properties, except for the branch facilities located at 130 Court Street, Williamsport, PA, and at 2 East Mountain Avenue, South Williamsport, PA, which are leased. All of the properties are in good condition. None of the owned properties are subject to encumbrance.

A listing of properties is as follows:

Main administrative offices:

90-92 Main Street Wellsboro, PA 16901	or	10 Nichols Street Wellsboro, PA 16901

Branch offices – Citizens & Northern Bank:

428 S. Main Street Athens, PA 18810	514 Main Street Laporte, PA 18626	2 East Mountain Avenue ** South Williamsport, PA 17702
10 North Main Street Coudersport, PA 16915	4534 Williamson Trail Liberty, PA 16930	41 Main Street Tioga, PA 16946
111 W. Main Street	1085 S. Main Street	428 Main Street

Dushore, PA 18614	Mansfield, PA 16933	Towanda, PA 18848
563 Main Street East Smithfield, PA 18817	612 James Monroe Avenue Monroeton, PA 18832	64 Elmira Street Troy, PA 16947
104 W. Main Street Elkland, PA 16920	3461 Route 405 Highway Muncy, PA 17756	90-92 Main Street Wellsboro, PA 16901
135 East Fourth Street Emporium, PA 15834	100 Maple Street Port Allegany, PA 16743	1510 Dewey Avenue Williamsport, PA 17701
230 Railroad Street Jersey Shore, PA 17740	24 Thompson Street Ralston, PA 17763	130 Court Street ** Williamsport, PA 17701
102 E. Main Street Knoxville, PA 16928	1827 Elmira Street Sayre, PA 18840	1467 Golden Mile Road Wysox, PA 18854
3 Main Street Canisteo, NY 14823	6250 County Rte 64 Hornell, NY 14843	

Loan production office of Citizens & Northern Bank:

250 East Water Street

Elmira, NY 14901

Facilities management office:

13 Water Street

Wellsboro, PA 16901

** designates leased branch facility

ITEM 3. LEGAL PROCEEDINGS

The Corporation and the Bank are involved in various legal proceedings incidental to their business. Management believes the aggregate liability, if any, resulting from such pending and threatened legal proceedings will not have a material adverse effect on the Corporation's financial condition or results of operations.

ITEM 4. MINE SAFETY DISCLOSURE

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

QUARTERLY SHARE DATA

Trades of the Corporation's stock are executed through various brokers who maintain a market in the Corporation's stock. The Corporation's stock is listed on the NASDAQ Capital Market with the trading symbol CZNC. As of December 31, 2017, there were 2,206 shareholders of record of the Corporation's common stock.

The following table sets forth the high and low sales prices of the common stock during 2017 and 2016.

	2017			2016		
	High	Low	Dividend Declared per Quarter	High	Low	Dividend Declared per Quarter
First quarter	$26.50	$22.31	$ 0.26	$20.99	$19.26	$ 0.26

Second quarter	24.40	22.00	0.26	21.00	19.40	0.26
Third quarter	25.42	22.01	0.26	22.67	20.00	0.26
Fourth quarter	26.75	23.02	0.26	26.57	20.54	0.26

Future dividend payments will depend upon maintenance of a strong financial condition, future earnings and capital and regulatory requirements. Also, the Corporation and C&N Bank are subject to restrictions on the amount of dividends that may be paid without approval of banking regulatory authorities. These restrictions are described in Note 18 to the consolidated financial statements.

Effective April 21, 2016, the Corporation's Board of Directors approved a treasury stock repurchase program. Under this program, the Corporation is authorized to repurchase up to 600,000 shares of the Corporation's common stock or slightly less than 5% of the Corporation's issued and outstanding shares at April 19, 2016. The Board of Directors' April 21, 2016 authorization provides that: (1) the new treasury stock repurchase program shall be effective when publicly announced and shall continue thereafter until suspended or terminated by the Board of Directors, in its sole discretion; and (2) all shares of common stock repurchased pursuant to the new program shall be held as treasury shares and be available for use and reissuance for purposes as and when determined by the Board of Directors including, without limitation, pursuant to the Corporation's Dividend Reinvestment and Stock Purchase Plan and its equity compensation program. To date, no purchases have been made under this repurchase program.

The following table sets forth a summary of purchases by the Corporation, in the open market, of its equity securities during the fourth quarter 2017:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet be Purchased Under the Plans or Programs
October 1 - 31, 2017	0	$ -	0	600,000
November 1 - 30, 2017	0	$ -	0	600,000
December 1 - 31, 2017	0	$ -	0	600,000

PERFORMANCE GRAPH

Set forth below is a chart comparing the Corporation's cumulative return to stockholders against the cumulative return of the Russell 2000 and a Peer Group Index of similar banking organizations selected by the Corporation for the five-year period commencing December 31, 2012 and ended December 31, 2017. The index values are market-weighted dividend-reinvestment numbers, which measure the total return for investing $100.00 five years ago. This meets Securities & Exchange Commission requirements for showing dividend reinvestment share performance over a five-year period and measures the return to an investor for placing $100.00 into a group of bank stocks and reinvesting any and all dividends into the purchase of more of the same stock for which dividends were paid.

	Period Ending					
Index	12/31/12	12/31/13	12/31/14	12/31/15	12/31/16	12/31/17
Citizens & Northern Corporation	100.00	114.68	121.20	129.69	170.12	162.63
Russell 2000 Index	100.00	138.82	145.62	139.19	168.85	193.58
Peer Group	100.00	125.12	137.72	145.57	199.56	229.49

Peer Group includes all publicly traded SEC filing Commercial Banks & Thrifts within NJ, NY, OH and PA with assets between $750M and $3.5B as of 9/30/2017

Source: S&P Global Market Intelligence © 2017

EQUITY COMPENSATION PLAN INFORMATION

The following table sets forth information concerning the Stock Incentive Plan and Independent Directors Stock Incentive Plan, both of which have been approved by the Corporation's shareholders. The figures shown in the table below are as of December 31, 2017.

	Number of Securities to be Issued Upon Exercise of Outstanding Options	Weighted-average Exercise Price of Outstanding Options	Number of Securities Remaining for Future Issuance Under Equity Compensation Plans
Equity compensation plans approved by shareholders	165,660	$ 18.49	287,575
Equity compensation plans not approved by shareholders	0	N/A	0

More details related to the Corporation's equity compensation plans are provided in Notes 1 and 13 to the consolidated financial statements.

ITEM 6. SELECTED FINANCIAL DATA

	As of or for the Year Ended December 31,				
INCOME STATEMENT (In Thousands)	2017	2016	2015	2014	2013
Interest and fee income	$45,863	$44,098	$44,519	$46,009	$48,914
Interest expense	3,915	3,693	4,602	5,122	5,765
Net interest income	41,948	40,405	39,917	40,887	43,149
Provision for loan losses	801	1,221	845	476	2,047
Net interest income after provision for loan losses	41,147	39,184	39,072	40,411	41,102
Noninterest income excluding securities gains	16,153	15,511	15,478	15,420	16,451
Realized gains on available-for-sale securities, net	257	1,158	2,861	1,104	1,718
Loss on prepayment of debt	0	0	2,573	0	1,023
Noninterest expense excluding loss on prepayment of debt	36,967	34,744	33,030	34,157	33,471
Income before income tax provision	20,590	21,109	21,808	22,778	24,777
Income tax provision	7,156	5,347	5,337	5,692	6,183
Net income	$13,434	$15,762	$16,471	$17,086	$18,594
Net income attributable to common shares	$13,365	$15,677	$16,387	$17,009	$18,490
PER COMMON SHARE:					
Basic earnings per share	$1.10	$1.30	$1.35	$1.38	$1.51
Diluted earnings per share	$1.10	$1.30	$1.35	$1.38	$1.50
Cash dividends declared per share	$1.04	$1.04	$1.04	$1.04	$1.00
Book value per common share at period-end	$15.43	$15.36	$15.39	$15.34	$14.49
Tangible book value per common share at period-end	$14.45	$14.37	$14.41	$14.36	$13.51
Weighted average common shares outstanding - basic	12,115,840	12,032,820	12,149,252	12,333,933	12,283,426
Weighted average common shares outstanding - diluted	12,155,136	12,063,055	12,171,084	12,355,916	12,313,833
END OF PERIOD BALANCES (Dollars In Thousands)					
Available-for-sale securities	$356,908	$395,077	$420,290	$516,807	$482,658
Gross loans	815,713	751,835	704,880	630,545	644,303
Allowance for loan losses	8,856	8,473	7,889	7,336	8,663
Total assets	1,276,959	1,242,292	1,223,417	1,241,963	1,237,695
Deposits	1,008,449	983,843	935,615	967,989	954,516
Borrowings	70,955	64,629	92,263	78,597	96,723
Stockholders' equity	188,443	186,008	187,487	188,362	179,472
Common shares outstanding	12,214,525	12,113,228	12,180,623	12,279,980	12,390,063
AVERAGE BALANCES (In Thousands)					
Total assets	1,247,759	1,229,866	1,243,209	1,239,897	1,237,096

