

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549**

**FORM 10-K**

(Mark One)

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

For the fiscal year ended December 31, 2017

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 0-13814

**CORTLAND BANCORP**

(Exact Name of Registrant as Specified in its Charter)

Ohio  
(State or Other Jurisdiction  
of Incorporation or Organization)

194 West Main Street, Cortland, Ohio  
(Address of Principal Executive Offices)

34-1451118  
(I.R.S. Employer  
Identification No.)

44410  
(Zip Code)

Registrant's telephone number, including area code: (330) 637-8040

Securities registered pursuant to Section 12(b) of the Act: None

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

Common Stock, no par value  
(Title of Class)

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

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

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  No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§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  No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§232.405 of this chapter) 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 the Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definition 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

Non-accelerated filer  (Do not check if a smaller reporting company) 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 Act).  Yes  No

Based upon the closing price of the registrant's common stock on June 30, 2017, the aggregate market value of the voting stock held by non-affiliates of the registrant was approximately \$72,521,756. For purposes of this response, directors and executive officers are considered the affiliates of the issuer at that date.

The number of shares outstanding of the issuer's classes of common stock as of March 14, 2018: 4,409,648 shares

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Proxy Statement for the 2018 Annual Meeting of Shareholders to be held on May 22, 2018 are incorporated by reference into Part III.

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## PART I

### Item 1. Business

#### THE CORPORATION

##### **CORTLAND BANCORP**

Cortland Bancorp (the Company) was incorporated under the laws of the State of Ohio in 1984, as a one bank holding company registered under the Bank Holding Company Act of 1956, as amended (BHC Act). The principal activity of the Company is to own, manage and supervise The Cortland Savings and Banking Company (Cortland Bank or the Bank). The Company owns all of the outstanding shares of the Bank.

The Company has made an election to be a financial holding company. The Company is regulated by the Board of Governors of the Federal Reserve System (Federal Reserve) and the Consumer Financial Protection Bureau (CFPB). The BHC Act provides generally for “umbrella” regulation of financial holding companies such as the Company by the Federal Reserve Board, and for functional regulation of banking activities by bank regulators, securities activities by securities regulators, and insurance activities by insurance regulators. The Company is also under the jurisdiction of the Securities and Exchange Commission (SEC) and is subject to the disclosure and regulatory requirements of the Securities Act of 1933, as amended, and the Securities Exchange Act of 1934, as amended, as administered by the SEC.

The business of the Company and the Bank is not seasonal to any significant extent and is not dependent on any single customer or group of customers. The Company operates as a single line of business.

##### **NEW RESOURCES LEASING CO.**

New Resources Leasing Co. was formed in December 1987 under Ohio law as a separate entity to handle the function of commercial and consumer leasing. The wholly owned subsidiary has been inactive since incorporation.

##### **CORTLAND BANK**

Cortland Bank is a full service, state-chartered bank engaged in commercial and retail banking. The Bank’s services include checking accounts, savings accounts, time deposit accounts, commercial, mortgage and installment loans, night depository, automated teller services, safe deposit boxes and other miscellaneous services normally offered by commercial banks. Commercial lending includes commercial, financial loans, real estate construction and development loans, commercial real estate loans, small business lending and trade financing. Consumer lending includes residential real estate, home equity and installment lending. Cortland Bank also offers a variety of Internet and mobile banking options.

Full service banking business is conducted at a total of thirteen offices, seven of which are located in Trumbull County, Ohio. The remaining offices are located throughout Portage, Ashtabula, Summit and Mahoning Counties in Ohio. There are also two financial service centers located in Beachwood, Ohio, Cuyahoga County, and Fairlawn, Ohio, Summit County.

The Bank’s main administrative and banking office is located at 194 West Main Street, Cortland, Ohio.

The Bank, as a state-chartered banking organization and member of the Federal Reserve, is subject to periodic examination and regulation by the Federal Reserve, the State of Ohio Division of Financial Institutions (Ohio Division) and the CFPB. These examinations, which include such areas as capital, liquidity, asset quality, management practices and other aspects of the Bank’s operations, are primarily for the protection of the Bank’s depositors. In addition to these regular examinations, the Bank must furnish periodic reports to regulatory authorities containing a full and accurate statement of its affairs. The Bank’s deposits are insured by the Federal Deposit Insurance Corporation (FDIC).

The Bank provides brokerage and investment services through an arrangement with LPL Financial. Under this arrangement, financial advisors can offer customers an extensive range of investment products and services, including estate planning, qualified retirement plans, mutual funds, annuities, life insurance, fixed income and equity securities, equity research and recommendations, and asset management services to customers through the brand Cortland Private Wealth Management.

## **CSB MORTGAGE COMPANY, INC.**

CSB Mortgage Company, Inc. (CSB) was formed as an Ohio corporation in December 2011. It is a wholly-owned subsidiary of Cortland Bank and functioned as the originator of wholesale mortgage loans and the seller of company-wide mortgage loans in the secondary mortgage market. It was inactive for the years ending December 31, 2017 and 2016.

## **COMPETITION**

The Bank actively competes with state and national banks located in Northeastern Ohio and Western Pennsylvania. It also competes for deposits, loans and other service business with a large number of other financial institutions, such as savings and loan associations, credit unions, insurance companies, consumer finance companies and commercial finance companies. Also, money market mutual funds, brokerage houses and similar institutions provide in a relatively unregulated environment many of the financial services offered by banks. In the opinion of management, the principal methods of competition are the rates of interest charged on loans, the rates of interest paid on deposit funds, the fees charged for services, and the convenience, availability, timeliness and quality of the customer services offered.

## **EMPLOYEES**

As of December 31, 2017, the Company, through the Bank, employed 141 full-time and 18 part-time employees. The Company provides its employees with a full range of benefit plans and considers its relations with its employees to be satisfactory.

## **GENERAL LENDING POLICY**

The Bank's lending policy is designed to provide a framework which will meet the credit needs and interests of the community and the Bank. It is the Bank's objective to make loans to credit-worthy customers that benefit their interests. The loans made by the Bank are subject to the guidelines established in the loan policy that is approved by the Bank's Board of Directors.

There are times when the Bank will go beyond its lending territory to accommodate people who have been customers of the Bank and have moved out of the lending area. There are also times when excess funds are available and it is profitable to participate in loans with other banks or to participate in large projects for community development.

Each lending relationship is reviewed and graded in 6 categories, which are (1) ability to pay, (2) financial condition, (3) management ability, (4) collateral and guarantors, (5) loan structure, and (6) industry and economics.

Further information can be found in Management's Discussion and Analysis of Financial Condition and Results of Operations, Item 7.

## **SUPERVISION AND REGULATION**

The Company and the Bank are subject to federal and state banking laws that are intended to protect depositors and borrowers, not shareholders. Changes in federal and state banking laws, including statutes, regulations, and policies of the bank regulatory agencies, could have a material adverse impact on our business and prospects. Federal and state laws applicable to holding companies and their financial institution subsidiaries regulate the range of permissible business activities, investments, reserves against deposits, capital levels, lending activities and practices, the nature and amount of collateral for loans, establishment of branches, mergers, dividends, and a variety of other important matters. The Company and the Bank are subject to detailed, complex, and sometimes overlapping federal and state statutes and regulations affecting routine banking operations. These statutes and regulations include, but are not limited to, state usury and consumer credit laws, the Truth-in-Lending Act and Regulation Z, the Equal Credit Opportunity Act and Regulation B, the Fair Credit Reporting Act, the Truth in Savings Act, and the Community Reinvestment Act. In addition to minimum capital requirements, federal law imposes other safety and soundness standards having to do with such things as internal controls, information systems, internal audit systems, loan documentation, credit underwriting, interest rate risk exposure, asset growth, asset quality, earnings, and compensation and benefits. The following discussion of bank supervision and regulation is qualified in its entirety by reference to the statutory and regulatory provisions discussed.

The Company is a financial holding company and a bank holding company within the meaning of the BHC Act. As such, the Company is subject to regulation, supervision, and examination by the Federal Reserve, acting primarily through the Federal Reserve Bank of Cleveland. The Company is required to file annual reports and other information with the Federal Reserve. The Bank is subject to regulation and supervision by the Ohio Division and, as a member bank of the Federal Reserve, by the Federal Reserve. The Bank is examined periodically by the Federal Reserve and by the Ohio Division to test compliance with various regulatory requirements. If as a result of examination the Federal Reserve or the Ohio Division determines that a bank's financial condition, capital resources, asset quality, earnings prospects, management, liquidity, or other aspects of the bank's operations are unsatisfactory, or that the bank or its management is in violation of any law or regulation, the bank regulatory agencies may take a number of

remedial actions. In addition, the Bank is subject to the regulations of the CFPB, established by the Dodd-Frank Wall Street Reform and Consumer Protection Act enacted in July 2010 (the Dodd-Frank Act). The CFPB has broad powers to adopt and enforce consumer protection regulations. Bank regulatory agencies make regular use of their authority to take formal and informal supervisory actions against banks and bank holding companies for unsafe or unsound practices in the conduct of their businesses and for violations of any law, rule, or regulation, or any condition imposed in writing by the appropriate federal banking regulatory authority. Potential supervisory and enforcement actions include appointment of a conservator or receiver, issuance of a cease-and-desist order that could be judicially enforced, termination of a bank's deposit insurance, imposition of civil money penalties, issuance of directives to increase capital, entry into formal or informal agreements, including memoranda of understanding, issuance of removal and prohibition orders against institution-affiliated parties, and enforcement of these actions through injunctions or restraining orders.

**Regulation of bank holding companies.** A bank holding company must serve as a source of financial and managerial strength for its subsidiary banks and must not conduct operations in an unsafe or unsound manner. The Federal Reserve requires all bank holding companies to maintain capital at or above prescribed levels. Federal Reserve policy requires that a bank holding company provide capital to its subsidiary banks during periods of financial stress or adversity and that the bank holding company maintain the financial flexibility and capital-raising capacity to obtain additional resources for assisting subsidiary banks. Bank holding companies may also be required under certain circumstances to give written notice to and receive approval from the Federal Reserve before purchasing or redeeming common stock or other equity securities or paying dividends.

*Acquisitions.* The BHC Act requires every bank holding company to obtain approval of the Federal Reserve to acquire ownership or control of any voting shares of another bank or bank holding company, if after the acquisition the acquiring company would own or control more than 5% of the shares of the other bank or bank holding company (unless the acquiring company already owns or controls a majority of the shares); acquire all or substantially all of the assets of another bank; or merge or consolidate with another bank holding company. The Federal Reserve will consider anticompetitive effects of the proposed transaction, capital adequacy and other financial and managerial factors, along with the subsidiary banks' performance under the Community Reinvestment Act of 1977. Approval of the Ohio Division is also necessary to acquire control of an Ohio-chartered bank.

The BHC Act, the Change in Bank Control Act, and the Federal Reserve Regulation Y require advance approval of the Federal Reserve to acquire "control" of a bank holding company. Control is conclusively presumed to exist if an individual or company acquires 25% or more of a class of voting securities of the bank holding company. Under certain circumstances, control may also be presumed to exist if a person acquires 10% or more, but less than 25%, of any class of voting securities.

*Interstate banking and branching.* Section 613 of the Dodd-Frank Act amends the interstate branching provisions of the Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994. The amendments authorize a state or national bank to open a de novo branch in another state if the law of the state where the branch is to be located would permit a bank chartered by that state to open the branch. Section 607 of the Dodd-Frank Act requires that a bank holding company be well capitalized and well managed as a condition to approval of an interstate bank acquisition and that an acquiring bank be and remain well capitalized and well managed as a condition to approval of an interstate bank merger.

*Nonbanking activities.* With some exceptions, the Bank Holding Company Act prohibits a bank holding company from acquiring or retaining direct or indirect ownership or control of more than 5% of the voting shares of any company that is not a bank or bank holding company or from engaging directly or indirectly in activities other than those of banking, managing or controlling banks, or providing services for its subsidiaries. The principal exceptions to these prohibitions involve non-bank activities that, by statute or by Federal Reserve regulation or order, are held to be closely related to the business of banking or of managing or controlling banks. A bank holding company may become a financial holding company if the holding company meets "well-capitalized" and "well-managed" requirements of the Federal Reserve and each of its subsidiary banks is well capitalized under the Federal Deposit Insurance Corporation Improvement Act of 1991 prompt corrective action provisions, is well managed, and has at least a satisfactory rating under the Community Reinvestment Act, by filing a declaration that the bank holding company elects to become a financial holding company. The Company is a financial holding company. No regulatory approval is required for a financial holding company to acquire a company, other than a bank or savings association, engaged in activities that are financial in nature or incidental to activities that are financial in nature, as determined by the Federal Reserve.

Activities that are "financial in nature" include:

- securities underwriting, dealing and market making;
- sponsoring mutual funds and investment companies;
- insurance underwriting and agency;

- merchant banking; and
- activities that the Federal Reserve Board has determined to be closely related to banking.

If a financial holding company or a subsidiary bank fails to meet all requirements for the holding company to maintain financial holding company status, material restrictions may be placed on the activities of the holding company and on the ability of the holding company to enter into certain transactions or obtain regulatory approvals. The holding company could also lose its financial holding company status and be required to divest ownership or control of all banks owned by the financial holding company. If restrictions are imposed on the activities of a financial holding company, such restrictions may not be made publicly available pursuant to confidentiality regulations of the banking regulators.

**Capital. Risk-based capital requirements.** Financial institutions and their holding companies are required to maintain capital as a way of absorbing losses that can, as well as losses that cannot, be predicted. The Federal Reserve has adopted risk-based capital guidelines for financial holding companies as well as state banks that are members of the Federal Reserve Bank. The Office of the Comptroller of the Currency and the FDIC have adopted risk-based capital guidelines for national banks and state non-member banks, respectively. The guidelines provide a systematic analytical framework which makes regulatory capital requirements sensitive to differences in risk profiles among banking organizations, takes off-balance sheet exposures expressly into account in evaluating capital adequacy and minimizes disincentives to holding liquid, low-risk assets. Capital levels as measured by these standards are also used to categorize financial institutions for purposes of certain prompt corrective action regulatory provisions.

The risk-based capital guidelines adopted by the federal banking agencies are based on the “International Convergence of Capital Measurement and Capital Standard” (Basel I), published by the Basel Committee on Banking Supervision (Basel Committee). New capital rules adopted by the United States banking regulators applicable to smaller banking organizations, including the Company and the Bank, became effective commencing on January 1, 2015. Compliance with the new minimum capital requirements was required effective on January 1, 2015, whereas a new capital conservation buffer and deductions from common equity capital phase in from January 1, 2016, through January 1, 2019, and most deductions from common equity tier 1 capital will phase in from January 1, 2015, through January 1, 2019.

The rules include (a) a minimum common equity tier 1 capital ratio of at least 4.5%, (b) a minimum Tier 1 capital ratio of 6.0%, (c) a minimum total capital ratio of 8.0%, and (d) a minimum leverage ratio (Tier 1 capital to average assets) of 4%.

Common equity for the common equity tier 1 capital ratio includes common stock (plus related surplus) and retained earnings, plus limited amounts of minority interests in the form of common stock, less the majority of certain regulatory deductions.

Tier 1 capital includes common equity as defined for the common equity tier 1 capital ratio, plus certain non-cumulative preferred stock and related surplus, cumulative preferred stock and related surplus and trust preferred securities that have been grandfathered (but which are not permitted going forward), and limited amounts of minority interests in the form of additional Tier 1 capital instruments, less certain deductions.

Tier 2 capital, which can be included in the total capital ratio, includes certain capital instruments (such as subordinated debt) and limited amounts of the allowance for loan and lease losses, subject to new eligibility criteria, less applicable deductions.

The deductions from common equity tier 1 capital include goodwill and other intangibles, certain deferred tax assets, mortgage-servicing assets above certain levels, gains on sale in connection with a securitization, investments in a banking organization’s own capital instruments and investments in the capital of unconsolidated financial institutions (above certain levels). The deductions phase in from 2015 through 2019.

For institutions with less than \$250 billion in assets, the final rules also allow a one-time opportunity to permanently opt-out of a requirement to include all components of accumulated other comprehensive income in the capital calculation. To avoid the possibility of extreme market volatility in determining capital adequacy, the Company and the Bank have elected to opt-out.

Under the guidelines, capital is compared to the relative risk related to the balance sheet. To derive the risk included in the balance sheet, one of several risk weights is applied to different balance sheet and off-balance sheet assets, primarily based on the relative credit risk of the counterparty. The capital amounts and classification are also subject to qualitative judgments by the regulators about components, risk weightings and other factors.



The rules also place restrictions on the payment of capital distributions, including dividends, and certain discretionary bonus payments to executive officers if the company does not hold a capital conservation buffer of greater than 2.5% composed of common equity tier 1 capital above its minimum risk-based capital requirements, or if its eligible retained income is negative in that quarter and its capital conservation buffer ratio was less than 2.5% at the beginning of the quarter. The capital conservation buffer phases in starting on January 1, 2016, at 0.625% and is currently 1.875%.

In addition to the capital requirements applicable to bank holding companies generally, the Federal Reserve requires financial holding companies to be “well-capitalized” under Federal Reserve standards. Pursuant to the Federal Reserve’s Small Bank Holding Company Policy (SBHC Policy), however, a holding company with assets of less than \$1 billion and meeting certain other requirements is not required to comply with the consolidated capital requirements. At December 31, 2017, the Company was deemed to be a small bank holding company under the SBHC Policy. The Bank must, however, comply with the new capital requirements.

*Prompt corrective action.* In addition to the capital adequacy requirements set forth above, every insured financial institution is classified into one of five categories based upon the institution’s capital ratios, the results of regulatory examinations of the institution and whether the institution is subject to enforcement agreements with its regulatory authorities. The categories are “well capitalized,” “adequately capitalized,” “undercapitalized,” “significantly undercapitalized,” and “critically undercapitalized.”

The capital of the Company and the Bank as of December 31, 2017 were as follows:

December 31, 2017	(Amounts in thousands)					
	Actual		Minimum required for capital adequacy purposes (1)		To be well-capitalized under prompt corrective action regulations	
	Amount	Ratio	Amount	Ratio	Amount	Ratio
<b>CET1 capital (to risk-weighted assets)</b>						
Consolidated	\$ 63,455	12.37%	\$ 23,082	4.5%	N/A	N/A
Bank	59,853	11.75%	22,931	4.5%	\$ 33,123	6.5%
<b>Tier 1 capital (to risk-weighted assets)</b>						
Consolidated	68,455	13.35%	30,776	6.0%	N/A	N/A
Bank	59,853	11.75%	30,575	6.0%	40,767	8.0%
<b>Total capital (to risk-weighted assets)</b>						
Consolidated	73,116	14.26%	41,033	8.0%	N/A	N/A
Bank	70,514	13.84%	40,767	8.0%	50,959	10.0%
<b>Tier 1 capital (to average assets)</b>						
Consolidated	68,455	10.77%	25,416	4.0%	N/A	N/A
Bank	59,853	9.25%	25,879	4.0%	32,348	5.0%

(1) Currently not required for the Company as a small bank holding company under the SBHC Policy.

A bank with a capital level that might qualify for well capitalized or adequately capitalized status may nevertheless be treated as though the bank is in the next lower capital category if the bank’s primary federal banking supervisory authority determines that an unsafe or unsound condition or practice warrants that treatment. A bank’s operations can be significantly affected by its capital classification under the prompt corrective action rules. For example, a bank that is not well capitalized generally is prohibited from accepting brokered deposits and offering interest rates on deposits higher than the prevailing rate in its market without advance regulatory approval. These deposit-funding limitations can have an adverse effect on the bank’s liquidity. At each successively lower capital category, an insured depository institution is subject to additional restrictions. Undercapitalized banks are required to take specified actions to increase their capital or otherwise decrease the risks to the federal deposit insurance fund. Bank regulatory agencies generally are required to appoint a receiver or conservator within 90 days after a bank becomes critically undercapitalized, with a leverage ratio of less than 2%. The Federal Deposit Insurance Act provides that a federal bank regulatory authority may require a bank holding company to divest itself of an undercapitalized bank subsidiary if the agency determines that divestiture will improve the bank’s financial condition and prospects.

In order to be “well-capitalized,” a bank must have a common equity tier 1 capital ratio of at least 6.5%, a total risk-based capital ratio of at least 10%, a Tier 1 risk-based capital ratio of at least 8% and a leverage ratio of at least 5%, and the bank must not be subject to any written agreement, order, capital directive or prompt corrective action directive to meet and maintain a specific capital level or any capital measure. The Company’s management believes that the Bank meets the ratio requirements to be deemed “well-capitalized” according to the guidelines described above.

In September 2017, the Federal Reserve, along with other bank regulatory agencies, proposed amendments to its capital requirements to simplify various aspects of the capital rules for community banks, including the Bank, in an attempt to reduce the regulatory burden for such smaller financial institutions. Because the amendments were proposed with a request for comments and have not been finalized, we do not yet know what effect the final rules will have on the Bank's capital calculations. In November 2017, the federal banking agencies extended, for the community banks, the existing capital requirements for certain items that were scheduled to change effective January 1, 2018, in light of the simplification amendments are being considered.

**Federal deposit insurance.** Deposits in the Bank are insured by the FDIC up to applicable limits through the Deposit Insurance Fund. Insured banks must pay deposit insurance premiums assessed semiannually and paid quarterly. The general insurance limit is \$250,000 per separately insured depositor. This insurance is backed by the full faith and credit of the United States Government.

As insurer, the FDIC is authorized to conduct examinations of and to require reporting by insured institutions, including the Bank, to prohibit any insured institution from engaging in any activity the FDIC determines to pose a threat to the deposit insurance fund, and to take enforcement actions against insured institutions. The FDIC may terminate insurance of deposits of any institution if it finds that the institution has engaged in unsafe and unsound practices, is in an unsafe or unsound condition or has violated any applicable law, regulation, rule, order or condition imposed by the FDIC or other regulatory agency.

The FDIC assesses a quarterly deposit insurance premium on each insured institution based on risk characteristics of the institution and may also impose special assessments in emergency situations. The premiums fund the Deposit Insurance Fund (DIF). Pursuant to the Dodd-Frank Act, the FDIC has established 2.0% as the designated reserve ratio (DRR), which is the amount in the DIF as a percentage of all DIF insured deposits. In March 2016, the FDIC adopted final rules designed to meet the statutory minimum DRR of 1.35% by September 30, 2020, the deadline imposed by the Dodd-Frank Act. The Dodd-Frank Act requires the FDIC to offset the effect on institutions with assets of less than \$10 billion of the increase in the statutory minimum DRR to 1.35% from the former statutory minimum of 1.15%. Although the FDIC's new rules reduced assessment rates on all banks, they imposed a surcharge on banks with assets of \$10 billion or more to be paid until the DRR reaches 1.35%. The rules also provide assessment credits to banks with assets of less than \$1 billion for the portion of their assessments that contribute to the increase of the DRR to 1.35%. The rules further changed the method of determining risk-based assessment rates for established banks with less than \$10 billion in assets to better ensure that banks taking on greater risks pay more for deposit insurance than banks that take on less risk.

In addition, all FDIC-insured institutions are required to pay assessments to fund interest payments on bonds issued by the Financing Corporation, which was established by the government to recapitalize a predecessor to the DIF. These assessments will continue until the Financing Corporation bonds mature in 2019.

The FDIC may terminate the deposit insurance of any insured depository institution if the FDIC determines that the institution has engaged or is engaging in unsafe or unsound practices, is in an unsafe or unsound condition to continue operations, or has violated any applicable law, regulation, order, or any condition imposed in writing by or written agreement with the FDIC.

**Transactions with affiliates.** The Bank must comply with section 23A and section 23B of the Federal Reserve Act, establishing rules for transactions by member banks with affiliates. These provisions protect banks from abuse in financial transactions with affiliates. Generally, section 23A and section 23B of the Federal Reserve Act (1) limit the extent to which a bank or its subsidiaries may lend to or engage in various other kinds of transactions with any one affiliate to an amount equal to 10% of the institution's capital and surplus (2) limit the aggregate of covered transactions with all affiliates to 20% of capital and surplus, (3) impose strict collateral requirements on loans or extensions of credit by a bank to an affiliate, (4) impose restrictions on investments by a subsidiary bank in the stock or securities of its holding company, (5) impose restrictions on the use of a holding company's stock as collateral for loans by the subsidiary bank, and (6) require that affiliate transactions be on terms substantially the same as those provided to a non-affiliate.

**Loans to insiders.** The authority of the Bank to extend credit to insiders –meaning executive officers, directors, and greater than 10% shareholders – or to entities those persons control, is subject to section 22(g) and section 22(h) of the Federal Reserve Act and Regulation O of the Federal Reserve. These laws require that insider loans be made on terms substantially similar to those offered to unaffiliated individuals, place limits on the amount of loans a bank may make to insiders based in part on the bank's capital position, and require specified approval procedures. Loans to an individual insider may not exceed the general legal limit on loans to any one borrower. The aggregate of all loans to all insiders may not exceed the bank's unimpaired capital and surplus. Insider loans exceeding the greater of 5% of capital or \$25,000 must be approved in advance by a majority of the board, with any interested director not participating in the voting. Loans to executive officers are subject to additional limitations based on the purpose of the loan. A violation of these restrictions could result in the assessment of substantial civil money penalties, the imposition of a cease-and-desist order, or other regulatory sanctions.



**Loans to one borrower.** Under Ohio law, the total loans and extensions of credit by an Ohio-chartered bank to a person outstanding at any time generally may not exceed 15% of the bank's unimpaired capital, plus 10% of unimpaired capital for loans and extensions of credit fully secured by readily marketable collateral.

**Dividends and Distributions.** Current federal banking regulations impose restrictions on the Bank's ability to pay dividends to the Company. These restrictions include a limit on the amount of dividends that may be paid in a given year without prior approval of the Federal Reserve and a prohibition on paying dividends that would cause the Bank's total capital to be less than the required minimum levels under the capital requirements imposed by the Federal Reserve. The capital rules also limit the payment of dividends if the Bank does not maintain the capital conservation buffer. Ohio law also limits the amount of dividends that may be paid in any given year without prior approval of the Ohio Superintendent of Financial Institutions. The Bank's regulators may prohibit the payment of dividends at any time if the regulators determine the dividends represent unsafe and/or unsound banking practices, or reduce the Bank's total capital below adequate levels.

The Company's ability to pay dividends to its shareholders may also be restricted. A financial holding company is required by law and Federal Reserve policy to act as a source of financial strength to each of its banking subsidiaries. The Federal Reserve may require the Company to commit resources or contribute additional capital to the Bank, which could restrict the amount of cash available for dividends.

The Federal Reserve has also issued a policy statement with regard to the payment of cash dividends by financial holding companies and other bank holding companies. The policy statement provides that, as a matter of prudent banking, the holding company should not maintain a rate of cash dividends unless its net income available to common shareholders has been sufficient to fully fund the dividends, and the prospective rate of earnings retention appears to be consistent with the holding company's capital needs, asset quality and overall financial condition. Accordingly, a financial holding company should not pay cash dividends that exceed its net income or can only be funded in ways that weaken the holding company's financial health, such as by borrowing.

**Executive and incentive compensation.** In June 2010, the federal banking regulatory agencies issued joint interagency guidance on incentive compensation policies (the Joint Guidance) intended to ensure that the incentive compensation policies of banking organizations do not undermine the safety and soundness of such organizations by encouraging excessive risk-taking. This principles-based guidance, which covers all employees that have the ability to materially affect the risk profile of an organization, either individually or as part of a group, is based upon the key principles that a banking organization's incentive compensation arrangements should: (1) provide incentives that do not encourage risk-taking beyond the organization's ability to effectively identify and manage risk; (2) be compatible with effective internal controls and risk management; and (3) be supported by strong corporate governance, including active and effective oversight by the organization's board of directors. The Federal Reserve reviews the incentive compensation arrangements of financial institutions as part of its examination process and includes findings in examination reports. Any deficiencies can affect the financial institution's supervisory ratings, which can affect the institution's ability to engage in acquisitions and activities, and can result in enforcement actions.

In May 2016, the federal bank regulatory agencies approved a second joint notice of proposed rules (the Second Proposed Joint Rules) designed to prohibit incentive-based compensation arrangements that encourage inappropriate risks at financial institutions. The Second Proposed Joint Rules would apply to covered financial institutions with total assets of \$1 billion or more. The requirements of the Second Proposed Joint Rules would differ for each of three categories of financial institutions, based on their asset sizes. Based on the Bank's current asset size, the Second Proposed Joint Rules would not apply to the Bank.

SEC regulations require the Company to provide various disclosures about executive compensation and, through required stock exchange rules, require the Company to permit its shareholders to have non-binding votes on executive compensation. Through stock exchange rules required by law, the Company's Compensation Committee must meet certain independence standards, and the Compensation Committee must consider the independence of its advisers.

**Consumer protection laws and regulations.** Banks are subject to regular examination to ensure compliance with federal statutes and regulations applicable to their business, including consumer protection statutes and implementing regulations. Potential penalties under these laws include, but are not limited to, fines. The Dodd-Frank Act established the CFPB, which has extensive regulatory and enforcement powers over consumer financial products and services. The CFPB has adopted numerous rules with respect to consumer protection laws, amending some existing regulations and adopting new ones, and has commenced enforcement actions. The following are just some of the consumer protection laws applicable to the Bank:

- Community Reinvestment Act of 1977: imposes a continuing and affirmative obligation to fulfill the credit needs of its entire community, including low- and moderate-income neighborhoods.
- Equal Credit Opportunity Act: prohibits discrimination in any credit transaction on the basis of any of various criteria.