Earning assets	1,169,569	1,147,549	1,159,298	1,155,401	1,145,340
Gross loans	780,640	723,076	657,727	627,753	656,495
Deposits	990,917	970,447	968,201	965,418	964,031
Stockholders' equity	188,958	188,373	188,905	185,469	181,412

ITEM 6. SELECTED FINANCIAL DATA (Continued)

	As of or for the Year Ended December 31,				
	2017	2016	2015	2014	2013
KEY RATIOS					
Return on average assets	1.08 %	1.28 %	1.32 %	1.38 %	1.50 %
Return on average equity	7.11 %	8.37 %	8.72 %	9.21 %	10.25 %
Average equity to average assets	15.14 %	15.32 %	15.19 %	14.96 %	14.66 %
Net interest margin (1)	3.82 %	3.76 %	3.69 %	3.80 %	4.05 %
Efficiency (2)	60.74 %	59.22 %	56.66 %	57.59 %	53.27 %
Cash dividends as a % of diluted earnings per share	94.55 %	80.00 %	77.04 %	75.36 %	66.67 %
Tier 1 leverage	14.23 %	14.27 %	14.31 %	13.89 %	13.78 %
Tier 1 risk-based capital	21.95 %	22.48 %	23.29 %	26.26 %	25.15 %
Total risk-based capital	23.07 %	23.60 %	24.40 %	27.60 %	26.60 %
Tangible common equity/tangible assets	13.95 %	14.15 %	14.49 %	14.34 %	13.66 %
Nonperforming assets/total assets	1.47 %	1.43 %	1.31 %	1.34 %	1.53 %
Nonperforming loans/total loans	2.10 %	2.07 %	2.09 %	2.45 %	2.80 %
Allowance for loan losses/total loans	1.09 %	1.13 %	1.12 %	1.16 %	1.34 %
Net charge-offs/average loans	0.05 %	0.09 %	0.04 %	0.29 %	0.04 %

(1) Rates of return on tax-exempt securities and loans are calculated on a fully-taxable equivalent basis.

(2) The efficiency ratio is calculated by dividing: (a) total noninterest expense excluding losses from prepayment of debt, by (b) the sum of net interest income (including income from tax-exempt securities and loans on a fully-taxable equivalent basis) and noninterest income excluding securities gains or losses.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Certain statements in this section and elsewhere in this Annual Report on Form 10-K are forward-looking statements. Citizens & Northern Corporation and its wholly-owned subsidiaries (collectively, the Corporation) intend such forward-looking statements to be covered by the safe harbor provisions for forward-looking statements contained in the Private Securities Reform Act of 1995. Forward-looking statements, which are not historical facts, are based on certain assumptions and describe future plans, business objectives and expectations, and are generally identifiable by the use of words such as, "should", "likely", "expect", "plan", "anticipate", "target", "forecast", and "goal". These forward-loo statements are subject to risks and uncertainties that are difficult to predict, may be beyond management's control and could cause results to differ materially from those expressed or implied by such forward-looking statements. Factors which could have a material, adverse impact on the operations and future prospects of the Corporation include, but are not limited to, the following:

- changes in monetary and fiscal policies of the Federal Reserve Board and the U.S. Government, particularly related to changes in interest rates
- changes in general economic conditions
- legislative or regulatory changes
- downturn in demand for loan, deposit and other financial services in the Corporation's market area
- increased competition from other banks and non-bank providers of financial services
- technological changes and increased technology-related costs
- changes in accounting principles, or the application of generally accepted accounting principles.

These risks and uncertainties should be considered in evaluating forward-looking statements and undue reliance should not be placed on such statements.

EARNINGS OVERVIEW

In 2017, net income totaled $13,434,000, or $1.10 per common share - basic and diluted, as compared to $1.30 per share – basic and diluted in 2016 and $1.35 per share – basic and diluted in 2015. The results for 2017 represented a return on average assets of 1.08% and a return on average equity of 7.11%. As described below, 2017 earnings were reduced for a tax charge in 2017 attributable to the recent reduction in the marginal corporate income tax rate.

2017 vs. 2016

In December 2017, the federal corporate income tax rate was lowered to 21% effective January 1, 2018, from the 35% marginal rate in effect throughout 2017 and 2016. As a result of the reduction in the income tax rate, the 2017 results include an additional income tax provision (expense) of $2,159,000 ($0.18 per share) related to a reduction in the carrying value of the net deferred tax asset. Management expects the Corporation's income tax provision will be significantly lower in 2018 and on an ongoing basis as a result of the lower tax rate.

Deferred tax assets and liabilities are recognized based on temporary differences between the financial statement carrying amounts and the tax basis of assets and liabilities, and are valued using currently enacted tax rates. The reduction in the deferred tax asset in 2017 reflects the reduced expected future net benefit from these differences, and was recognized upon the new tax bill being signed into law in December 2017.

The table below provides a reconciliation of the Corporation's annual earnings results under U.S. generally accepted accounting principles (U.S. GAAP) to the comparative results excluding the additional tax charge referred to above. Management believes disclosure of 2017 earnings results, adjusted to exclude the additional income tax provision resulting from the change in the tax rate, provides useful information to investors for purposes of comparison with 2016 results.

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RECONCILIATION OF NON-U.S. GAAP MEASURE

(Dollars in Thousands, Except Per Share Data)

	Year Ended Dec. 31, 2017		Year Ended Dec. 31, 2016	
	Earnings	Diluted Earnings per Share	Earnings	Diluted Earnings per Share
Net Income	$ 13,434	$ 1.10	$ 15,762	$ 1.30
Additional Income Tax Provision Resulting from Change in Tax Rate	2,159		0	
Net Income, Excluding Effect of Change in Tax Rate	$ 15,593	$ 1.28	$ 15,762	$ 1.30

The effective tax rate (income tax provision as a percentage of income before tax) for the year ended December 31, 2017 was 34.75% as compared to 25.33% for 2016. The higher effective tax rate for 2017 resulted mainly from the additional tax provision related to the change in the tax rate. Management estimates the effective tax rate for 2018 to be approximately 15%, reflecting the benefit of a lower corporate rate.

In addition to the income tax provision fluctuation discussed above, significant highlights related to earnings in 2017 as compared to 2016 are as follows:

- Net interest income was $1,543,000 (3.8%) higher in 2017 as compared to 2016. The net interest margin was 3.82% for 2017, up from 3.76% for 2016. Average total loans outstanding were up $57.6 million (8.0%) in 2017 as compared to 2016, while average total available-for-sale securities were lower by $33.2 million. Average total deposits were $20.5 million (2.1%) higher in 2017 as compared to 2016.

- The provision for loan losses was $801,000 in 2017, which was $420,000 lower than the amount in 2016. In 2017, the provision included $1,023,000 related to the change in total specific allowances on impaired loans, as adjusted for net charge-offs during the period and a $101,000 increase in the unallocated portion of the allowance, with a reduction in the provision of $323,000 related to the reduction in the collectively determined allowance for loan losses. The reduction in the collectively determined allowance included the effects of an improvement in the Corporation's aggregate net charge-off experience and a reduction in the qualitative factors used to estimate the allowance as of December 31, 2017, partially offset by the effects of loan growth. The net increase in specific allowances in 2017 included an increase in the allowance related to one real estate secured commercial loan of $391,000 to $919,000 at December 31, 2017 as compared to $528,000 at December 31, 2016. The increase in the specific allowance for this loan was based on an updated appraisal. In comparison, the provision of $1,221,000 for 2016 included $491,000 related to the change in total specific allowances on impaired loans, as adjusted for net charge-offs during the period, a $29,000 decrease in the unallocated portion of the allowance and an increase in the provision of $759,000 related to an increase in the collectively determined allowance for loan losses. The increase in the collectively determined portion of the allowance at December 31, 2016 as compared to the end of the preceding year resulted from loan growth and slight increases in the net charge-off and qualitative factors used to estimate the allowance.

· Noninterest revenue increased $642,000 (4.1%) in 2017 as compared to 2016. Trust and financial management revenue increased $639,000 (13.4%), reflecting growth in assets under management resulting from market appreciation and new business, as well as a recent increase in fee levels and an estimated $215,000 of additional revenue from changing the frequency of billings to monthly for certain services. Interchange revenue from debit card transactions increased $278,000 (14.3%), reflecting improvements in card-related volumes and processing. Loan servicing fees, net, increased $141,000, as the fair value of mortgage servicing rights decreased by $168,000 in 2017 as compared to a reduction of $282,000 in 2016. Net gains from sales of loans decreased $211,000 (20.5%) due to a lower volume of sales. Service charges on deposit accounts decreased $207,000 (4.4%), as revenue from consumer overdrafts declined due to lower volume.

- Net gains on available-for-sale securities totaled $257,000 in 2017, a reduction of $901,000 from $1,158,000 in 2016. In 2016, gains from sales of bank stocks totaled $1,125,000, as the Corporation completed its program of bank stock sales that had begun in 2015. The Corporation had no remaining investments in bank stocks throughout 2017.

- Total noninterest expenses increased $2,223,000 (6.4%) in 2017 as compared to 2016. Other operating expense increased $808,000. Within other operating expense, the largest variances included increases of $208,000 in loan collection expenses, $149,000 in accounting and auditing expense stemming from increased internal audit outsourcing and $130,000 in attorney fees (mainly related to a commercial loan workout situation). Employee benefits expense increased $657,000, including an increase of $594,000 from higher health care expenses on the Corporation’s partially self-insured plan. Salaries and wages expense increased $395,000 (2.6%), reflecting the net effects of annual merit-based salary increases, an increase to an average of 292 FTEs in 2017 from 287 in 2016 and a net decrease in officers’ incentive compensation from corporate plans of $166,000.

2016 vs. 2015

Net income per share – diluted for 2016 was 3.7% lower than in 2015. Some of the more significant highlights related to annual earnings in 2016 as compared to 2015 are as follows:

- Net interest income was $488,000 (1.2%) higher than the comparable total for 2015. The net interest margin was 3.76%, which was 0.07% higher than the margin for 2015, reflecting the benefits of a lower cost of borrowed funds and a more favorable mix of earning assets. The average balance of total borrowed funds was $62,516,000 at an average interest rate of 2.57% in 2016, down from average borrowings of $77,642,000 at an average interest rate of 3.45% in 2015. Average total loans outstanding were higher by $65.3 million (9.9%) in 2016 as compared to 2015, while average total available-for-sale securities were lower by $74.2 million. Average total deposits increased $2.2 million (0.2%).

- The provision for loan losses was $1,221,000 in 2016, an increase of $376,000 over 2015. In 2016, the provision included the impact of increasing the allowance for loan losses for the effects of loan growth and slight increases in net charge-off experience and qualitative factors used in determining the collectively evaluated portion of the allowance. In comparison, in 2015 the provision also reflected the effects of loan growth, but the qualitative factors used in determining a portion of the collectively determined allowance decreased slightly during the period. Also in 2016, the provision included an increase of $148,000 as compared to 2015 from changes in specific allowances on loans individually identified as impaired, adjusted for the impact of net charge-offs.

- Total noninterest revenue for 2016 increased $33,000 (0.2%) over 2015. Net gains from sales of loans increased $294,000 (40.0%), reflecting higher volume of sales, and Trust and Financial Management revenue increased $134,000 (2.9%). Other operating income increased $28,000 (2.2%), including an increase of $148,000 from redemptions of tax credits and increases in lending-related fees of $80,000, while this category included a gain of $212,000 from a split-dollar life insurance policy in 2015. Service charges on deposit accounts decreased $169,000

(3.5%) in 2016, reflecting a reduction in consumer overdraft volume. Loan servicing fees, net, decreased $113,000 in 2016 as compared to 2015, including a decrease in the fair value of mortgage servicing rights of $282,000 in 2016, which was a larger decrease by $120,000 as compared to 2015. Brokerage revenue decreased $83,000 (9.9%), as the volume of sales of annuities declined.

- In 2016, realized gains from securities totaled $1,158,000, including gains from sales of bank stocks of $1,125,000. In 2015, the Corporation generated gains from sales of securities totaling $2,861,000, including gains from sales of bank stocks of $2,220,000, and also incurred losses of $2,573,000 from prepayments of a borrowing in the second and fourth quarters totaling $34 million. In the fourth quarter 2016, the Corporation completed its program of bank stock sales that had begun in 2015, and had no remaining investments in bank stocks at December 31, 2016.

- Noninterest expenses, excluding losses on prepayment of borrowings, in 2016 exceeded the amount for 2015 by $1,714,000 (5.2%). Salaries and wages expense increased $729,000 (5.0%). Several new positions were established in the latter portion of 2015 and early 2016, including new positions established for lending, lending support, information technology, training, human resources and marketing functions. Professional fees expense increased $488,000, including increases related to employee sales and service training, information technology and marketing. Other operating expense increased $399,000 (7.8%), including increases in other real estate expenses of $123,000, donations and public relations-related expenses of $94,000 and education and training-related expenses of $60,000. Also, other operating expense was reduced in 2015 by $69,000 as a result of a recovery of sales tax previously paid.

- The provision for income tax totaled $5,347,000 in 2016, or an effective tax rate of 25.3% of pre-tax income. In comparison, the provision for income tax of $5,337,000 in 2015 represented a 24.5% effective rate. The higher effective tax rate in 2016 included the impact of a $300,000 reduction in tax-exempt interest income and an increase in the provision for state income tax of $64,000 that resulted mainly from a catch-up adjustment to increase New York State taxes for the effect of changes in the tax methodology that first became effective in 2015.

More detailed information concerning fluctuations in the Corporation's earnings results are provided in other sections of Management's Discussion and Analysis.

CRITICAL ACCOUNTING POLICIES

The presentation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect many of the reported amounts and disclosures. Actual results could differ from these estimates.