- Truth in Lending Act: requires that credit terms are disclosed in a manner that permits a consumer to understand and compare credit terms more readily and knowledgeably.
- Fair Housing Act: makes it unlawful for a lender to discriminate in its housing-related lending activities against any person on the basis of any of certain criteria.
- Home Mortgage Disclosure Act: requires financial institutions to collect data that enables regulatory agencies to determine whether the financial institutions are serving the housing credit needs of the communities in which they are located.
- Real Estate Settlement Procedures Act: requires that lenders provide borrowers with disclosures regarding the nature and cost of real estate settlements and prohibits abusive practices that increase borrowers' costs.
- Privacy provisions of the Gramm-Leach-Bliley Act: requires financial institutions to establish policies and procedures to restrict the sharing of non-public customer data with non-affiliated parties and to protect customer information from unauthorized access.

The banking regulators also use their authority under the Federal Trade Commission Act to take supervisory or enforcement action with respect to unfair or deceptive acts or practices by banks that may not necessarily fall within the scope of specific banking or consumer finance law.

In October 2017, the CFPB issued a final rule with respect to certain consumer loans to be effective on January 16, 2018, although compliance with most sections to be required starting on August 19, 2019. The first major part of the rule makes it an unfair and abusive practice for a lender to make short-term and longer-term loans with balloon payments (with certain exceptions) without reasonably determining that the borrower has the ability to repay the loan. The second major part of the rule applies to the same types of loans as well as longer-term loans with an annual percentage rate greater than 36 percent that are repaid directly from the borrower's account. The rule states that it is an unfair and abusive practice for the lender to withdraw payment from the borrower's account after two consecutive payment attempts have failed, unless the lender obtains the consumer's new and specific authorization to make further withdrawals from the account. The rule also requires lenders to provide certain notices to the borrower before attempting to withdraw payment on a covered loan from the borrower's account.

On January 16, 2018, the CFPB issued a press release stating that it "intends to engage in a rulemaking process so that the Bureau may reconsider the Payday Rule."

We are currently assessing the expected effect of this new rule on the Bank's lending business and on the Company's financial condition and results of operations.

**Monetary policy.** The earnings of financial institutions are affected by the policies of regulatory authorities, including monetary policy of the Federal Reserve. An important function of the Federal Reserve is regulation of aggregate national credit and money supply, relying on measures such as open market transactions in securities, establishment of the discount rate on bank borrowings, and changes in reserve requirements against bank deposits. These methods are used in varying combinations to influence overall growth and distribution of financial institutions' loans, investments, and deposits, and they also affect interest rates charged on loans or paid on deposits. Monetary policy is influenced by many factors, including inflation, unemployment, short-term and long-term changes in the international trade balance, and fiscal policies of the United States government. Federal Reserve Board monetary policy has had a significant effect on the operating results of financial institutions in the past and it will continue to influence operating results in the future.

**Anti-money laundering and anti-terrorism legislation.** The Bank Secrecy Act of 1970 requires financial institutions to maintain records and report transactions to prevent the financial institutions from being used to hide money derived from criminal activity and tax evasion. The Bank Secrecy Act establishes (a) record-keeping requirements to assist government enforcement agencies with tracing financial transactions and flow of funds, (b) reporting requirements for Suspicious Activity Reports and Currency Transaction Reports to assist government enforcement agencies with detecting patterns of criminal activity, (c) enforcement provisions authorizing criminal and civil penalties for illegal activities and violations of the Bank Secrecy Act and its implementing regulations, and (d) safe harbor provisions that protect financial institutions from civil liability for their cooperative efforts.

The Treasury's Office of Foreign Asset Control administers and enforces economic and trade sanctions against targeted foreign countries, entities, and individuals based on U.S. foreign policy and national security goals. As a result, financial institutions must scrutinize transactions to ensure that they do not represent obligations of or ownership interests in entities owned or controlled by sanctioned targets.

The USA PATRIOT Act of 2001 requires financial institutions to establish due diligence policies, procedures, and controls reasonably designed to detect and report money laundering through correspondent accounts and private banking accounts, share information with law enforcement about individuals, entities, and organizations engaged in or suspected of engaging in terrorist acts or money laundering activities, and comply with regulations setting forth minimum standards regarding customer identification. These regulations require financial institutions to implement reasonable procedures for verifying the identity of any person seeking to open an account, maintain records of the information used to verify the person's identity, and consult lists of known or suspected terrorists and terrorist organizations provided to the financial institution by government agencies.

**Volcker Rule.** A regulation implementing the Volcker Rule provision of the Dodd-Frank Act (the "Volcker Rule") places limits on the trading activity of insured depository institutions and entities affiliated with a depository institution, subject to certain exceptions. The trading activity includes a purchase or sale as principal of a security, derivative, commodity future or option on any such instrument in order to benefit from short-term price movements or to realize short-term profits. The Volcker Rule exempts specified U.S. Government, agency and/or municipal obligations, and it excepts trading conducted in certain capacities, including as a broker or other agent, through a deferred compensation or pension plan, as a fiduciary on behalf of customers, to satisfy a debt previously contracted, repurchase and securities lending agreements and risk-mitigating hedging activities. The Volcker Rule also prohibits a banking entity from having an ownership interest in, or certain relationships with, a hedge fund or private equity fund, with a number of exceptions.

The Company has no investments prohibited by the Volcker Rule and does not engage in any of the trading activities governed by the Volcker Rule.

**Ohio Banking Law.** As a bank chartered under the laws of the State of Ohio, the Bank is governed by the laws of the State of Ohio and the regulations of the Ohio Department of Commerce Division of Financial Institutions ("ODFI"). In 2017, the State of Ohio completed a substantial re-writing of Ohio's banking laws that became effective on January 1, 2018. One of the primary purposes of the revision of the law was to adopt one universal bank charter for depository institutions chartered by the state, rather than having separate types of state depository institution charters with different powers and limitations for banks, savings banks and savings and loan associations. The result is that all Ohio-chartered depository institutions are now considered to have full commercial bank powers, unless an institution elects to continue to be governed by federal restrictions applicable to federal savings and loan associations and federal savings banks. While the most substantial changes in the law affect institutions chartered by Ohio as savings banks or savings and loan associations prior to the effectiveness of the new law, some changes also apply to institutions, like the Bank, that were chartered as commercial banks prior to the change in the law. The changes for all Ohio-chartered banks include provisions allowing Ohio-chartered banks to exercise the same powers, perform all acts, and provide all services that are permitted for federally chartered depository institutions, with the exception of laws and regulations dealing with interest rates, thereby enhancing opportunities for Ohio-chartered banks to compete with other financial institutions. Other provisions clarify previous laws addressing, or allow more flexibility with respect to, corporate governance matters, mergers and acquisitions and additional reliance on Ohio corporate law generally.

In addition, in October 2017, Ohio-chartered banks received notices of required assessments to be paid to the ODFI. For two years, the ODFI was funded by State of Ohio excess unclaimed funds allocated to the ODFI by the State of Ohio. That funding source has ceased to be available, and assessments are once again required, as before the funding by unclaimed funds.

#### AVAILABLE INFORMATION

The Company files an annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports with the SEC pursuant to Section 13(a) or 15(d) of the Exchange Act of 1934 Amended. The Company's website is [www.cortlandbank.com](http://www.cortlandbank.com). The Company makes available through its website, free of charge, the reports filed with the SEC, as soon as reasonably practicable after such material is electronically filed, or furnished to, the SEC. The SEC also maintains a website that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC at [www.sec.gov](http://www.sec.gov). The public may read and copy any materials filed with the Commission at the SEC's Public Reference Room at 100 F Street, NE, Washington, DC 20549, on official business days during the hours of 10:00 am to 3:00 pm. The public may obtain information on the operation of the Public Reference Room by calling the Commission at 1-800-SEC-0330.

## Item 1A. Risk Factors

Like all financial companies, the Company's business and results of operations are subject to a number of risks, many of which are outside of our control. In addition to the other information in this report, readers should carefully consider that the following important factors could materially impact our business and future results of operations.

### ***Changes in economic and political conditions could adversely affect our earnings through declines in deposits, loan demand, the ability of our customers to repay loans and the value of the collateral securing the loans.***

Our success depends, in part, on economic and political conditions, local and national, as well as governmental fiscal and monetary policies. Conditions such as inflation, recession, unemployment, changes in interest rates, fiscal and monetary policy and other factors beyond our control may adversely affect our deposit levels and composition, demand for loans, the ability of our borrowers to repay their loans and the value of the collateral securing the loans we make. The election of a new United States President in 2016 has resulted in substantial changes in economic and political conditions for the United States and the remainder of the world. Economic turmoil in Europe and Asia and changes in oil production in the Middle East affect the economy and stock prices in the United States, which can affect our earnings and capital and the ability of our customers to repay loans. Because the Company has a significant amount of real estate loans, decreases in real estate values could adversely affect the value of property used as collateral and our ability to sell the collateral upon foreclosure.

### ***The enactment of new legislation or regulations may significantly affect our financial condition and results of operations.***

The Company is subject to regulations and supervision of the Federal Reserve, and the Bank is subject to regulation and supervision of the ODFI, the Federal Reserve, the FDIC and the CFPB. The regulations are designed to protect customers and the Deposit Insurance Fund. Regulations governing financial institutions are constantly undergoing change. New regulations or amendments could adversely affect the Company's business. Regulatory agencies have great discretion in connection with their supervisory and enforcement activities, including the imposition of restrictions on the operation of an institution, the classification of assets held by an institution and the appropriateness of an institution's allowance for loan losses. In addition, actions by regulatory agencies could cause us to devote significant time and resources to compliance and defense of the Company's business and may lead to penalties that materially affect the Company.

In recent years, Congress and the banking regulators have increased their focus on the financial services industry. The laws and regulations adopted have subjected the Company and the Bank to additional restrictions, oversight and costs that may have an impact on the financial condition and results of operations of the Company. In 2013, the Company's and the Bank's primary federal regulator established a new comprehensive capital framework for U.S. banking organizations. The new capital rules became effective for the Bank on January 1, 2015, subject to a phase-in period. Although the implementation of the new rules is not expected to have a material impact on the Bank's capital ratios when fully phased in, any future changes to capital requirements may have such an effect.

The current President of the United States and Congress have taken steps to change laws and regulations applicable to financial institutions, including the Company and the Bank. While those steps are generally intended to lessen regulatory burden on financial institutions, the results of such efforts are not yet known, and even the reduction of regulatory restrictions could have an adverse effect on the Company and the Bank and the Company's shareholders if such lessening of restrictions increases competition within the financial services industry or the Company's market area.

Further information about government regulation of the Company and the Bank may be found under the heading, "SUPERVISION AND REGULATION" in "ITEM 1. BUSINESS" of this Form 10-K.

### ***Adverse changes in the financial markets may adversely impact our results of operations.***

While we generally invest in securities issued by U.S. government agencies and sponsored entities and U.S. state and local governments with limited credit risk, certain investment securities we hold possess higher credit risk since they represent beneficial interests in structured investments collateralized by residential mortgages, debt obligations and other similar asset-backed assets. Regardless of the level of credit risk, all investment securities are subject to changes in market value due to changing interest rates, implied credit spreads and credit ratings.

***We may be compelled to seek additional capital in the future but may not be able to access capital when needed.***

Should we experience significant loan losses, we may need additional capital. In addition, we may elect to raise additional capital to support our business, to finance acquisitions, if any, or for other purposes. Our ability to raise additional capital, if needed, will depend on our financial performance, conditions in the capital markets, economic conditions and a number of other factors, many of which are outside of our control. There can be no assurance, therefore, that we can raise additional capital at all or on terms acceptable to us. If we cannot raise additional capital when needed or desired, it may have a material adverse effect on our financial condition, results of operations and prospects.

***A default by another larger financial institution could adversely affect financial markets generally.***

The commercial soundness of many financial institutions may be closely interrelated as a result of relationships between the institutions. As a result, concerns about, or a default or threatened default by, one institution could lead to significant market-wide liquidity and credit problems, losses or defaults by other institutions. This “systemic risk” may adversely affect our business.

***When we loan money, we incur a risk of losses if our borrowers do not repay their loans.***

In deciding whether to extend credit, we may rely on information provided by or on behalf of our borrowers, including financial statements and other financial information. Although we regularly review our credit exposure to specific clients, as well as industries, default risk may arise from events or circumstances that we have not detected, such as fraud. We may also fail to receive full information with respect to the risks of a borrower. In addition, when we have extended credit against collateral, we may find that we have inadequate collateral, such as when there are sudden declines in market value of the collateral or due to fraud with respect to such collateral. If such events occur, it could result in loss of revenue and have an adverse effect on our business, results of operations and financial condition.

***Changes in national and local economic and political conditions could adversely affect our earnings, as our borrowers’ ability to repay loans and the value of the collateral securing our loans decline and as loans and deposits decline.***

There are inherent risks associated with our lending activities, including credit risk, which is the risk that borrowers may not repay outstanding loans or the value of the collateral securing loans will decrease. Conditions such as inflation, recession, unemployment, changes in interest rates and money supply and other factors beyond our control may adversely affect the ability of our borrowers to repay their loans and the value of collateral securing the loans, which could adversely affect our earnings. Recent changes in government, particularly the change in the U.S. President, could bring changes in all of such factors. Because we have a significant amount of real estate loans, a decline in the value of real estate could have a material adverse effect on us. As of December 31, 2017, 81.4% of our loan portfolio consisted of commercial, commercial real estate, real estate construction and installment, all of which are generally viewed as having more risk of default than residential real estate loans and all of which, with the exception of installment loans, are typically larger than residential real estate loans. Residential real estate loans held in the portfolio are typically originated using conservative underwriting standards that do not include sub-prime lending. We attempt to manage credit risk through a program of underwriting standards, the review of certain credit decisions and an on-going process of assessment of the quality of the credit already extended. Economic and political changes could also adversely affect our deposits and loan demand, which could adversely affect our earnings and financial condition. Since substantially all of our loans are to individuals and businesses in Ohio, any decline in the economy of this market area could have a materially adverse effect on our credit risk and on our deposit and loan levels.

***Our allowance for loan losses may be insufficient.***

We maintain an allowance for loan losses to provide for probable loan losses based on management’s quarterly analysis of the loan portfolio. The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States (GAAP) requires management to make significant estimates that affect the financial statements. One of our most critical estimates is the level of the allowance for loan losses. Due to the inherent nature of these estimates, we cannot provide absolute assurance that we will not be required to charge earnings for significant unexpected loan losses. For more information on the sensitivity of these estimates, refer to the discussion of our “Critical Accounting Policies” in this report.

We maintain an allowance for loan losses that we believe is a reasonable estimate of known and inherent losses within the loan portfolio. We make various assumptions and judgments about the collectability of our loan portfolio, including the creditworthiness of our borrowers and the value of the real estate and other assets serving as collateral for the repayment of loans. In deciding whether to extend credit or enter into other transactions with customers and counterparties, we may rely on information provided to us by customers and counterparties, including financial statements and other financial information. We may also rely on representations of customers and counterparties as to the accuracy and completeness of that information and, with respect to financial statements, on reports of independent auditors. For example, in deciding whether to extend credit to a business, we may assume that the customer’s audited financial statements conform with GAAP and present fairly, in all material respects, the financial condition, results of



operations and cash flows of the customer. We may also rely on the audit report covering those financial statements. Our financial condition, results of operations and cash flows could be negatively impacted to the extent that we rely on financial statements that do not comply with GAAP or on financial statements and other financial information that are materially misleading.