A material estimate that is particularly susceptible to significant change is the determination of the allowance for loan losses. The Corporation maintains an allowance for loan losses that represents management's estimate of the losses inherent in the loan portfolio as of the balance sheet date and recorded as a reduction of the investment in loans. Management believes the allowance for loan losses is adequate and reasonable. Notes 1 and 8 to the consolidated financial statements provide an overview of the process management uses for evaluating and determining the allowance for loan losses, and additional discussion of the allowance for loan losses is provided in a separate section later in Management's Discussion and Analysis. Given the very subjective nature of identifying and valuing loan losses, it is likely that well-informed individuals could make materially different assumptions, and could, therefore calculate a materially different allowance value. While management uses available information to recognize losses on loans, changes in economic conditions may necessitate revisions in future years. In addition, various regulatory agencies, as an integral part of their examination process, periodically review the Corporation's allowance for loan losses. Such agencies may require the Corporation to recognize adjustments to the allowance based on their judgments of information available to them at the time of their examination.

Another material estimate is the calculation of fair values of the Corporation's debt securities. For most of the Corporation's debt securities, the Corporation receives estimated fair values of debt securities from an independent valuation service, or from brokers. In developing fair values, the valuation service and the brokers use estimates of cash flows, based on historical performance of similar instruments in similar interest rate environments. Based on experience, management is aware that estimated fair values of debt securities tend to vary among brokers and other valuation services.

As described in Note 7 to the consolidated financial statements, management evaluates securities for other-than-temporary impairment ("OTTI"). In making that 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) whether the Corporation intends to sell the security or more likely than not will be required to sell the security before its anticipated recovery. Management's assessments of the likelihood and potential for recovery in value of securities are subjective and based on sensitive assumptions.

NET INTEREST INCOME

The Corporation's primary source of operating income is net interest income, which is equal to the difference between the amounts of interest income and interest expense. Tables I, II and III include information regarding the Corporation's net interest income in 2017, 2016, and 2015. In each of these tables, the amounts of interest income earned on tax-exempt securities and loans have been adjusted to a fully taxable-equivalent basis. Accordingly, the net interest income amounts reflected in these tables exceed the amounts presented in the consolidated financial statements. The discussion that follows is based on amounts in the tables.

The calculations of fully taxable-equivalent yields on tax-exempt loans and securities in Tables I, II and III reflect inherent tax benefit based on the Corporation's marginal federal income tax rate of 35% for all periods presented. In 2018, the tax benefit from tax-exempt loans and securities will be reduced as a result of the change to a 21% federal income tax rate. The overall yield on tax-exempt assets, however, in 2018 and future periods will depend on market conditions for new assets originated or purchased and the pace of principal repayments on assets held as of December 31, 2017.

2017 vs. 2016

Fully taxable equivalent net interest income was $44,708,000 in 2017, $1,551,000 (3.6%) higher than in 2016. Interest income was $1,773,000 higher in 2017 as compared to 2016; interest expense was also higher by $222,000 in comparing the same periods. As presented in Table II, the Net Interest Margin was 3.82% in 2017 as compared to 3.76% in 2016, and the "Interest Rate Spread" (excess of average rate of return on earning assets over average cost of funds on interest-bearing liabilities) increased to 3.68% in 2017 from 3.63% in 2016.

INTEREST INCOME AND EARNING ASSETS

Interest income totaled $48,623,000 in 2017, an increase of 3.8% from 2016. Although the average yield on loans fell, the overall yield on earning assets increased to 4.16% in 2017 from 4.08% in 2016 due to a change in mix of earning assets, as loans increased while available-for-sale securities decreased. Interest and fees on loans receivable increased $2,466,000, or 6.9%, while interest on available-for-sale securities decreased $765,000, or 6.9%. The average balance of gross loans receivable increased 8.0% to $780,640,000 in 2017 from $723,076,000 in 2016. The Corporation experienced significant growth in both residential mortgages and commercial loans. The Corporation's average rate of return on loans receivable declined to 4.87% in 2017 from 4.92% in 2016 as average interest rates on new loans have been lower than the average rates on loans that have been fully or partially paid off.

As indicated in Table II, average available-for-sale securities (at amortized cost) totaled $371,825,000 in 2017, a decrease of $33,154,000 (8.2%) from 2016. Funds generated from the net decrease in the Corporation's available-for-sale securities portfolio were used, in part, to fund the loan growth described above. The average rate of return on available-for-sale securities was 2.79% in 2017, up from 2.75% in 2016.

The average balance of interest-bearing due from banks decreased to $16,634,000 in 2017 from $19,022,000 in 2016, while the average yield increased to 1.14% in 2017 from 0.61% in 2016. This category has consisted primarily of balances held by the Federal Reserve and also includes other overnight deposits and FDIC-insured certificates of deposit issued by other financial institutions.

INTEREST EXPENSE AND INTEREST-BEARING LIABILITIES

Interest expense rose $222,000, or 6.0%, to $3,915,000 in 2017 from $3,693,000 in 2016. Table II shows that the overall cost of funds on interest-bearing liabilities increased to 0.48% in 2017 from 0.45% in 2016.

Total average deposits (interest-bearing and noninterest-bearing) increased 2.1% to $990,917,000 in 2017 from $970,447,000 in 2016. Increases in the average balances of noninterest-bearing demand deposits, savings and interest checking were partially offset by decreases in average balances of money market and Individual Retirement Accounts. The average rate paid on interest-bearing deposits increased to 0.32% in 2017 from 0.28% in 2016. The increase in average rate is mainly due to increases in rates paid on certificates of deposits and interest checking accounts.

Total average borrowed funds decreased $3,097,000 to $59,419,000 in 2017 from $62,516,000 in 2016. The average rate on borrowed funds was 2.54% in 2017, down slightly from 2.57% in 2016. Interest expense on short-term borrowings increased $58,000 in 2017 as compared to 2016, reflecting an increase in average rate to 0.90% in 2017 from 0.65% in 2016. Interest expense on long-term borrowings decreased $154,000, as the overall reduction in average balance of $2,952,000 included the impact of repayments of two higher-cost borrowings that had been originated in 2007. These borrowings included a $10 million FHLB advance with an interest rate of 3.81% that matured in September 2017 and repurchase agreements with a broker dealer totaling $27 million with an interest rate of 3.595% that matured in December 2017.

2016 vs. 2015

Fully taxable equivalent net interest income was $43,157,000 in 2016, $338,000 (0.8%) higher than in 2015. Interest income was $571,000 lower in 2016 as compared to 2015; interest expense was also lower by $909,000 in comparing the same periods. As presented in Table II, the Net Interest Margin was 3.76% in 2016 as compared to 3.69% in 2015, and the "Interest Rate Spread" (excess of average rate of return on earning assets over average cost of funds on interest-bearing liabilities) increased to 3.63% in 2016 from 3.54% in 2015.

INTEREST INCOME AND EARNING ASSETS

Interest income totaled $46,850,000 in 2016, a decrease of 1.2% from 2015. Although yields on securities and loans fell, overall yield on earning assets dropped only 0.01% due to a change in mix of earning assets to increase loans and decrease securities. Interest and fees on loans receivable increased $1,695,000, or 5.0%, while interest on available-for-sale securities decreased $2,300,000, or 17.1%. The average balance of gross loans receivable increased 9.9% to $723,076,000 in 2016 from $657,727,000 in 2015. The Corporation experienced significant growth in both residential and commercial loans. The Corporation's average rate of return on loans receivable declined to 4.92% in 2016 from 5.15% in 2015.

As indicated in Table II, average available-for-sale securities (at amortized cost) totaled $404,979,000 in 2016, a decrease of $74,169,000 (15.5%) from 2015. Funds generated from the net decrease in the Corporation's available-for-sale securities portfolio were used, in part, to fund the loan growth described above. The Corporation's yield on securities was lower in 2016 than in 2015, primarily due to higher-yielding securities maturing as the portfolio size was reduced. The average rate of return on available-for-sale securities was 2.75% in 2016 and 2.81% in 2015.

INTEREST EXPENSE AND INTEREST-BEARING LIABILITIES

Interest expense fell $909,000, or 19.8%, to $3,693,000 in 2016 from $4,602,000 in 2015. Table II shows that the overall cost of funds on interest-bearing liabilities fell to 0.45% in 2016 from 0.55% in 2015.