Through a periodic review and consideration of the loan portfolio, management determines the amount of the allowance for loan losses by considering general market conditions, credit quality of the loan portfolio, the collateral supporting the loans and performance of customers relative to their financial obligations with us. The amount of future losses is susceptible to changes in economic, operating and other conditions, including changes in interest rates, which may be beyond our control, and these losses may exceed current estimates. We cannot fully predict the amount or timing of losses or whether the loss allowance will be adequate in the future. If our assumptions prove to be incorrect, our allowance for loan losses may not be sufficient to cover losses inherent in our loan portfolio, resulting in additions could have a material adverse impact on our financial condition and results of operations. In addition, federal and state regulators periodically review our allowance for loan losses as part of their examination process and may require management to increase the allowance or recognize further loan charge-offs based on judgments different than those of management. Any increase in the provision for loan losses would decrease our pretax and net income. Moreover, the Financial Accounting Standards Board has changed its requirements for establishing the allowance for loan losses. The new guidance is effective for annual reporting periods and interim reporting periods within those annual periods, beginning after December 15, 2019. Management is currently evaluating the impact of the adoption of this accounting guidance on the Bank's allowance for loan losses.

***Changes in interest rates could adversely affect our financial condition and results of operations.***

Our results of operations depend substantially on our net interest income, which is the difference between (i) the interest earned on loans, securities and other interest-earning assets and (ii) the interest paid on deposits and borrowings. These rates are highly sensitive to many factors beyond our control, including general economic conditions, inflation, recession, unemployment, money supply and the policies of various governmental and regulatory authorities. If the interest we pay on deposits and other borrowings increases at a faster rate than the interest we receive on loans and other investments, our net interest income and therefore earnings, could be adversely affected. Earnings could also be adversely affected if the interest we receive on loans and other investments falls more quickly than the interest we pay on deposits and borrowings. While we have taken measures intended to manage the risks of operating in a changing interest rate environment, there can be no assurance that these measures will be effective in avoiding undue interest rate risk.

Increases in interest rates also can affect the value of loans and other assets, including our ability to realize gains on the sale of assets. We originate loans for sale and for our portfolio. Increasing interest rates may reduce the origination of loans for sale and consequently the fee income we earn on such sales. Further, increasing interest rates may adversely affect the ability of borrowers to pay the principal or interest on loans and leases, resulting in an increase in non-performing assets and a reduction of income recognized.

***Increases in FDIC insurance premiums may have a material adverse effect on our earnings.***

We are generally unable to control the amount of premiums that we are required to pay for FDIC insurance. If there are a significant number of financial institution failures or changes in the method of calculating premiums, we may be required to pay higher FDIC premiums. Increases in FDIC insurance premiums may materially adversely affect our results of operations and our ability to continue to pay dividends on our common shares at the current rate or at all.

***If we foreclose on collateral property and own the underlying real estate, we may be subject to the increased costs associated with the ownership of real property, resulting in reduced revenues.***

We may have to foreclose on collateral property to protect our investment and may thereafter own and operate such property, in which case we will be exposed to the risks inherent in the ownership of real estate. The amount that we, as a mortgagee, may realize after a default is dependent upon factors outside of our control, including, but not limited to: (i) general or local economic conditions; (ii) neighborhood values; (iii) interest rates; (iv) real estate tax rates; (v) operating expenses of the mortgaged properties; (vi) supply of and demand for rental units or properties; (vii) ability to obtain and maintain adequate occupancy of the properties; (viii) zoning laws; (ix) governmental rules, regulations and fiscal policies; and (x) acts of God. Certain expenditures associated with the ownership of real estate, principally real estate taxes and maintenance costs, may adversely affect the income from the real estate. Therefore, the cost of operating a real property may exceed the rental income earned from such property, and we may have to advance funds in order to protect our investment, or we may be required to dispose of the real property at a loss. The foregoing expenditures and costs could adversely affect our ability to generate revenues, resulting in reduced levels of profitability.

***Environmental liability associated with commercial lending could have a material adverse effect on our business, financial condition and results of operations.***

In the course of our business, we may acquire, through foreclosure, commercial properties securing loans that are in default. There is a risk that hazardous substances could be discovered on those properties. In this event, we could be required to remove the substances from and remediate the properties at our cost and expense. The cost of removal and environmental remediation could be substantial. We may not have adequate remedies against the owners of the properties or other responsible parties and could find it difficult or impossible to sell the affected properties. These events could have a material adverse effect on our financial condition and results of operation.

***The loss of key members of our senior management team could adversely affect our business.***

We believe that our success depends largely on the efforts and abilities of our senior management. Their experience and industry contacts significantly benefit us. In addition, our success depends in part upon senior management's ability to implement our business strategy. The competition for qualified personnel in the financial services industry is intense, and the loss of services of any of our senior executive officers or an inability to continue to attract, retain and motivate key personnel could adversely affect our business. We cannot assure you that we will be able to retain our existing key personnel or attract additional qualified personnel.

***Loss of key employees may disrupt relationships with certain customers.***

Our business is primarily relationship-driven in that many of our key employees have extensive customer relationships. Loss of a key employee with such customer relationships may lead to the loss of business if the customers were to follow that employee to a competitor. While we believe our relationships with our key producers is good, we cannot guarantee that all of our key personnel will remain with our organization. Loss of such key personnel, should they enter into an employment relationship with one of our competitors, could result in the loss of some of our customers.

***The Bank may be required to repurchase loans it has sold or indemnify loan purchasers under the terms of the sale agreements, which could adversely affect the Company's liquidity, results of operations and financial condition.***

When the Bank sells a mortgage loan, it may agree to repurchase or substitute a mortgage loan if it is later found to have breached any representation or warranty the Bank made about the loan or if the borrower is later found to have committed fraud in connection with the origination of the loan. The Bank's underwriting policies and procedures may not prevent every breach or fraud. Repurchases or indemnifications may have an adverse effect on the Company's financial condition and results of operations.

***The Company has operational risk.***

The Company has many types of operational risk, including those discussed in more detail in this Risk Factors section, such as cyber-related risks, insufficient allowances for loan losses, errors in estimates in the preparation of financial statements, and risks related to future expansion. The Company also has reputational risk, legal and compliance risk, the risk of fraud or theft by employees or outsiders and unauthorized transactions by employees, and operational errors, including clerical or record-keeping errors and errors resulting from faulty or disabled computer or telecommunications systems.

The Company's operations may be disrupted by events beyond our control, including spikes in transaction volume or customer activity, electrical or telecommunications outages or natural disasters. If our policies and systems designed to mitigate such problems fail to operate well, such failures could result in reputational damage, regulatory intervention and civil litigation, leading to financial loss or liability. Negative public opinion could result from the Company's actual or alleged conduct with respect to a variety of its activities, including lending practices, corporate governance and acquisitions. Negative public opinion can adversely affect the Company's ability to attract and keep customers.

The Company relies on vendors for certain processes. The Company is exposed to the risk that its vendors may be unable to fulfill their contractual obligations or will suffer from the same risks as the Company has and that their business continuity systems may be inadequate, resulting in damage to the Company's reputation, loss of business, regulatory enforcement actions and civil litigation.

***We operate in an extremely competitive market, and our business will suffer if we are unable to compete effectively.***

In our market area, we encounter significant competition from other banks, savings and loan associations, credit unions, mortgage banking firms, securities brokerage firms, asset management firms and insurance companies. The increasingly competitive environment is a result primarily of changes in regulation and the accelerating pace of consolidation among financial service providers. The Company is smaller than many of our competitors. Many of our competitors have substantially greater resources and lending limits than we do and may offer services that we do not or cannot provide.

***We may lose business due to trends of consumers deciding not to use banks to complete financial transactions or depositing funds electronically with banks outside of our market area, which could negatively affect our net financial condition and results of operations.***

Technology and other changes allow parties to complete financial transactions without banks. For example, consumers can pay bills and transfer funds directly without banks. Consumers can also shop for higher deposit interest rates at banks across the country, which may offer higher rates because they have few or no physical branches and open deposit accounts electronically. This process could result in the loss of fee income, as well as the loss of client deposits and the income generated from those deposits, in addition to increasing our funding costs.

***Our ability to pay cash dividends is limited.***

We are dependent primarily upon the earnings of our operating subsidiaries for funds to pay dividends on our common shares. The payment of dividends by us and our subsidiaries is subject to certain regulatory restrictions. As a result, any payment of dividends in the future will be dependent, in large part, on our ability to satisfy these regulatory restrictions and our subsidiaries' earnings, capital requirements, financial condition and other factors. Although our financial earnings and financial condition have allowed us to declare and pay periodic cash dividends to our shareholders, there can be no assurance that our dividend policy or size of dividend distribution will continue in the future.

***The preparation of financial statements requires management to make estimates about matters that are inherently uncertain.***

Management's accounting policies and methods are fundamental to how we record and report our financial condition and results of operations. Our management must exercise judgment in selecting and applying many of these accounting policies and methods in order to ensure that they comply with generally accepted accounting principles and reflect management's judgment as to the most appropriate manner in which to record and report our financial condition and results of operations. One of the most critical estimates is the level of the allowance of loan losses. Due to the inherent nature of these estimates, we cannot provide absolute assurance that we will not significantly increase the allowance for loan losses or sustain loan losses that are significantly higher than the provided allowance.

***Failures or material breaches in security of our systems or those of third-party service providers may have a significant effect on our business.***

We collect, process and store sensitive consumer data by utilizing computer systems and telecommunications networks operated by both us and third-party service providers. The Bank's necessary dependence upon automated systems to record and process the Bank's transactions poses the risk that technical system flaws, employee errors, tampering or manipulation of those systems, or attacks by third parties will result in losses and may be difficult to detect. We have security and backup and recovery systems in place, as well as a business continuity plan, to ensure the computer systems will not be inoperable, to the extent possible. Our inability to use or access these information systems at critical points in time could unfavorably impact the timeliness and efficiency of our business operations. In recent years, some banks have experienced denial of service attacks in which individuals or organizations flood the bank's website with extraordinarily high volumes of traffic, with the goal and effect of disrupting the ability of the bank to process transactions. Other businesses have been victims of ransomware attacks in which the business becomes unable to access its own information and is presented with a demand to pay a ransom in order to once again have access to its information. We could be adversely affected if one of our employees causes a significant operational break-down or failure, either as a result of human error or where an individual purposefully sabotages or fraudulently manipulates our operations or systems. We may not be able to prevent employee errors or misconduct, and the precautions we take to detect this type of activity might not be effective in all cases. The Bank is further exposed to the risk that the third-party service providers may be unable to fulfill their contractual obligations (or will be subject to the same risks as the Bank). These disruptions may interfere with service to the Bank's customers. We are also at risk of the impact of natural disasters, terrorism and international hostilities on our systems or for the effects of outages or other failures involving power or communications systems operated by others.

In addition, there have been instances where financial institutions have been victims of fraudulent activity in which criminals pose as customers to initiate wire and automated clearinghouse transactions out of customer accounts. The recent massive breach of the systems of a credit bureau presents additional threats as criminals now have more information about a larger portion of our country's population than past breaches have involved, which could be used by criminals to pose as customers initiating transfers of money from customer accounts. Although we have policies and procedures in place to verify the authenticity of our customers, we cannot assure that such policies and procedures will prevent all fraudulent transfers.

We have implemented security controls to prevent unauthorized access to the computer systems and require our third-party service providers to maintain similar controls. However, management cannot be certain that these measures will be successful. A security breach of the computer systems and loss of confidential information, such as customer account numbers and related information, could result in a loss of customers' confidence and, thus, loss of business. We could also lose revenue if competitors gain access to confidential information about our business operations and use it to compete with us.

Further, we may be affected by data breaches at retailers and other third parties who participate in data interchanges with us and our customers that involve the theft of customer credit and debit card data, which may include the theft of our debit card PIN numbers and commercial card information used to make purchases at such retailers and other third parties. Such data breaches could result in us incurring significant expenses to reissue debit cards and cover losses, which could result in a material adverse effect on our results of operations.

Our assets at risk for cyber-attacks include financial assets and non-public information belonging to customers. We use several third-party vendors who have access to our assets via electronic media. Certain cyber security risks arise due to this access, including cyber espionage, blackmail, ransom, and theft.

All of the types of cyber incidents discussed above could result in damage to our reputation, loss of customer business, costs of incentives to customers or business partners in order to maintain their relationships, litigation, increased regulatory scrutiny and potential enforcement actions, repairs of system damage, increased investments in cybersecurity (such as obtaining additional technology, making organizational changes, deploying additional personnel, training personnel and engaging consultants), increased insurance premiums, and loss of investor confidence and a reduction in our stock price, all of which could result in financial loss and material adverse effects on our results of operations and financial condition.

***Trading in our common shares is very limited, which may adversely affect the time and the price at which you can sell your Company common shares.***

Although the common shares of the Company are quoted on the OTC Market, trading in the Company's common shares is not active, and the spread between the bid and the asked price is often wide. As a result, you may not be able to sell your shares on short notice, and the sale of a large number of shares at one time could temporarily depress the market price. The price at which you may be able to sell your common shares may be significantly lower than the price at which you could buy the Company's common shares at that time.

***Our organizational documents may have the effect of discouraging a third party from acquiring us.***

Our articles of incorporation and code of regulations contain provisions, including a staggered board of directors and a supermajority vote requirement, that make it more difficult for a third party to gain control or acquire us without the consent of the board of directors. These provisions could also discourage proxy contests and may make it more difficult for dissident shareholders to elect representatives as directors and take other corporate actions.

***Future expansion may adversely affect our financial condition and results of operations.***

We may acquire other financial institutions or parts of institutions in the future and may open new branches. We also may consider and enter into new lines of business or offer new products or services. Expansions of our business involve a number of expenses and risks, including:

- the time and costs associated with identifying and evaluating potential acquisitions or new products or services;
- the potential inaccuracy of estimates and judgments used to evaluate credit, operations, management and market risk with respect to the target institutions;
- the time and costs of evaluating new markets, hiring local management and opening new offices, and the delay between commencing these activities and the generation of profits from the expansion;
- our ability to finance an acquisition or other expansion and the possible dilution to our existing shareholders;
- the diversion of management's attention to the negotiation of a transaction and the integration of the operations and personnel of the combining businesses;
- entry into unfamiliar markets;
- the possible failure of the introduction of new products and services into our existing business;

- the incurrence and possible impairment of goodwill associated with an acquisition and possible adverse short-term effects on our results of operations; and
- the risk of loss of key employees and customers.

We may incur substantial costs to expand, and we can give no assurance that such expansion will result in the levels of profits we expect. Neither can we assure that integration efforts for any future acquisitions will be successful. We may issue equity securities in connection with acquisitions, which could dilute the economic and voting interests of our existing shareholders. We may also lose customers as we close one or more branches as part of a plan to expand into other areas or become more productive from other branches.