Total average deposits (interest-bearing and noninterest-bearing) increased slightly (0.2%) to $970,447,000 in 2016 from $968,201,000 in 2015. Decreases in the average balances of certificates of deposit and Individual Retirement Accounts were offset by increases in average balances of interest checking, money market accounts, savings accounts and noninterest-bearing demand deposits. The average rate paid on interest-bearing deposits increased slightly to 0.28% in 2016 from 0.26% in 2015.

Total average borrowed funds decreased $15,126,000 to $62,516,000 in 2016 from $77,642,000 in 2015. The average rate on borrowed funds was 2.57% in 2016 compared to 3.45% in 2015, reflecting a $27,604,000 reduction in the average balance of higher-rate, long-term borrowings resulting from prepayment in the second and fourth quarters of 2015 of a long-term repurchase agreement borrowing with an interest rate of 4.265%. The average balance of short-term borrowings increased $12,478,000 in 2016 over 2015, as average overnight borrowings were higher in 2016 and the Corporation funded the pay-off of the long-term repurchase agreement with a series of short-term advances from the FHLB-Pittsburgh that matured over the course of 2016.

TABLE I - ANALYSIS OF INTEREST INCOME AND EXPENSE

	Years Ended December 31,			Increase/(Decrease)	
(In Thousands)	2017	2016	2015	2017/2016	2016/2015
INTEREST INCOME					
Available-for-sale securities:					
Taxable	$5,499	$5,916	$7,587	$(417)	$(1,671)
Tax-exempt	4,892	5,240	5,869	(348)	(629)
Total available-for-sale securities	10,391	11,156	13,456	(765)	(2,300)
Interest-bearing due from banks	190	116	93	74	23
Loans held for sale	25	27	16	(2)	11
Loans receivable:					
Taxable	34,907	32,827	31,311	2,080	1,516
Tax-exempt	3,110	2,724	2,545	386	179
Total loans receivable	38,017	35,551	33,856	2,466	1,695
Total Interest Income	48,623	46,850	47,421	1,773	(571)
INTEREST EXPENSE					
Interest-bearing deposits:					
Interest checking	474	293	214	181	79
Money market	355	342	299	13	43
Savings	143	133	128	10	5
Certificates of deposit	996	882	831	114	51
Individual Retirement Accounts	434	434	451	0	(17)
Other time deposits	1	1	1	0	0
Total interest-bearing deposits	2,403	2,085	1,924	318	161
Borrowed funds:					
Short-term	213	155	32	58	123
Long-term	1,299	1,453	2,646	(154)	(1,193)
Total borrowed funds	1,512	1,608	2,678	(96)	(1,070)
Total Interest Expense	3,915	3,693	4,602	222	(909)
Net Interest Income	$44,708	$43,157	$42,819	$1,551	$338

(1) Interest income from tax-exempt securities and loans has been adjusted to a fully taxable-equivalent basis, using the Corporation’s marginal federal income tax rate of 35%.

(2) Fees on loans are included with interest on loans and amounted to $883,000 in 2017, $1,000,000 in 2016, and $1,004,000 in 2015.

TABLE II - ANALYSIS OF AVERAGE DAILY BALANCES AND RATES

(Dollars in Thousands)

	Year Ended 12/31/2017 Average Balance	Rate of Return/ Cost of Funds %	Year Ended 12/31/2016 Average Balance	Rate of Return/ Cost of Funds %	Year Ended 12/31/2015 Average Balance	Rate of Return/ Cost of Funds %
EARNING ASSETS						
Available-for-sale securities, at amortized cost:						
Taxable	$259,079	2.12 %	$293,636	2.01 %	$366,448	2.07 %
Tax-exempt	112,746	4.34 %	111,343	4.71 %	112,700	5.21 %
Total available-for-sale securities	371,825	2.79 %	404,979	2.75 %	479,148	2.81 %
Interest-bearing due from banks	16,634	1.14 %	19,022	0.61 %	22,201	0.42 %
Loans held for sale	470	5.32 %	472	5.72 %	222	7.21 %
Loans receivable:						
Taxable	711,901	4.90 %	662,769	4.95 %	603,771	5.19 %
Tax-exempt	68,739	4.52 %	60,307	4.52 %	53,956	4.72 %
Total loans receivable	780,640	4.87 %	723,076	4.92 %	657,727	5.15 %
Total Earning Assets	1,169,569	4.16 %	1,147,549	4.08 %	1,159,298	4.09 %
Cash	17,322		16,570		16,639	
Unrealized gain/loss on securities	88		7,166		8,871	
Allowance for loan losses	(8,820)		(8,082)		(7,380)	
Bank premises and equipment	15,541		15,413		15,911	
Intangible Assets	11,957		11,966		11,983	
Other assets	42,102		39,284		37,887	
Total Assets	$1,247,759		$1,229,866		$1,243,209	
INTEREST-BEARING LIABILITIES						
Interest-bearing deposits:						
Interest checking	$209,893	0.23 %	$201,357	0.15 %	$195,940	0.11 %
Money market	191,356	0.19 %	199,405	0.17 %	196,585	0.15 %
Savings	143,575	0.10 %	132,679	0.10 %	128,355	0.10 %
Certificates of deposit	117,366	0.85 %	117,130	0.75 %	121,803	0.68 %
Individual Retirement Accounts	97,519	0.45 %	103,467	0.42 %	110,659	0.41 %
Other time deposits	1,014	0.10 %	1,036	0.10 %	1,031	0.10 %
Total interest-bearing deposits	760,723	0.32 %	755,074	0.28 %	754,373	0.26 %
Borrowed funds:						
Short-term	23,761	0.90 %	23,906	0.65 %	11,428	0.28 %
Long-term	35,658	3.64 %	38,610	3.76 %	66,214	4.00 %
Total borrowed funds	59,419	2.54 %	62,516	2.57 %	77,642	3.45 %
Total Interest-bearing Liabilities	820,142	0.48 %	817,590	0.45 %	832,015	0.55 %
Demand deposits	230,194		215,373		213,828	

Other liabilities	8,465			8,530			8,461		
Total Liabilities	1,058,801			1,041,493			1,054,304		
Stockholders' equity, excluding other comprehensive income/loss	188,756			183,671			183,125		
Other comprehensive income/loss	202			4,702			5,780		
Total Stockholders' Equity	188,958			188,373			188,905		
Total Liabilities and Stockholders' Equity	$1,247,759			$1,229,866			$1,243,209		
Interest Rate Spread		3.68	%		3.63	%		3.54	%
Net Interest Income/Earning Assets		3.82	%		3.76	%		3.69	%
Total Deposits (Interest-bearing and Demand)	$990,917			$970,447			$968,201		

(1) Rates of return on tax-exempt securities and loans are presented on a fully taxable-equivalent basis, using the Corporation's marginal federal income tax rate of 35%.

(2) Nonaccrual loans have been included with loans for the purpose of analyzing net interest earnings.

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TABLE III - ANALYSIS OF VOLUME AND RATE CHANGES

(In Thousands)	Year Ended 12/31/17 vs. 12/31/16			Year Ended 12/31/16 vs. 12/31/15		
	Change in Volume	Change in Rate	Total Change	Change in Volume	Change in Rate	Total Change
EARNING ASSETS						
Available-for-sale securities:						
Taxable	$ (721)	$ 304	$ (417)	$ (1,472)	$ (199)	$ (1,671)
Tax-exempt	65	(413)	(348)	(70)	(559)	(629)
Total available-for-sale securities	(656)	(109)	(765)	(1,542)	(758)	(2,300)
Interest-bearing due from banks	(17)	91	74	(14)	37	23
Loans held for sale	0	(2)	(2)	15	(4)	11
Loans receivable:						
Taxable	2,412	(332)	2,080	2,965	(1,449)	1,516
Tax-exempt	381	5	386	290	(111)	179
Total loans receivable	2,793	(327)	2,466	3,255	(1,560)	1,695
Total Interest Income	2,120	(347)	1,773	1,714	(2,285)	(571)
INTEREST-BEARING LIABILITIES						
Interest-bearing deposits:						
Interest checking	12	169	181	6	73	79
Money market	(14)	27	13	4	39	43
Savings	11	(1)	10	4	1	5
Certificates of deposit	2	112	114	(33)	84	51
Individual Retirement Accounts	(25)	25	0	(30)	13	(17)
Other time deposits	0	0	0	0	0	0
Total interest-bearing deposits	(14)	332	318	(49)	210	161
Borrowed funds:						
Short-term	(1)	59	58	56	67	123
Long-term	(109)	(45)	(154)	(1,047)	(146)	(1,193)
Total borrowed funds	(110)	14	(96)	(991)	(79)	(1,070)
Total Interest Expense	(124)	346	222	(1,040)	131	(909)
Net Interest Income	$ 2,244	$ (693)	$ 1,551	$ 2,754	$ (2,416)	$ 338

(1) Changes in income on tax-exempt securities and loans are presented on a fully taxable-equivalent basis, using the Corporation’s marginal federal income tax rate of 35%.

(2) The change in interest due to both volume and rates has been allocated to volume and rate changes in proportion to the relationship of the absolute dollar amounts of the change in each.

NONINTEREST INCOME

Years Ended December 31, 2017, 2016 and 2015

The table below presents a comparison of noninterest income and excludes realized gains on available-for-sale securities, which are discussed in the “Earnings Overview” section of Management’s Discussion and Analysis.

TABLE IV - COMPARISON OF NONINTEREST INCOME

(Dollars In Thousands)

	Years Ended December 31,			
	2017	2016	$ Change	% Change
Service charges on deposit accounts	$4,488	$4,695	$ (207)	(4.4)
Service charges and fees	417	439	(22)	(5.0)
Trust and financial management revenue	5,399	4,760	639	13.4
Brokerage revenue	797	756	41	5.4
Insurance commissions, fees and premiums	115	102	13	12.7
Interchange revenue from debit card transactions	2,221	1,943	278	14.3
Net gains from sales of loans	818	1,029	(211)	(20.5)
Loan servicing fees, net	244	103	141	136.9
Increase in cash surrender value of life insurance	379	382	(3)	(0.8)
Other operating income	1,275	1,302	(27)	(2.1)
Total noninterest income before realized gains on available-for-sale securities, net	$16,153	$15,511	$ 642	4.1

	Years Ended December 31,			
	2016	2015	$ Change	% Change
Service charges on deposit accounts	$4,695	$4,864	$ (169)	(3.5)
Service charges and fees	439	494	(55)	(11.1)
Trust and financial management revenue	4,760	4,626	134	2.9
Brokerage revenue	756	839	(83)	(9.9)
Insurance commissions, fees and premiums	102	109	(7)	(6.4)
Interchange revenue from debit card transactions	1,943	1,935	8	0.4
Net gains from sales of loans	1,029	735	294	40.0
Loan servicing fees, net	103	216	(113)	(52.3)
Increase in cash surrender value of life insurance	382	386	(4)	(1.0)
Other operating income	1,302	1,274	28	2.2

Total noninterest income before realized gains on available-for-sale securities, net	$15,511	$15,478	$ 33	0.2

Total noninterest income, excluding realized gains on available-for-sale securities, increased $642,000 in 2017 compared to 2016. In 2016, total noninterest income increased $33,000 from 2015. Changes of significance are discussed in the narrative that follows.

2017 vs. 2016

Trust and financial management revenue increased $639,000 (13.4%), reflecting growth in assets under management resulting from market appreciation and new business, as well as an increase in fee levels and an estimated $215,000 of additional revenue from changing the frequency of billings to monthly for certain services.

Interchange revenue from debit card transactions increased $278,000 (14.3%), reflecting improvements in card-related volumes and processing.

Loan servicing fees, net, increased $141,000. This category includes fees received from servicing residential mortgage loans that have been originated and sold, adjusted for the change in the fair value of servicing rights. The fair value of mortgage servicing rights decreased by $168,000 in 2017 as compared to a reduction of $282,000 in 2016.

Net gains from sales of loans decreased $211,000 (20.5%) due to a lower volume of residential mortgage sales.

Service charges on deposit accounts decreased $207,000 (4.4%). Revenue from consumer overdrafts declined $133,000 due to lower volume. Also, fees on noninterest-bearing, business-related checking accounts decreased $53,000 as the earnings crediting rate used to offset the cost of services increased over the year, consistent with increases in the Fed Funds rate.

2016 vs. 2015

Net gains from sales of loans increased $294,000 (40.0%), reflecting higher volume of sales. The increase in volume in 2016 included the impact of employing one additional mortgage lender in a dedicated, full-time capacity throughout most of 2016 as compared to 2015.

Trust and Financial Management revenue increased $134,000 (2.9%). The increase in Trust revenue in 2016 reflected, in part, the effect of higher value of U.S. equity markets in the latter portion of the year.

Service charges on deposit accounts decreased $169,000 (3.5%) in 2016, including a $131,000 reduction in consumer overdraft fees due to a lower volume of overdrafts.

Loan servicing fees, net, decreased $113,000 in 2016. The fair value of mortgage servicing rights decreased $282,000 in 2016, as their valuation was negatively impacted by a reduction in demand by banks for purchasing servicing rights resulting from regulatory changes that have generally increased their risk-based capital weighting. In comparison, the fair value of mortgage servicing rights decreased $162,000 in 2015.

Brokerage revenue decreased $83,000 (9.9%), as the volume of sales of annuities declined.

NONINTEREST EXPENSE

Years Ended December 31, 2017, 2016 and 2015

Total noninterest expenses increased $2,223,000 (6.4%) in 2017 as compared to 2016. Total noninterest expense decreased $859,000, or 2.4%, in 2016 as compared to 2015; however, excluding losses from prepayment of borrowings in 2015, noninterest expense was $1,714,000 (5.2%) higher in 2016 as compared to 2015. In 2015, the Corporation incurred losses totaling $2,573,000 from prepayment of borrowings (repurchase agreements). There were no losses from prepayment of borrowings incurred in 2017 or 2016. Changes of significance (other than the previously discussed losses on prepayment of debt) are discussed in the narrative that follows.

TABLE V - COMPARISON OF NONINTEREST EXPENSE

(Dollars In Thousands)

	Years Ended December 31, 2017	2016	$ Change	% Change
Salaries and wages	$15,806	$15,411	$395	2.6
Pensions and other employee benefits	5,374	4,717	657	13.9
Occupancy expense, net	2,340	2,340	0	0.0
Furniture and equipment expense	1,834	1,730	104	6.0
FDIC Assessments	376	488	(112)	(23.0)
Pennsylvania shares tax	1,329	1,274	55	4.3
Professional fees	1,086	1,126	(40)	(3.6)
Automated teller machine and interchange expense	1,284	1,137	147	12.9
Software subscriptions	1,190	981	209	21.3
Other operating expense	6,348	5,540	808	14.6
Total Other Expense	$36,967	$34,744	$2,223	6.4

	Years Ended December 31, 2016	2015	$ Change	% Change
Salaries and wages	$15,411	$14,682	$729	5.0
Pensions and other employee benefits	4,717	4,420	297	6.7
Occupancy expense, net	2,340	2,574	(234)	(9.1)
Furniture and equipment expense	1,730	1,860	(130)	(7.0)
FDIC Assessments	488	603	(115)	(19.1)
Pennsylvania shares tax	1,274	1,248	26	2.1
Professional fees	1,126	638	488	76.5
Automated teller machine and interchange expense	1,137	988	149	15.1
Software subscriptions	981	876	105	12.0
Loss on prepayment of borrowings	0	2,573	(2,573)	(100.0)
Other operating expense	5,540	5,141	399	7.8
Total Other Expense	$34,744	$35,603	$(859)	(2.4)

2017 vs 2016

Other operating expense increased $808,000. Within other operating expense, the largest variances included increases of $208,000 in loan collection expenses, $149,000 in accounting and auditing expense stemming from increased internal audit outsourcing and $130,000 in attorney fees (mainly related to a commercial loan workout situation). The increased loan collection expenses in 2017 included payments of delinquent property taxes associated with mortgage loans on properties located in New York State and $32,000 for the Corporation's share of collection expenses on a Multi-family residential participation loan that has been classified as impaired at December 31, 2017 and 2016.