***Changes in accounting standards could materially impact the Company's consolidated financial statements.***

The Company's accounting policies and methods are fundamental to how our financial condition and results of operations are recorded and reported. The accounting standard setters, including the Financial Accounting Standards Board, the SEC, and other regulatory bodies, from time to time may change the financial accounting and reporting standards that govern the preparation of the Company's consolidated financial statements. These changes can be hard to predict and can materially impact how the Company records and reports financial condition and results of operations. In some cases, the Company could be required to apply a new or revised standard retroactively, resulting in changes to previously reported financial results, or a cumulative charge to retained earnings. Management may be required to make difficult, subjective, or complex judgments about matters that are uncertain. Materially different amounts could be reported under different conditions or using different assumptions.

The Company undertakes no obligation and disclaims any intention to publish revised information or updates to forward-looking statements contained in the above risk factors or in any other statement made at any time by any director, officer, employee or other representative of the Company unless and until any such revisions or updates are required to be disclosed by applicable securities laws or regulations.

***Changes in tax laws could adversely affect our performance.***

We are subject to extensive federal, state and local taxes, including income, excise, sales/use, payroll, franchise, withholding and ad valorem taxes. Changes to our taxes could have a material adverse effect on our results of operations. In addition, our customers are subject to a wide variety of federal, state and local taxes. Changes in taxes paid by our customers, including changes in the deductibility of mortgage loan related expenses, may adversely affect their ability to purchase homes or consumer products, which could adversely affect their demand for our loans and deposit products. In addition, such negative effects on our customers could result in defaults on the loans we have made and decrease the value of mortgage-backed securities in which we have invested.

On December 22, 2017, H.R.1, formally known as the "Tax Cuts and Jobs Act," was enacted into law. This new tax legislation, among other changes, limits the amount of state, federal and local taxes that taxpayers are permitted to deduct on their individual tax returns and eliminates other deductions in their entirety. Such limits and eliminations may result in customer defaults on loans we have made and decrease the value of mortgage-backed securities in which we have invested.

Item 1B. Unresolved Staff Comments — Not applicable to the Company because it is a smaller reporting company.

Item 2. Properties

The Company's operations are conducted at 194 West Main Street, Cortland, Ohio.



Full service banking business is conducted at a total of thirteen offices, including:

<b>BRISTOL</b> 6090 State Route 45 Bristolville, Ohio 44402 330-889-3062	<b>HUBBARD</b> 890 West Liberty Street Hubbard, Ohio 44425 330-534-2265	<b>VIENNA</b> 4434 Warren-Sharon Road Vienna, Ohio 44473 330-394-1438
<b>BROOKFIELD</b> 7202 Warren-Sharon Road Brookfield, Ohio 44403 330-448-6814	<b>HUDSON</b> 75 S. Main St. Hudson, OH 44236 330-342-1100	<b>WARREN</b> 2935 Elm Road Warren, Ohio 44483 330-372-1520
<b>CANFIELD</b> 3615 Boardman-Canfield Road Canfield, Ohio 44406 330-941-5867	<b>MANTUA</b> 11661 State Route 44 Mantua, Ohio 44255 330-274-3111	<b>WILLIAMSFIELD</b> 5917 U.S. Route 322 Williamsfield, Ohio 44093 440-293-7502
<b>CORTLAND</b> 194 West Main Street Cortland, Ohio 44410 330-637-8040	<b>NILES PARK PLAZA</b> 815 Youngstown-Warren Road Suite 1 Niles, Ohio 44446 330-652-8700	<b>WINDHAM</b> 8950 Maple Grove Road Windham, Ohio 44288 330-326-2340
	<b>NORTH LIMA</b> 9001 Market Street North Lima, Ohio 44452 330-758-5884	

The Bank's main and administrative office is located at 194 West Main Street, Cortland, Ohio. The Bank leases two financial service centers in Beachwood, Ohio and Fairlawn, Ohio. The Hubbard, Niles Park Plaza and Hudson offices are leased, while all of the other offices are owned by the Bank.

### Item 3. Legal Proceedings

The Bank is involved from time to time in legal actions arising in the ordinary course of the Bank's business. In the opinion of management, the outcomes from such legal proceedings, either individually or in the aggregate, are not expected to have any material effect on the Company.

### Item 4. Mine Safety Disclosures – Not applicable

#### Executive Officers of the Registrant

The names, ages and positions of the executive officers as of March 22, 2018 are as follows:

<u>Name</u>	<u>Age</u>	<u>Position Held</u>
James M. Gasior	58	President, Chief Executive Officer and Director
Timothy Carney	52	Executive Vice President, Chief Operations Officer and Director
David J. Lucido	60	Senior Vice President and Chief Financial Officer
Stanley P. Feret	57	Senior Vice President and Chief Lending Officer

#### Principal Occupation and Business Experience of Executive Officers

During the past five years the business experience of each of the executive officers has been as follows:

Mr. Gasior has been President and Chief Executive Officer of the Company and the Bank since November 2, 2009. Mr. Gasior is a director of the Company and the Bank since November 2005.

Mr. Carney has been Executive Vice President and Chief Operating Officer of the Company and the Bank since November 2, 2009. Mr. Carney is a director of the Company and the Bank since November 2009.

Mr. Lucido was appointed Senior Vice President and Chief Financial Officer of the Company and the Bank on January 18, 2010.

Mr. Feret was appointed Senior Vice President and Chief Lending Officer of the Company and the Bank on March 10, 2010.

## PART II

### Item 5. Market for Registrant's Common Equity, Related Shareholder Matters and Issuer Purchases of Equity Securities

The following is information regarding market information, holders and dividends.

The Company files quarterly reports on Form 10-Q, an annual report on Form 10-K, current reports on Form 8-K, and proxy statements, as well as any amendments to those reports and statements, with the SEC pursuant to section 13(a) or (15)d of the Exchange Act. In 2018, the Company's quarterly reports will be filed within 45 days of the end of each quarter, and the Company's annual report will be filed within 90 days of the end of the year. Any person may access these reports and statements free of charge, as soon as reasonably practicable after such material is electronically filed with or furnished to the SEC, by visiting our web site at [www.cortlandbank.com](http://www.cortlandbank.com) or by writing to:

Deborah L. Eazor  
Cortland Bancorp  
194 West Main Street  
Cortland, Ohio 44410

The SEC also maintains a website at [www.sec.gov](http://www.sec.gov) where our filings and other information may be obtained free of charge.

The Company's common shares trade on the OTCQX under the symbol CLDB. The following brokerage firm is known to be relatively active in trading the Company's common shares:

Boenning & Scattergood  
9922 Brewster Lane  
Powell, OH 43065  
Telephone: 866-326-8113

The following table shows the dividends declared during the periods indicated and the prices at which the common shares of the Company have actually been purchased and sold in market transactions. The range of market prices is compiled from data available from the OTCQX, a financial marketplace for 10,000 U.S. and global securities that recently expanded to include financial institutions that meet the capital requirements and disclosure commitments as established by the OTC. The data may not necessarily represent all transactions. As of March 14, 2018, the Company had approximately 1,254 shareholders of record.

	Price Per Share			Cash Dividends Declared Per Share
	High	Low	Close	
<b>2017</b>				
Fourth Quarter	\$ 21.00	\$ 17.95	\$ 20.50	\$ 0.08
Third Quarter	19.25	17.00	19.25	0.08
Second Quarter	19.00	17.94	18.00	0.08
First Quarter	18.93	17.50	18.60	0.15
<b>2016</b>				
Fourth Quarter	\$ 19.00	\$ 15.35	\$ 17.50	\$ 0.07
Third Quarter	16.25	14.65	15.61	0.07
Second Quarter	16.25	14.15	15.00	0.07
First Quarter	17.50	15.11	15.40	0.07
<b>2015</b>				
Fourth Quarter	\$ 15.80	\$ 14.31	\$ 15.50	\$ 0.06
Third Quarter	15.00	13.00	14.31	0.06
Second Quarter	15.60	14.15	14.15	0.06
First Quarter	16.00	15.16	15.30	0.06

For current share prices, please access our website at [www.cortlandbank.com](http://www.cortlandbank.com).

The Bank is subject to a dividend restriction that generally limits the amount of dividends that can be paid by an Ohio state-chartered bank. Under the Ohio Banking Code, cash dividends may not exceed net profits as defined for that year combined with retained net profits for the two preceding years less any required transfers to surplus. Under this formula, the amount available for payment of dividends in 2018 is \$6.7 million plus 2018 profits retained up to the date of the dividend declaration.

For the convenience of shareholders, the Company has established a plan whereby shareholders may have their dividends automatically reinvested in the common shares of the Company. Participation in the plan is completely voluntary and shareholders may withdraw at any time.

**Shareholder and General Inquiries**

Cortland Bancorp  
 194 West Main Street  
 Cortland, Ohio 44410  
 (330) 637-8040  
 Attention: Deborah L. Eazor  
 Vice President  
 DEazor@cortlandbank.com

**Transfer Agent**

American Stock Transfer & Trust Company, LLC  
 6201 15<sup>th</sup> Avenue  
 Brooklyn, NY 11219  
 (888) 509-4619

Please contact our transfer agent directly for assistance in changing your address, elimination of duplicate mailings, transferring shares or replacing lost, stolen or destroyed share certificates. Other questions regarding your status as a shareholder of the Company may be addressed to the Company as indicated above.

The following table shows information relating to the repurchase of shares of the Company's common stock during the quarter ended December 31, 2017:

	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	—	—	—	90,437
November	—	—	—	90,437
December	3,300	20.25	3,300	—
Total	<u>3,300</u>	<u>\$ 15.03</u>	<u>3,300</u>	<u>—</u>

\* On January 24, 2017, the Company's Board of Directors approved a Stock Repurchase Program. The program allowed the Company to purchase up to 100,000 shares and expired on December 31, 2017. (See footnote 18 to the Consolidated Financial Statements.)

The Company did not sell any of its shares without registration during 2017, 2016 or 2015.

## Item 6. Selected Financial Data

(In thousands of dollars, except for ratios and per share amounts)  
Years Ended December 31,

	2017	2016	2015	2014	2013
<b>SUMMARY OF OPERATIONS</b>					
Total interest income	\$ 23,492	\$ 22,555	\$ 21,113	\$ 20,665	\$ 20,060
Total interest expense	3,190	2,918	2,607	2,884	3,404
Net interest income (NII)	20,302	19,637	18,506	17,781	16,656
Provision for loan losses	100	50	455	1,638	650
NII after loss provision	20,202	19,587	18,051	16,143	16,006
Investment security gains (losses), including impairment losses	7	419	64	915	(1,234)
Mortgage banking gains	1,074	1,248	785	440	1,491
Other income	4,085	2,930	3,060	2,772	2,488
Total non-interest income	5,166	4,597	3,909	4,127	2,745
Total non-interest expenses	18,601	18,186	16,363	15,499	16,879
Income before tax expense	6,767	5,998	5,597	4,771	1,872
Federal income tax expense	2,417	1,127	1,219	902	88
Net income	\$ 4,350	\$ 4,871	\$ 4,378	\$ 3,869	\$ 1,784
<b>PER COMMON SHARE DATA (1)</b>					
Earnings per share, basic and diluted	\$ 0.99	\$ 1.11	\$ 0.97	\$ 0.85	\$ 0.39
Cash dividends declared per share	0.39	0.28	0.24	0.18	0.12
Book value	13.94	13.05	12.87	12.33	10.94
<b>BALANCE SHEET DATA</b>					
Assets	\$ 711,101	\$ 655,184	\$ 612,443	\$ 568,932	\$ 556,918
Investment securities	162,422	179,219	162,035	170,108	168,133
Loans held for sale	2,780	4,554	4,033	632	656
Loans	487,490	419,768	394,254	360,185	346,833
Allowance for loan losses	4,578	4,868	5,194	5,202	3,764
Deposits	585,851	539,850	496,404	456,761	448,669
Borrowings	48,678	43,202	44,499	44,759	46,404
Subordinated debt	5,155	5,155	5,155	5,155	5,155
Shareholders' equity	61,630	57,670	56,684	55,852	49,535
<b>AVERAGE BALANCES</b>					
Assets	\$ 636,915	\$ 608,298	\$ 568,897	\$ 542,542	\$ 540,510
Investment securities	168,654	166,690	166,155	175,000	181,051
Loans	412,450	385,667	356,105	325,747	306,411
Loans held for sale	2,801	4,506	2,504	814	12,003
Deposits	527,653	496,917	454,920	428,468	435,550
Borrowings	33,777	36,292	43,761	46,886	44,127
Subordinated debt	5,155	5,155	5,155	5,155	5,155
Shareholders' equity	59,998	58,923	56,625	53,648	49,449
<b>ASSET QUALITY RATIOS</b>					
Loan charge-offs	\$ (840)	\$ (614)	\$ (723)	\$ (594)	\$ (1,022)
Recoveries on loans	450	238	260	394	311
Net charge-offs	\$ (390)	\$ (376)	\$ (463)	\$ (200)	\$ (711)
Net charge-offs as a percentage of average total loans	0.09%	0.10%	0.13%	0.06%	0.23%
Loans 30+ days delinquent as a percentage of total loans	0.24%	1.04%	1.80%	2.22%	0.54%
Nonperforming loans	\$ 5,114	\$ 8,286	\$ 11,542	\$ 9,237	\$ 6,120
Nonperforming securities	895	825	778	779	1,203
Other real estate owned	—	—	61	40	33
Total nonperforming assets	\$ 6,009	\$ 9,111	\$ 12,381	\$ 10,056	\$ 7,356
Allowance for loan losses as a percentage of non-performing loans	89.52%	58.75%	45.00%	56.32%	61.50%
Nonperforming assets as a percentage of:					
Total assets	0.85%	1.39%	2.02%	1.77%	1.32%
Equity plus allowance for loan losses	9.08	14.57	20.01	16.47	13.80
Tier I capital	8.78	13.88	19.99	17.13	13.39
<b>FINANCIAL RATIOS</b>					
Return on average equity	7.25%	8.27%	7.73%	7.21%	3.61%
Return on average assets	0.68	0.80	0.77	0.71	0.33
Effective tax rate	35.72	18.79	21.78	18.91	4.70
Average equity-to-average asset ratio	9.42	9.69	9.95	9.89	9.15
Tangible equity ratio	10.77	10.46	10.62	10.66	10.35
Cash dividend payout ratio	39.39	25.23	24.74	21.18	30.77
Net interest margin	3.59	3.63	3.65	3.67	3.41

(1) Basic earnings per common share are based on weighted average shares outstanding. Diluted earnings per share is after consideration of common stock equivalent. Cash dividends per common share are based on actual cash dividends declared. Book value per common share is based on shares outstanding at each period end.

For more information see Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations and Item 8, Financial Statements and Supplementary Data.

## Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following schedules show average balances of interest-earning and non interest-earning assets and liabilities, and shareholders' equity for the years indicated. Also shown are the related amounts of interest earned or paid and the related average yields or interest rates paid for the years indicated. The averages are based on daily balances.