Employee benefits expense increased $657,000, including an increase of $594,000 from higher health care expenses from the Corporation's partially self-insured plan. The Corporation is self-insured for health insurance, up to a cap for catastrophic levels of losses, which are insured by a third party.

Salaries and wages expense increased $395,000 (2.6%), reflecting the net effects of annual merit-based salary increases, an increase to an average of 292 FTEs in 2017 from 287 in 2016 and a net decrease in officers' incentive compensation from corporate plans of $166,000.

Software subscriptions increased $209,000, including costs associated with new applications as well as annual licensing increases.

Automated teller machine and interchange expense increased $147,000, including increases in volume-related costs and fraud monitoring costs.

Furniture and equipment expenses in 2017 increased $104,000 primarily as a result of higher depreciation and repair costs.

FDIC insurance decreased $112,000 in 2017 reflecting lower assessment levels beginning in the third quarter of 2016.

2016 vs 2015

Salaries and wages expense increased $729,000 (5.0%), reflecting an increase in number of employees. The average number of full-time equivalent employees was 287 in 2016, up from 281 in 2015, including new positions established for lending, lending support, information technology, training and marketing functions.

Pension and other employee benefits expense increased $297,000 (6.7%). The increase resulted mainly from an increase of $214,000 in healthcare expense as a result of increased healthcare claims. Payroll taxes and other expenses within this category increased in 2016, as well, due to the increase in number of employees described above.

Professional fees expense increased $488,000, including increases related to employee sales and service training, information technology and marketing.

Automated teller machine and interchange expense increased $149,000, including the costs of purchasing new debit cards with EMV functionality.

Software subscriptions increased $105,000 as a result of enhancements and new applications initiated in 2015 and continuing into 2016 including costs associated with the network operating system, automated document signatures and marketing-related functionality.

Other operating expense increased $399,000 (7.8%), including increases in other real estate expenses of $123,000, donations and public relations-related expenses of $94,000 and education and training-related expenses of $60,000. Also, other operating expense was reduced in 2015 by $69,000 as a result of a recovery of sales tax previously paid.

Occupancy expenses in 2016 were $234,000 under 2015 primarily as a result of lower depreciation costs as well as lower winter-related expenses such as snow removal and fuel costs.

Furniture and equipment expenses in 2016 were $130,000 under 2015 primarily as a result lower depreciation costs.

FDIC insurance decreased $115,000 in 2016 reflecting lower assessment levels beginning in the third quarter of 2016.

INCOME TAXES

The effective income tax rate was 34.8% of pre-tax income in 2017, up from 25.3% in 2016 and 24.5% in 2015. The Corporation’s effective tax rates differed from the statutory rate of 35% in 2016 and 2015 principally because of the effects of tax-exempt interest income. In 2017, the Corporation realized an increase in the income tax provision (expense) due to the write-down of the net deferred tax asset as a result of the recently enacted Tax Cuts and Jobs Act of 2017 that, among other things, lowered the federal corporate income tax rate to 21% effective January 1, 2018, from the 35% marginal tax rate in effect for prior periods. Excluding the effect of the write-down of the deferred tax asset resulting from the change in the federal corporate income tax rate, the effective income tax rate for the year ended December 31, 2017 would have been 24.3%. Further, management estimates that had the recently enacted 21% federal tax rate been in effect throughout 2017 and 2016, the effective federal tax rate would have been 14.5% in 2017 and 15% in 2016. Management estimates the effective tax rate for 2018 will be approximately 15%. In developing these estimates, no adjustments have been made to 2017 and 2016 historical data for reinvestment of additional funds or for any changes to the composition of the Corporation’s assets and liabilities.

The Corporation recognizes deferred tax assets and liabilities based on differences between the financial statement carrying amounts and the tax basis of assets and liabilities. At December 31, 2017, the net deferred tax asset was $3,289,000, a decrease from the balance at December 31, 2016 of $5,117,000. The primary reason for the decrease was the write-down of the deferred tax asset based on the decrease in the federal tax rate as described above. The total amount of the write-down of the net deferred tax asset was $2,159,000, including $325,000 associated with items included in Accumulated Other Comprehensive Loss in the consolidated balance sheet.

The Corporation regularly reviews deferred tax assets for recoverability based on history of earnings, expectations for future earnings and expected timing of reversals of temporary differences. Realization of deferred tax assets ultimately depends on the existence of sufficient taxable income, including taxable income in prior carryback years, as well as future taxable income. Further, the value of the benefit from realization of deferred tax assets would be impacted if income tax rates were changed from currently enacted levels.

Management believes the recorded net deferred tax asset at December 31, 2017 is fully realizable; however, if management determines the Corporation will be unable to realize all or part of the net deferred tax asset, the Corporation would adjust the deferred tax asset, which would negatively impact earnings.

Additional information related to income taxes is presented in Note 14 to the consolidated financial statements.

SECURITIES

Table VI shows the composition of the investment portfolio at December 31, 2017, 2016 and 2015. Comparison of the amortized cost totals of available-for-sale securities at each year-end presented reflects a decrease of $19,917,000 to $396,538,000 at December 31, 2016 from December 31, 2015. This change was followed by a decrease of $37,221,000 to $359,317,000 at December 31, 2017. The continued decrease in securities in 2017 reflects the use of cash generated from the investment portfolio to help fund the increase in loans outstanding. The Corporation's holdings of mortgage-backed securities issued or guaranteed by U.S. Government agencies or sponsored agencies have decreased to $221,187,000 at December 31, 2017 from $237,654,000 at December 31, 2016 and $266,372,000 at December 31, 2015. Within that overall category, in 2017, the Corporation had some commercial mortgage-backed securities for which the underlying collateral consists of multi-family properties. The total amortized cost of commercial mortgage-backed securities held at December 31, 2017 was $33,881,000.

As reflected in Table VI, the fair value of available-for-sale securities as of December 31, 2017 was $2,409,000, or 0.67%, less than the total amortized cost basis. In comparison, the aggregate unrealized loss position at December 31, 2016 was $1,461,000, or 0.37% of the total amortized cost basis. .. Modest increases in intermediate-term and long-term interest rates over the course of 2016 and 2017, as well as market expectations of further rate increases, have contributed to the decrease in fair values of debt securities. Also, the fair values of tax-exempt municipal bonds have been negatively impacted by the reduced benefit of their tax-exempt nature as a result of the reduction in the federal corporate income tax rate. At December 31, 2015, the aggregate unrealized gain position was $3,835,000, or 0.92% of total amortized cost, including an unrealized gain of $706,000 on marketable equity securities (bank stocks). The Corporation liquidated its investments in bank stocks in 2015 and 2016, and held no investments in bank stocks in 2017. The Corporation reported net realized gains from sales of available-for-sale securities of $257,000 in 2017. In comparison, net realized gains from sales of available-for-sale securities totaled $1,158,000 in 2016 and $2,861,000 in 2015, including realized gains from sales of bank stocks of $1,125,000 in 2016 and $2,220,000 in 2015.