	(Fully taxable equivalent basis in thousands of dollars)								
	2017			2016			2015		
	Average Balance Outstanding	Interest Earned or Paid	Yield or Rate	Average Balance Outstanding	Interest Earned or Paid	Yield or Rate	Average Balance Outstanding	Interest Earned or Paid	Yield or Rate
<b>Interest-earning assets:</b>									
Interest-earning deposits and other earning assets	\$ 8,668	\$ 98	1.13%	\$ 8,233	\$ 44	0.54%	\$ 5,930	\$ 19	0.32%
Available-for-sale securities (Note 1, 2, 3):									
U.S. Treasury and other U.S. Government agencies and corporations	6,314	158	2.50%	3,703	98	2.63%	11,356	301	2.65%
States of the U.S. and political subdivisions - taxable	—	—	—%	1,757	65	3.69%	4,665	162	3.47%
States of the U.S. and political subdivisions - nontaxable	66,886	2,853	4.26%	58,387	2,647	4.53%	45,169	2,211	4.90%
U.S. Government mortgage-backed pass through certificates	80,144	1,692	2.11%	85,448	1,647	1.93%	91,017	1,836	2.02%
U.S. Government-guaranteed small business administration pools	11,110	206	1.85%	9,040	166	1.84%	1,248	18	1.44%
Other securities	4,200	173	4.12%	4,326	145	3.35%	4,702	153	3.25%
<b>Total available-for-sale securities</b>	<b>168,654</b>	<b>5,082</b>	<b>3.01%</b>	<b>162,661</b>	<b>4,768</b>	<b>2.93%</b>	<b>158,157</b>	<b>4,681</b>	<b>2.96%</b>
Trading securities (Note 1, 2, 3)	—	—	—%	4,029	94	2.33%	7,998	362	4.53%
Loans (Note 1, 2, 3, 4)	415,251	19,257	4.64%	390,173	18,570	4.76%	358,609	16,933	4.72%
<b>Total interest-earning assets</b>	<b>592,573</b>	<b>\$24,437</b>	<b>4.12%</b>	<b>565,096</b>	<b>\$23,476</b>	<b>4.15%</b>	<b>530,694</b>	<b>\$21,995</b>	<b>4.14%</b>
<b>Noninterest-earning assets:</b>									
Cash and due from banks	7,804			7,844			7,399		
Premises and equipment	9,193			9,038			7,165		
Other assets	27,345			26,320			23,639		
<b>Total assets</b>	<b>\$ 636,915</b>			<b>\$ 608,298</b>			<b>\$ 568,897</b>		
<b>Interest-bearing liabilities:</b>									
Deposits:									
Interest-bearing demand deposits	\$ 168,536	\$ 751	0.45%	\$ 137,505	\$ 435	0.32%	\$ 110,130	\$ 269	0.24%
Savings	114,261	90	0.08%	113,125	78	0.07%	113,272	66	0.06%
Time	128,251	1,730	1.35%	134,523	1,580	1.17%	133,490	1,333	1.00%
<b>Total interest-bearing deposits</b>	<b>411,048</b>	<b>2,571</b>	<b>0.63%</b>	<b>385,153</b>	<b>2,093</b>	<b>0.54%</b>	<b>356,892</b>	<b>1,668</b>	<b>0.47%</b>
Borrowings:									
Securities sold under agreement to repurchase	2,018	7	0.33%	2,249	7	0.31%	4,082	4	0.10%
Subordinated debt	5,155	138	2.64%	5,155	112	2.13%	5,155	91	1.75%
Federal Home Loan Bank advances - short term	16,917	175	1.03%	13,550	73	0.54%	14,674	40	0.27%
Federal Home Loan Bank advances - long term	14,842	299	2.01%	20,493	633	3.09%	25,005	804	3.22%
<b>Total borrowings</b>	<b>38,932</b>	<b>619</b>	<b>1.59%</b>	<b>41,447</b>	<b>825</b>	<b>1.99%</b>	<b>48,916</b>	<b>939</b>	<b>1.92%</b>
<b>Total interest-bearing liabilities</b>	<b>449,980</b>	<b>\$ 3,190</b>	<b>0.71%</b>	<b>426,600</b>	<b>\$ 2,918</b>	<b>0.68%</b>	<b>405,808</b>	<b>\$ 2,607</b>	<b>0.64%</b>
<b>Noninterest-bearing liabilities:</b>									
Demand deposits	116,605			111,764			98,028		
Other liabilities	10,332			11,011			8,436		
Shareholders' equity	59,998			58,923			56,625		
<b>Total liabilities and shareholders' equity</b>	<b>\$ 636,915</b>			<b>\$ 608,298</b>			<b>\$ 568,897</b>		
Net interest income		<b>\$21,247</b>			<b>\$20,558</b>			<b>\$19,388</b>	
Net interest rate spread (Note 5)			<b>3.41%</b>			<b>3.47%</b>			<b>3.50%</b>
Net interest margin (Note 6)			<b>3.59%</b>			<b>3.63%</b>			<b>3.65%</b>

Note 1 – Includes both taxable and tax exempt securities and loans.

Note 2 – The amounts are presented on a fully taxable equivalent basis using the statutory rate of 34%, and have been adjusted to reflect the effect of disallowed interest expenses related to carrying tax-exempt assets. The tax equivalent income adjustment for loans and investments available-for-sale and trading was \$14,000 and \$931,000, respectively, for December 31, 2017; \$16,000 and \$905,000, respectively, for December 31, 2016; and \$24,000 and \$858,000, respectively, for December 31, 2015.

Note 3 – Average balance outstanding includes the average amount outstanding of all non-accrual investment securities and loans. Investment securities consist of average total principal adjusted for amortization of premium and accretion of discount and include both taxable and tax-exempt securities. Loans consist of average total loans, including loans held for sale, less average unearned income.



Note 4 – Interest earned on loans includes net loan fees of \$443,000 in 2017, \$684,000 in 2016 and \$486,000 in 2015.

Note 5 – Net interest rate spread represents the difference between the yield on earning assets and the rate paid on interest-bearing liabilities.

Note 6 – Net interest margin is calculated by dividing the net interest income by total interest-earning assets.

## **FINANCIAL REVIEW**

The following is management’s discussion and analysis of the financial condition and results of operations of the Company. The discussion should be read in conjunction with the Consolidated Financial Statements and related notes and summary financial information included elsewhere in this annual report.

## **NOTE REGARDING FORWARD-LOOKING STATEMENTS**

The Private Securities Litigation Reform Act of 1995 provides a “safe harbor” for forward-looking statements. In addition to historical information, certain information included in this discussion and other materials filed or to be filed by the Company with the SEC (as well as information included in oral statements or other written statements made or to be made by the Company) may contain forward-looking statements that involve risks and uncertainties. The words “believes,” “expects,” “may,” “will,” “should,” “projects,” “contemplates,” “anticipates,” “forecasts,” “intends,” or similar terminology identify forward-looking statements. These statements reflect management’s beliefs and assumptions, and are based on information currently available to management.

Economic circumstances, the Company’s operations and actual results could differ significantly from those discussed in any forward-looking statements. Some of the factors that could cause or contribute to such differences are changes in the economy and interest rates either nationally or in the Company’s market area, including the impact of the impairment of securities; political actions, including failure of the United States Congress to raise the federal debt ceiling or the imposition of changes in the federal budget; changes in customer preferences and consumer behavior; increased competitive pressures or changes in either the nature or composition of competitors; changes in the legal and regulatory environment; changes in factors influencing liquidity, such as expectations regarding the rate of inflation or deflation, currency exchange rates, and other factors influencing market volatility; changes in assumptions underlying the establishment of reserves for possible loan losses, reserves for repurchase of mortgage loans sold and other estimates; and risks associated with other global economic, political and financial factors.

While actual results may differ significantly from the results discussed in the forward-looking statements, the Company undertakes no obligation to update publicly any forward-looking statement for any reason, even if new information becomes available.

## **CRITICAL ACCOUNTING POLICIES AND ESTIMATES**

The discussion and analysis of the Company’s financial condition and results of operation are based upon the Consolidated Financial Statements, which have been prepared in accordance with U.S. Generally Accepted Accounting Principles (GAAP). The preparation of these consolidated financial statements requires management to make estimates and judgments that affect the reported amounts of assets and liabilities, revenues and expenses, and related disclosures of contingent assets and liabilities at the date of the Company’s consolidated financial statements. Actual results may differ from these estimates under different assumptions or conditions.

Certain accounting policies involve significant judgments and assumptions by management which has a material impact on the carrying value of certain assets and liabilities; management considers such accounting policies to be critical accounting policies. The judgments and assumptions used by management are based on historical experience and other factors, which are believed to be reasonable under the circumstances.

Management believes the following are critical accounting policies that require the most significant judgments and estimates used in the preparation of the Company’s consolidated financial statements.

### ***Accounting for the Allowance for Loan Losses***

The determination of the allowance for loan losses and the resulting amount of the provision for loan losses charged to operations reflects management’s current judgment about the credit quality of the loan portfolio and takes into consideration changes in lending policies and procedures, changes in economic and business conditions, changes in the nature and volume of the portfolio and, in the terms of loans, changes in the experience, ability and depth of lending management, changes in the volume and severity of past due, non-accrual and adversely classified or graded loans, changes in the quality of the loan review system, changes in the value of underlying collateral for collateral-dependent loans, the existence and effect of any concentrations of credit and the effect of competition, legal and regulatory requirements and other external factors. The nature of the process by which we determine the appropriate allowance for loan losses requires the exercise of considerable judgment. While management utilizes its best judgment and information available, the ultimate adequacy of the allowance is dependent upon a variety of factors beyond our control, including the

performance of the loan portfolio, the economy, changes in interest rates and the view of the regulatory authorities toward loan classifications. The allowance is increased by the provision for loan losses and decreased by charge-offs when management believes the uncollectibility of a loan is confirmed. Subsequent recoveries, if any, are credited to the allowance. A weakening of the economy or other factors that adversely affect asset quality could result in an increase in the number of delinquencies, bankruptcies or defaults and a higher level of non-performing assets, net charge offs, and provision for loan losses in future periods.

The Company's allowance for loan losses methodology consists of three elements: (i) specific valuation allowances based on probable losses on specific loans; (ii) valuation allowances based on historical loan loss experience for similar loans with similar characteristics and trends; and (iii) general valuation allowances based on general economic conditions and other qualitative risk factors both internal and external to the Company. These elements support the basis for determining allocations between the various loan categories and the overall adequacy of our allowance to provide for probable losses inherent in the loan portfolio.

With these methodologies, a general allowance is established for each loan type based on historical losses for each loan type in the portfolio. Additionally, management allocates a specific allowance for "Impaired Credits," which is based on current information and events, if it is probable the Company will not collect all amounts due according to the original contractual terms of the loan agreement. The level of the general allowance is established to provide coverage for management's estimate of the credit risk in the loan portfolio by various loan segments not covered by the specific allowance. Additional information regarding allowance for credit losses can be found in Item 8, Note 3 to the Consolidated Financial Statements and elsewhere in this Management's Discussion and Analysis.

### ***Investment Securities and Impairment***

The classification and accounting for investment securities is discussed in detail in Item 8, Notes 1 and 2 to the Consolidated Financial Statements. Investment securities must be classified as held-to-maturity, available-for-sale, or trading. The appropriate classification is based partially on the Company's ability to hold the securities to maturity and largely on management's intentions, if any, with respect to either holding or selling the securities. The classification of investment securities is significant since it directly impacts the accounting for unrealized gains and losses on securities. Unrealized gains and losses on trading securities, if any, flow directly through earnings during the periods in which they arise, whereas available-for-sale securities are recorded as a separate component of shareholders' equity (accumulated other comprehensive income or loss) and do not affect earnings until realized. The fair values of the Company's investment securities are generally determined by reference to quoted market prices and reliable independent sources. At each reporting date, the Company assesses whether there is an "other-than-temporary" impairment to the Company's investment securities. Such impairment must be recognized in current earnings rather than in other comprehensive income (loss).

For debt securities, ASC topic 320 requires an entity to assess whether it has the intent to sell the debt security or it is more-likely-than-not that it will be required to sell the debt security before its anticipated recovery. If either of these conditions is met, an other-than-temporary-impairment (OTTI) loss on the security must be recognized.

In instances in which a determination is made that a credit loss (defined as the difference between the present value of the cash flows expected to be collected and the amortized cost basis) exists but the entity does not intend to sell the debt security and it is not more-likely-than-not that the entity will be required to sell the debt security before the anticipated recovery of its remaining amortized cost basis (i.e., the amortized cost basis less any current-period credit loss), ASC topic 320 changes the presentation and amount of the OTTI recognized in the income statement.

In these instances, the impairment is separated into the amount of the total impairment related to the credit loss and the amount of the total impairment related to all other factors. The amount of the total OTTI related to the credit loss is recognized in earnings. The amount of the total impairment related to all other factors is recognized in other comprehensive income (loss). The total OTTI is presented in the income statement with an offset for the amount of the total OTTI that is recognized in other comprehensive income (loss). In determining the amount of impairment related to credit loss, the Company uses a third party discounted cash flow model, several inputs for which require estimation and judgment. Among these inputs are projected deferral and default rates and estimated recovery rates. Realization of events different than that projected could result in a large variance in the values of the securities.

Additional information regarding investment securities can be found in Item 8, Notes 2 and 11 to the Consolidated Financial Statements and elsewhere in this Management's Discussion and Analysis.

### ***Income Taxes***

The provision for income taxes is based on income reported for financial statement purposes and differs from the amount of taxes currently payable, since certain income and expense items are reported for financial statement purposes in different periods than those for tax reporting purposes. Taxes are discussed in more detail in Item 8, Note 10 to the Consolidated Financial Statements. Accrued taxes represent the net estimated amount due or to be received from taxing authorities. In estimating accrued taxes, the Company assesses the relative merits and risks of the appropriate tax treatment of transactions taking into account statutory, judicial and regulatory guidance in the context of our tax position.

The Company accounts for income taxes using the asset and liability approach, the objective of which is to establish deferred tax assets and liabilities for the temporary differences between the financial reporting basis and tax basis of our assets and liabilities at enacted tax rates expected to be in effect when such amounts are realized or settled. We conduct periodic assessments of deferred tax assets to determine if it is more-likely-than-not that they will be realized. In making these assessments, we consider taxable income in prior periods, projected future taxable income, potential tax planning strategies and projected future reversals of deferred tax items. These assessments involve a certain degree of subjectivity which may change significantly depending on the related circumstances.

## **CORPORATE PROFILE**

The Company, with total assets of approximately \$711.1 million at December 31, 2017, is a bank holding company headquartered in Cortland, Ohio whose principle activity is to manage, supervise and otherwise serve as a source of strength to the Bank.

Cortland Bank is a state-chartered bank engaged in commercial and retail banking services. The Bank offers a full range of financial services to its local communities with an ongoing strategic focus on commercial banking relationships.

The Bank's results of operations depend primarily on net interest income, which, in part, is a direct result of the market interest rate environment. Net interest income is the difference between the interest income earned on interest-earning assets and the interest paid on interest-bearing liabilities. Net interest income is affected by the shape of the market yield curve, the repricing of interest-earning assets and interest-bearing liabilities and the prepayment rate of mortgage-related assets. Results of operations may be affected significantly by general and local economic conditions, particularly those with respect to changes in market interest rates, credit quality, governmental policies and actions of regulatory authority.

## **2017 OVERVIEW**

In 2017, the Company's net income was \$4.4 million compared to \$4.9 million in 2016. Amid more rigorous regulatory standards and an uncertain economy, the Company continues to follow its core strategic direction. Operating results reflect its commitment to growing loans and deposits in the markets in which it operates and in producing consistent positive earnings.

With the passage of the Tax Cuts and Jobs Act ("Tax Act"), tax law for corporations has several material changes effective beginning in 2018. The most significant change is the reduction in the corporate tax rate from 34% to 21%. Because this reduced rate was signed into law in December 2017, generally accepted accounting principles require recognition of the lower rate on the Company's deferred tax position as of December 31, 2017. As the Company is in a net deferred tax asset position, the reduction of this benefit resulted in a \$1.2 million additional charge to federal income tax expense in the Company's 2017 Consolidated Statements of Income.

Highlights of 2017 financial results:

- Diluted earnings per share (EPS) was \$0.99 for the full year 2017, compared to \$1.11 per diluted share for 2016.
- Normalized earnings (net income of \$4.4 million excluding the Tax Act adjustment of \$1.2 million) improved 15% to \$5.6 million.
- For 2017, NIM was 3.59%, compared to 3.63% for twelve months ended 2016.
- For 2017, net interest income was \$20.3 million, compared to \$19.6 million for 2016.
- For the years ended December 31, 2017 and 2016, non-interest income totaled \$5.2 million and \$4.6 million, respectively. Excluding investment security gains and losses of \$7,000 and \$419,000, respectively, for 2017 and 2016, non-interest income increased 23% to \$5.2 million for 2017 compared to \$4.2 million for 2016.
- Total deposits grew 9% to \$585.9 million at December 31, 2017, compared to \$539.9 million at the end of the December 31, 2016.
- Total loans increased 16% to \$487.5 million compared to \$419.8 million at December 31, 2016.
- Nonperforming assets declined to 0.85% of total assets at December 31, 2017, compared to 1.39% at December 31, 2016.
- The allowance for loan losses was 0.94% of total loans at December 31, 2017, compared to 1.16% a year earlier.
- The Company remained well-capitalized with total risk-based capital to risk-weighted assets of 14.26%.

In the midst of earnings pressures brought on by economic instability, interest rate compression and increased competition, the Company devoted substantial attention in 2017 and 2016 to profit improvement measures and balance sheet positioning. The Company's management team continues to focus on measures designed to maintain capital and to provide for adequate liquidity for lending and business development purposes. New strategies are being pursued to improve market penetration and product expansion, with the objective of increasing both the interest income and non-interest income revenue base.

Total shareholders' equity at December 31, 2017 was \$61.6 million, representing a ratio of equity capital to total assets of 8.7%. In comparison, total shareholders' equity was \$57.7 million at December 31, 2016, representing a ratio of equity capital to total assets of 8.8%. A component of shareholders' equity is accumulated other comprehensive income (loss), which includes the net after-tax impact of unrealized gains or losses on investment securities classified as available-for-sale. Net unrealized losses on available-for-sale investment securities, net of tax, were \$1.8 million at December 31, 2017, compared with net unrealized losses, net of tax, of \$2.9 million at December 31, 2016. Such unrealized gains or losses represent the difference, net of applicable income tax effect, between the estimated fair value and amortized cost of investment securities classified as available-for-sale.

Return on average equity was 7.25% in 2017, compared to 8.27% in 2016, while return on average assets measured 0.68% in 2017 and 0.80% in 2016. Book value per share increased by \$0.89 to \$13.94 at December 31, 2017 from \$13.05 at December 31, 2016. The price of the Company's common shares traded in a range between a low of \$17.00 and a high of \$21.00, closing the year at \$20.50 per share.

The Company continues to maintain capital sufficient to be deemed well capitalized under all regulatory measures. In the current regulatory environment, regulatory oversight bodies expect banks to maintain ratios above the statutory levels as a margin of safety.

### CERTAIN NON-GAAP MEASURES

Certain financial information has been determined by methods other than GAAP. Specifically, certain financial measures are based on core earnings rather than net income. Core earnings exclude income, expense, gains and losses that either are not reflective of ongoing operations or that are not expected to reoccur with any regularity or reoccur with a high degree of uncertainty and volatility. Such information may be useful to both investors and management and can aid them in understanding the Company's current performance trends and financial condition. Core earnings are a supplemental tool for analysis and not a substitute for GAAP net income. Reconciliation from GAAP net income to the non-GAAP measure of core earnings is referenced as part of management's discussion and analysis of quarterly and year-to-date financial results of operations.

Core earnings, which exclude non-recurring items, were \$4.7 million in 2017 and 2016, and \$4.4 million in 2015. Core earnings per share were \$1.07 in 2017 and 2016, and \$0.97 in 2015.

The following is a reconciliation between core earnings and earnings under GAAP:

	(Amounts in thousands, except per share data)		
	Years Ended December 31,		
	2017	2016	2015
GAAP earnings	\$ 4,350	\$ 4,871	\$ 4,378
Investment gains not in the ordinary course of business (net of tax) *	—	(191)	—
Net losses from the extinguishment of debt (net of tax) **	—	160	—
Gains recognized on Bank Owned Life Insurance policy (tax free)***	(898)	—	—
Change in corporate tax rate	1,246	—	—
Reversal of deferred tax valuation allowance	—	(93)	—
Core earnings	<u>\$ 4,698</u>	<u>\$ 4,747</u>	<u>\$ 4,378</u>
GAAP earnings per share	0.99	1.11	0.97
Investment gains not in the ordinary course of business (net of tax) *	—	(0.05)	—
Net losses from the extinguishment of debt (net of tax) **	—	0.03	—
Gains recognized on Bank Owned Life Insurance policy (tax free)***	(0.20)	—	—
Change in corporate tax rate	0.28	—	—
Reversal of deferred tax valuation allowance	—	(0.02)	—
Core earnings per share	<u>\$ 1.07</u>	<u>\$ 1.07</u>	<u>\$ 0.97</u>

\* Gains to offset the early payoff penalties on FHLB long-term notes.

\*\* Loss on the early payoff of FHLB long term debt.

\*\*\* Insurance proceeds received upon the death of a former executive that exceeded the cash value of the policy.

## BALANCE SHEET COMPOSITION

The following table illustrates, during the years presented, the mix of the Company's funding sources and the assets in which those funds are invested as a percentage of the Company's average total assets at December 31 for the periods indicated. Average assets totaled \$636.9 million in 2017 compared to \$608.3 million in 2016 and \$568.9 million in 2015.

	December 31,		
	2017	2016	2015
<b>Sources of Funds:</b>			
Deposits:			
Non-interest bearing	<b>18.3%</b>	18.4%	17.2%
Interest bearing	<b>64.6</b>	63.3	62.7
Long-term debt and other borrowings	<b>5.3</b>	6.0	7.7
Subordinated debt	<b>0.8</b>	0.8	0.9
Other non-interest bearing liabilities	<b>1.6</b>	1.8	1.5
Shareholders' equity	<b>9.4</b>	9.7	10.0
Total	<b>100.0%</b>	100.0%	100.0%
<b>Uses of Funds:</b>			
Loans, including loans held for sale	<b>65.2%</b>	64.1%	63.0%
Investment securities	<b>26.5</b>	27.4	29.2
Interest-earning deposits and other earning assets	<b>1.4</b>	1.4	1.0
Bank-owned life insurance	<b>2.7</b>	2.8	3.0
Partnerships and other investments	<b>1.4</b>	1.0	1.0
Other non-interest earning assets	<b>2.8</b>	3.3	2.8
Total	<b>100.0%</b>	100.0%	100.0%

Deposits continue to be the Company's primary source of funding. During 2017, the relative mix of deposits has remained steady with interest-bearing being the main source. Average non-interest bearing deposits totaled 22.1% of total average deposits in 2017, compared to 22.5% in 2016 and 21.6% in 2015. Additional information regarding deposits can be found in Item 8, Note 5 to the Consolidated Financial Statements and elsewhere in this Management's Discussion and Analysis.

The Company primarily invests funds in loans and securities. Loans continue to be the focus of the Company's asset allocation. Average securities increased \$2.0 million, or 1.2%, to \$168.7 million during 2017 from \$166.7 million in 2016, while average loans increased by \$25.1 million, or 6.4%, to \$415.3 million during 2017 from \$390.2 million in 2016.

## ASSET QUALITY

The Company's management regularly monitors and evaluates trends in asset quality. Loan review practices and procedures require detailed monthly analysis of delinquencies, nonperforming assets and other sensitive credits. Loans are moved to non-accrual status once they reach 90 days past due or when analysis of a borrower's creditworthiness indicates the collection of interest and principal is in doubt. Nonperforming loans include loans in non-accrual status, restructured loans and real estate acquired in satisfaction of debts previously contracted.

Additionally, as part of the Company's loan review process, management routinely evaluates risks which could potentially affect the ability to collect loan balances in their entirety. Reviews of individual credits, aggregate account relationships or any concentration of credits in particular industries are subject to a detailed loan review.

Gross income that would have been recorded in 2017 on these nonperforming loans, had they been in compliance with their original terms, was \$348,000. Interest income that actually was included in income on these loans amounted to \$307,000. In addition to nonperforming loans, nonperforming assets include nonperforming investment securities. Gross income that would have been recorded in 2017 on nonperforming investments, had they been in compliance with their original terms, was \$46,000. Interest income that actually was included in income on these investments amounted to \$42,000. There are no accruing loans which are contractually past due 90 days or more as to principal or interest payments.



The following table depicts the trend in these potentially problematic asset categories:

	(Amounts in thousands)				
	December 31,				
	2017	2016	2015	2014	2013
<b>Non-accrual loans:</b>					
Commercial	\$ —	\$ —	\$ 1,196	\$ 1,824	\$ 98
Commercial real estate	506	1,458	2,176	2,247	1,279
Residential real estate	247	1,265	1,252	1,331	481
Consumer - home equity	129	55	262	149	72
Consumer - other	—	—	—	6	16
Total non-accrual loans	882	2,778	4,886	5,557	1,946
Investment securities	895	825	778	779	1,203
Other real estate owned	—	—	61	40	33
Troubled debt restructured loans	4,232	5,508	6,656	3,680	4,174
Nonperforming assets	<u>\$ 6,009</u>	<u>\$ 9,111</u>	<u>\$ 12,381</u>	<u>\$ 10,056</u>	<u>\$ 7,356</u>
Loans past due greater than 30 days or on nonaccrual	<u>\$ 1,409</u>	<u>\$ 4,533</u>	<u>\$ 7,242</u>	<u>\$ 8,201</u>	<u>\$ 2,176</u>
	December 31,				
	2017	2016	2015	2014	2013
Non-accrual loans as a percentage of total loans	0.18%	0.66%	1.24%	1.54%	0.56%
Nonperforming assets as a percentage of total assets	0.85%	1.39%	2.02%	1.77%	1.32%
Nonperforming assets as a percentage of equity capital plus allowance for loan losses	9.08%	14.57%	20.01%	16.47%	13.80%

As of December 31, 2017, there were \$9.2 million in loans not included in this table where known information about borrowers' possible credit problems caused management to have some doubts as to the ability of these borrowers to comply with present loan payment terms and which may result in disclosure of such loans in this table.

Loans accounted for on a non-accrual basis ranged from a high of \$5.6 million in 2014 to a low of \$882,000 in 2017. Non-accrual loans in 2017 of \$882,000 is lower than the average of the past five years, which is \$3.2 million. The increase in non-accrual loans from 2013 to 2015 was mainly due to loans to one related group in both the commercial and commercial real estate categories which were resolved favorably in 2016. The increase in residential real estate in 2014 to 2016 is one loan for \$1.0 million which paid off in 2017. The total of all loans past due more than 30 days or on non-accrual ranged from a low of \$1.4 million in 2017 to a high of \$8.2 million in 2014. Loans charged-off, net of recoveries, was \$390,000 for 2017, compared to \$376,000 for 2016, \$463,000 for 2015, \$200,000 for 2014 and \$711,000 for 2013. The resulting ratios do not indicate any trends of concern from management's perspective.

Troubled-debt restructured loans are loans that have been modified when economic concessions have been granted to borrowers who have experienced or are expected to experience financial difficulties. In 2015, \$3.2 million in new troubled debt restructurings were added. There were none added in 2017, 2016 or 2014.

In 2017, the provision for loan losses was \$100,000, as general economic conditions improved and the Company's credit quality remained strong, along with a favorable settlement of a creditor in bankruptcy. In 2016 and 2015, the provision for loan losses was \$50,000 and \$455,000, respectively. Additional information regarding loans can be found in Item 8, Note 3 to the Consolidated Financial Statements and elsewhere in this Management's Discussion and Analysis.

At December 31, 2017, there was \$895,000 of the Company's holdings in trust preferred securities considered to be in non-accrual status. The quarterly interest payments for both of its investments in trust preferred securities had been placed in "payment in kind" status. Payment in kind status results in a temporary delay in the payment of interest. As a result of a delay in the collection of the interest payments, management placed these securities in non-accrual status. Current estimates indicate that the interest payment delays may exceed ten years.

## RESULTS OF OPERATIONS

	(Amounts in thousands)		
	December 31,		
	2017	2016	2015
Net interest income	\$ 20,302	\$ 19,637	\$ 18,506
Tax equivalent income adjustment for investment securities	931	905	858
Tax equivalent income adjustment for loans	14	16	24
Net interest income on a fully taxable equivalent basis	<u>\$ 21,247</u>	<u>\$ 20,558</u>	<u>\$ 19,388</u>
Interest and dividends on investment securities	\$ 4,151	\$ 3,957	\$ 4,185
Tax equivalent income adjustment for investment securities	931	905	858
Investment securities income on a fully taxable equivalent basis	<u>\$ 5,082</u>	<u>\$ 4,862</u>	<u>\$ 5,043</u>
Interest and fees on loans	\$ 19,243	\$ 18,554	\$ 16,909
Tax equivalent income adjustment for loans	14	16	24
Loan income on a fully taxable equivalent basis	<u>\$ 19,257</u>	<u>\$ 18,570</u>	<u>\$ 16,933</u>

### Analysis of Net Interest Income - Years Ended December 31, 2017 and 2016

Net interest income, the principal source of the Company's earnings, is the amount by which interest and fees generated by interest-earning assets, primarily loans and investment securities, exceed the interest cost of deposits and borrowed funds. On a fully taxable equivalent basis, net interest income measured \$21.2 million for 2017 and \$20.6 million for 2016. The resulting net interest margin was 3.59% for 2017 and 3.63% for 2016.

The increase in interest income, on a fully taxable equivalent basis, of \$961,000 is the product of a 4.9% year-over-year increase in average earning assets along with a 3 basis point decrease in yield. The increase in interest expense of \$272,000 was a product of a 3 basis point increase in rates paid and a 5.5% increase in average interest-bearing liabilities. The net result was a 3.4% increase in net interest income on a fully taxable equivalent basis, and a 4 basis point decrease in the Company's net interest margin on a growing asset base with a different mix.