Management has reviewed the Corporation's holdings as of December 31, 2017 and concluded that unrealized losses on all of the securities in an unrealized loss position are considered temporary. Notes 6 and 7 to the consolidated financial statements provide more detail concerning the Corporation's processes for evaluating securities for other-than-temporary impairment. Management will continue to closely monitor the status of impaired securities in 2018.

TABLE VI - INVESTMENT SECURITIES

	As of December 31,					
	2017		2016		2015	
(In Thousands)	Amortized Cost	Fair Value	Amortized Cost	Fair Value	Amortized Cost	Fair Value
AVAILABLE-FOR-SALE SECURITIES:						
Obligations of U.S. Government agencies	$8,026	$7,873	$9,671	$9,541	$10,663	$10,483
Obligations of states and political subdivisions:						
Tax-exempt	103,673	105,111	118,140	119,037	103,414	107,757
Taxable	25,431	25,573	30,073	30,297	34,317	34,597
Mortgage-backed securities issued or guaranteed by U.S. Government agencies or sponsored agencies:						
Residential pass-through securities	52,992	52,347	58,922	58,404	73,227	73,343
Residential collateralized mortgage obligations	134,314	131,814	147,915	146,608	193,145	191,715
Commercial mortgage-backed securities	33,881	33,219	30,817	30,219	0	0
Other collateralized debt obligations	0	0	0	0	9	9
Total debt securities	358,317	355,937	395,538	394,106	414,775	417,904
Marketable equity securities	1,000	971	1,000	971	1,680	2,386
Total	$359,317	$356,908	$396,538	$395,077	$416,455	$420,290

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The following table presents the contractual maturities and the weighted-average yields (calculated based on amortized cost) of investment securities as of December 31, 2017. Yields on tax-exempt securities are presented on a nominal basis, that is, the yields are not presented on a fully taxable-equivalent basis. Actual maturities may differ from contractual maturities because counterparties may have the right to call or prepay obligations with or without call or prepayment penalties.

(In Thousands, Except for Percentages)	Within One Year	Yield	One-Five Years	Yield	Five-Ten Years	Yield	After Ten Years	Yield	Total
AVAILABLE-FOR-SALE SECURITIES:									
Obligations of U.S. Government agencies	$0	0.00%	$8,026	1.42%	$0	0.00%	$0	0.00%	$8,026
Obligations of states and political subdivisions:									
Tax-exempt	6,247	1.55%	45,184	3.00%	32,822	2.21%	19,420	3.60%	103,673
Taxable	5,103	1.97%	16,064	2.51%	4,264	3.12%	0	0.00%	25,431
Sub-total	$11,350	1.74%	$69,274	2.71%	$37,086	2.32%	$19,420	3.60%	137,130
Mortgage-backed securities issued or guaranteed by U.S. Government agencies or sponsored agencies:									
Residential pass-through securities									52,992
Residential collateralized mortgage obligations									134,314
Commercial mortgage-backed securities									33,881
Total									$358,317

The Corporation's mortgage-backed securities and collateralized mortgage obligations have stated maturities that may differ from actual maturities due to borrowers' ability to prepay obligations. Cash flows from such investments are dependent upon the performance of the underlying mortgage loans and are generally influenced by the level of interest rates. As rates increase, cash flows generally decrease as prepayments on the underlying mortgage loans decrease. As rates decrease, cash flows generally increase as prepayments increase due to increased refinance activity and other factors. In the table above, the entire balances and weighted-average rates for mortgage-backed securities and collateralized mortgage obligations are shown in one period.

FINANCIAL CONDITION

Gross loans outstanding (excluding mortgage loans held for sale) were $815,713,000 at December 31, 2017, up 8.5% from $751,835,000 at December 31, 2016. The total outstanding balances of residential mortgage segment loans at

December 31, 2017 increased $26,513,000 (6.3%) as compared to December 31, 2016, and the total outstanding balances of commercial segment loans at December 31, 2017 increased $36,148,000 (11.4%) as compared to December 31, 2016. The 2017 loan growth followed growth in loans outstanding in 2016 of 6.7% from December 31, 2015. Total outstanding commercial loans were higher by $9,206,000 (3.0%), and residential mortgage segment loans were up $34,683,000 (9.0%), at December 31, 2016 as compared to December 31, 2015.

The increases in loans outstanding in 2016 and 2017 included increases in commercial participation loans. Participation loans represent portions of larger commercial transactions for which other institutions are the “lead banks”. Although not the lead bank, the Corporation conducts detailed underwriting and monitoring of participation loan opportunities. Participation loans are included in the “Commercial and industrial,” “Commercial loans secured by real estate” and “Political subdivisions” classes in the loan tables presented in this Form 10-K. Total participation loans outstanding amounted to $61,245,000 at December 31, 2017, up from $47,508,000 at December 31, 2016. At December 31, 2017, the balance of participation loans outstanding includes a total of $53,756,000 to businesses located outside of the Corporation’s market area, including $10,063,000 from participations in loans originated through the Corporation’s membership in a network that originates loans throughout the U.S. The Corporation’s participation loans originated through the network consist of loans to businesses that are larger than the Corporation’s typical commercial customer base. The loans originated through the network are considered “leveraged loans,” meaning the businesses typically have minimal tangible book equity and the extent of collateral available is limited, though at the time of origination the businesses have demonstrated strong cash flow performance in their recent histories. At December 31, 2017, total leveraged participation loans, including loans originated through the network and four loans to two borrowers originated through another lead institution, totaled $15,328,000, up slightly from $15,207,000 at December 31, 2016. At December 31, 2017, there was a leveraged loan with an outstanding balance of $324,000 classified as impaired with a specific allowance for loan losses of $96,000. With the exception of the loan identified in the preceding sentence, there were no loans classified as impaired at December 31, 2017 and 2016, and all of the leveraged loans (including the loan classified as impaired) were current as to payments of principal and interest as of December 31, 2017 and 2016.

Table VIII presents loan maturity data as of December 31, 2017. The interest rate simulation model used to prepare Table VIII classifies certain loans under different categories from the categories that appear in Table VII. Fixed-rate loans are shown in Table VIII based on their contractually scheduled principal repayments, and variable-rate loans are shown based on the date of the next change in rate. Table VIII shows that fixed-rate loans are approximately 38% of the loan portfolio. Of the 62% of the portfolio made up of variable-rate loans, a significant portion (42%) will re-price after more than one year. Variable-rate loans re-pricing after more than one year include residential and commercial real estate secured loans. The Corporation’s substantial investment in long-term, fixed-rate loans and variable-rate loans with extended periods until re-pricing is one of the concerns management attempts to address through interest rate risk management practices. See Part II, Item 7A for a more detailed discussion of the Corporation’s interest rate risk.

Short-term borrowings totaled $61,766,000 at December 31, 2017, up from $26,175,000 at December 31, 2016. Within this category, overnight borrowing from FHLB-Pittsburgh of $29,000,000 was up from $21,000,000 at December 31, 2016. Also at December 31, 2017, the balance of short-term borrowings included a series of advances from FHLB-Pittsburgh totaling $29,000,000, including advances maturing monthly from January through October 2018 with a weighted average interest rate of 1.69% and rates ranging from 1.23% to 1.89%.

Long-term borrowings of $9,189,000 at December 31, 2017 were down from the balance at December 31, 2016 of $38,454,000. In 2017, the Corporation paid off two higher-cost borrowings totaling $37,000,000, including an advance from FHLB-Pittsburgh of $10,000,000 with a rate of 3.81% in October and repurchase agreements totaling $27,000,000 with a rate of 3.595% in December. Repayment of these borrowings was funded by advances from FHLB-Pittsburgh, including the short-term advances described above and an additional $8,000,000 of advances included in long-term borrowings