On a fully taxable equivalent basis, income on investment securities available-for-sale and trading increased by \$220,000, or 4.5%. The average invested balances in these securities increased by \$2.0 million, or 1.2%, from the levels of a year ago. The increase in the average balance of investment securities was accompanied by an 8 basis point increase in the tax equivalent yield of the portfolio. The trading account was liquidated at the end of the second quarter of 2016. The Company will continue attempting to redeploy liquidity into loans which generate greater yields than securities. Any reinvestment into the securities portfolio may serve to decrease the yield due to the current low rate environment although many economists project a rising rate environment on the horizon. Additional information regarding investment securities can be found in Item 8, Notes 2 and 11 to the Consolidated Financial Statements and elsewhere in this Management's Discussion and Analysis.

On a fully taxable equivalent basis, income on loans increased by \$687,000, or 3.7%, for 2017 compared to the same period in 2016. A \$25.1 million increase in the average balance of the loan portfolio, or 6.4%, was accompanied by a 12 basis point decrease in the portfolio's tax equivalent yield. Despite the recent rise in short term interest rates, strong competition for good credits has kept offering rates lower. In addition, the amortization of the existing portfolio at higher rates decreases the effective yield. The commercial loan portfolio housed the majority of the increase in balances. Additional information regarding loans can be found in Item 8, Note 3 to the Consolidated Financial Statements and elsewhere in this Management's Discussion and Analysis.

Other interest income increased by \$54,000, or 122.7%, from the same period a year ago. The average balance of interest-earning deposits increased by \$435,000, or 5.3%. The yield increased by 59 basis points from 2016 to 2017, reflecting the recent increases in the federal funds rate. Management intends to remain fully invested, minimizing on-balance sheet liquidity.

Average interest-bearing demand deposits and money market accounts increased by \$31.0 million, or 22.6%, while average savings balances increased by \$1.1 million, or 1.0%. Total interest paid on interest-bearing demand deposits and money market accounts was \$751,000, a \$316,000 increase from last year. The average rate paid increased 13 basis points from 2016 to 2017. Total interest paid on savings accounts was \$90,000, a \$12,000 increase from last year. The average rate paid on savings accounts increased 1 basis point from 2016 to 2017. The average balance of time deposit products decreased by \$6.3 million, or 4.7%, as the average rate paid increased by 18 basis points, from 1.17% to 1.35%. Interest expense increased on time deposits by \$150,000 from the prior year. The current low-rate environment offers little opportunity for time deposit customers, except for periodic special rates offered on a limited

basis. Time deposits also include wholesale funds obtained at generally higher rates than in-market accounts. Additional information regarding deposits can be found in Item 8, Note 5 to the Consolidated Financial Statements and elsewhere in this Management's Discussion and Analysis.

Average borrowings and subordinated debt decreased by \$2.5 million while the average rate paid on borrowings decreased by 39 basis points. The Company elected to pay off two of its longest maturity FHLB notes in January 2016, \$4.5 million at an average rate of 4%. Of the \$419,000 in securities gains in 2016, \$289,000 was generated to offset the \$242,000 prepayment penalty on this early payoff. Alternative funding of \$3.5 million at 1.44% was used to replace the borrowings. Including a December 2016 maturity of \$2 million at 4.07%, \$13.5 million at an average rate of 4.15% matured in 2017. Refinancings for \$12 million at an average rate of 1.37% served to reduce funding costs in 2017 and beyond. Management continues to utilize short-term borrowings to bridge liquidity gaps. Additional information regarding FHLB Advances and Other Borrowings and Subordinated Debt can be found in Item 8, Notes 6 and 7 to the Consolidated Financial Statements and elsewhere in this Management's Discussion and Analysis.

### **Analysis of Net Interest Income - Years Ended December 31, 2016 and 2015**

Net interest income, the principal source of the Company's earnings, is the amount by which interest and fees generated by interest-earning assets, primarily loans and investment securities, exceed the interest cost of deposits and borrowed funds. On a fully taxable equivalent basis, net interest income measured \$20.6 million for 2016 and \$19.4 million for 2015. The resulting net interest margin was 3.63% for 2016 and 3.65% for 2015.

The increase in interest income, on a fully taxable equivalent basis, of \$1.5 million is the product of a 6.5% year-over-year increase in average earning assets along with a 1 basis point increase in yield. The increase in interest expense of \$311,000 was a product of a 4 basis point increase in rates paid and a 5.1% increase in average interest-bearing liabilities. The net result was a 6.0% increase in net interest income on a fully taxable equivalent basis, and a 2 basis point decrease in the Company's net interest margin on a growing asset base with a different mix.

On a fully taxable equivalent basis, income on investment securities available-for-sale and trading decreased by \$181,000, or 3.6%. The average invested balances in these securities increased by \$535,000, or 0.3%, from the levels of a year ago. The increase in the average balance of investment securities was accompanied by an 11 basis point decrease in the tax equivalent yield of the portfolio. As the reservoir for excess liquidity, the increase in investment securities year-over-year reflects the robust deposit growth generated during the year. The trading account was liquidated at the end of the second quarter of 2016. The Company continued attempting to redeploy liquidity into loans which generate greater yields than securities. Any reinvestment into the securities portfolio may serve to decrease the yield due to the current low rate environment although many economists project a rising rate environment on the horizon. Additional information regarding investment securities can be found in Item 8, Notes 2 and 11 to the Consolidated Financial Statements and elsewhere in this Management's Discussion and Analysis.

On a fully taxable equivalent basis, income on loans increased by \$1.6 million, or 9.7%, for 2016 compared to the same period in 2015. Supplementing this increase was the collection of \$296,000 of interest and fees on a nonperforming loan settled favorably in bankruptcy. A \$31.6 million increase in the average balance of the loan portfolio, or 8.8%, was accompanied by a 4 basis point increase in the portfolio's tax equivalent yield. Without the collection of the past due interest, the portfolio yield would have declined 8 basis points. New loan volume was near historic low interest rates, while strong competition for good credits also drives rates downward. The commercial loan portfolio housed the majority of the increase in balances. Additional information regarding loans can be found in Item 8, Note 3 to the Consolidated Financial Statements and elsewhere in this Management's Discussion and Analysis.

Other interest income increased by \$25,000, or 131.6%, from the same period a year ago. The average balance of interest-earning deposits increased by \$2.3 million, or 38.8%. The yield increased by 22 basis points from 2015 to 2016, reflecting the December 2015 rise in the federal funds rate. Management intended to remain fully invested, minimizing on-balance sheet liquidity.

Average interest-bearing demand deposits and money market accounts increased by \$27.4 million, or 24.9%, while average savings balances decreased by \$147,000, or 0.1%. Total interest paid on interest-bearing demand deposits and money market accounts was \$435,000, a \$166,000 increase from last year. The yield increased 8 basis points from 2015 to 2016. Total interest paid on savings accounts was \$78,000, an \$11,000 increase from last year. The average rate paid on savings accounts increased 1 basis point from 2015 to 2016. The average balance of time deposit products increased by \$1.0 million, or 0.8%, as the average rate paid increased by 17 basis points, from 1.00% to 1.17%. Interest expense increased on time deposits by \$247,000 from the prior year. The current low-rate environment offered little opportunity for deposit customers, except for periodic special rates offered on a limited basis. The Company's offering of the Kasasa suite of accounts was a major factor in the growth of interest-bearing demand accounts. Additional information regarding deposits can be found in Item 8, Note 5 to the Consolidated Financial Statements and elsewhere in this Management's Discussion and Analysis.

Average borrowings and subordinated debt decreased by \$7.5 million while the average rate paid on borrowings decreased by 6 basis points. The Company elected to pay off two of its longest maturity FHLB notes in January 2016, \$4.5 million at an average rate of 4%. Of the \$419,000 in securities gains, \$289,000 was generated to offset the \$242,000 prepayment penalty on this early payoff. Alternative funding of \$3.5 million at 1.44% was used to replace the borrowings. Annualized interest expense savings of \$130,000 is expected from the transaction. After a December 2016 maturity of \$2 million at 4.07%, three long-term FHLB notes remain at an average rate of 4.16%, all maturing by September of 2017, which was expected to reduce 2017 funding costs by \$275,000. Management continued to utilize short-term borrowings to bridge liquidity gaps. Additional information regarding FHLB Advances and Other Borrowings and Subordinated Debt can be found in Item 8, Notes 6 and 7 to the Consolidated Financial Statements and elsewhere in this Management's Discussion and Analysis.

The following table provides a detailed analysis of changes in net interest income on a tax equivalent basis, identifying that portion of the change that is due to a change in the volume of average assets and liabilities outstanding versus that portion which is due to a change in the average yields on earning assets and average rates on interest-bearing liabilities. Changes in interest due to both rate and volume which cannot be segregated have been allocated to rate and volume changes in proportion to the relationship of the absolute dollar amounts of the change in each.

	(Amounts in thousands)					
	2017 Compared to 2016			2016 Compared to 2015		
	Volume	Rate	Total	Volume	Rate	Total
Increase (decrease) in interest income:						
Interest-earning deposits and other money markets	\$ 2	\$ 52	\$ 54	\$ 9	\$ 16	\$ 25
Investment securities available-for-sale:						
U.S. Government agencies and corporations	66	(6)	60	(203)	—	(203)
Obligations of states and political subdivisions	293	(152)	141	470	(131)	339
Mortgage-backed and related securities	(106)	151	45	(109)	(80)	(189)
U.S. Government-guaranteed small business administration pools	38	2	40	142	6	148
Other securities	(4)	32	28	(12)	4	(8)
Trading securities	(94)	—	(94)	(136)	(132)	(268)
Loans	1,172	(485)	687	1,501	136	1,637
Total interest income change	1,367	(406)	961	1,662	(181)	1,481
Increase (decrease) in interest expense:						
Interest-bearing demand deposits	112	204	316	76	90	166
Savings deposits	1	11	12	0	12	12
Time deposits	(76)	226	150	17	230	247
Securities sold under agreements to repurchase	(1)	1	—	(2)	5	3
FHLB advances - short term	22	80	102	(3)	36	33
FHLB advances - long term	(148)	(186)	(334)	(140)	(31)	(171)
Subordinated debt	—	26	26	—	21	21
Total interest expense change	(90)	362	272	(52)	363	311
Increase (decrease) in net interest income on a taxable equivalent basis	\$ 1,457	\$ (768)	\$ 689	\$ 1,714	\$ (544)	\$ 1,170

## PROVISION FOR LOAN LOSSES, NON-INTEREST INCOME, NON-INTEREST EXPENSE & FEDERAL INCOME TAX

During 2017, 2016 and 2015, the amount charged to operations as a provision for loan loss was adjusted to account for charge-offs against the allowance, as well as an increase in loan balances recorded in the portfolio, expected losses on specific problem loans and several qualitative factors, including factors specific to the local economy and to industries operating in the local market. The Company has allocated a portion of the allowance to a number of specific problem loans through 2017, \$625,000 of which was allocated to one commercial loan customer in 2017. The Company has not experienced significant deterioration in any loan type, including the residential real estate portfolios or the commercial real estate loan portfolio, and accordingly has not added any special provision for these loan types. For the year ended December 31, 2017, the provision for loan losses was \$100,000, with net charge-offs of \$390,000. For the year ended December 31, 2016, the provision for loan losses was \$50,000, with net charge-offs of \$376,000. The lower provision in 2016 was because of a favorable outcome of a credit relationship that had a specific reserve in place that was removed. There was a favorable ruling in a bankruptcy court surrounding the eventual sale of a business to which the Company lent funds, \$2.1 million of which was included in nonaccrual loans. The company resolved a substantial portion of the delinquent loan, allowing the portion of the allowance for loan losses allocated to this credit to be used for other problem loans. For the year ended December 31, 2015, the provision for loan losses was \$455,000, which was fairly close to net charge-offs of \$463,000. Provision expense levels are in recognition of loan growth and a changing composition of the loan portfolio as the Company takes aim at managing its balance sheet with a commercially-oriented focus.

The following table provides a detailed analysis of non-interest income:

	(Amounts in thousands)		
	December 31,		
	2017	2016	2015
Fees for customer services	\$ 2,241	\$ 2,103	\$ 2,019
Mortgage banking gains, net	1,074	1,248	785
Earnings on bank-owned life insurance	1,203	328	338
Wealth management	35	95	435
Other real estate gains	170	13	—
Other non-interest income	436	391	268
Non-interest income, excluding investment gains	5,159	4,178	3,845
Investment securities available-for-sale gains, net	7	466	75
Trading securities losses, net	—	(47)	(11)
Total non-interest income	<u>\$ 5,166</u>	<u>\$ 4,597</u>	<u>\$ 3,909</u>

Total non-interest income, excluding investment gains, increased by \$981,000, or 23.5%, for 2017 compared to an increase of \$333,000, or 8.7%, for 2016. After gains on investment securities and impairment losses, non-interest income increased by \$569,000, or 12.4%, in 2017 compared to an increase of \$688,000, or 17.6%, in 2016.

Fees for customer services increased by \$138,000, or 6.6% in 2017, compared to an increase of \$84,000, or 4.2%, in the prior year driven by customer transactions on deposit accounts.

Mortgage banking gains totaled \$1.1 million in 2017, \$1.2 million in 2016 and \$785,000 in 2015, reflecting the tightening of margins on loans sales since the November election.

Wealth management income of \$35,000 was recorded in 2017, compared to \$95,000 in 2016 and \$435,000 in 2015. After operating its own non-deposit investment services program, the Bank is in a start-up phase of its new Cortland Private Wealth Management program, which partners with an external platform and advisory group to offer a full suite of program options, including private asset management, financial and estate planning, retirement plans, insurance and advisory services.

Earnings on bank-owned life insurance increased by \$875,000. Proceeds received on a policy upon the death of a former executive exceeded the cash value of the policy by \$898,000. Other real estate gains were \$170,000 on the sale of property that was recorded as other real estate owned, with \$13,000 recorded in 2016 and none in 2015.

Net gains on the sale of available-for-sale investment securities decreased by \$459,000 in 2017 from year ago levels. Included in the total in 2016 is \$289,000 of gains generated to offset losses from the extinguishment of debt. In 2016, trading securities losses increased by \$36,000, reflective of the decline in the secondary market activity for municipal securities in which the trading account operated. In June 2016, the trading account was liquidated and remained dormant throughout 2017. Additional information regarding investment securities can be found in Item 8, Notes 2 and 11 to the Consolidated Financial Statements and elsewhere in this Management's Discussion and Analysis.



The following table provides a summary of non-interest expenses:

	(Amounts in thousands)		
	December 31,		
	2017	2016	2015
Salaries and employee benefits	\$ 10,631	\$ 10,169	\$ 9,311
Net occupancy and equipment	2,331	2,151	2,019
State and local taxes	463	455	389
FDIC insurance	199	251	304
Professional fees	786	882	830
Advertising and marketing	478	527	454
Net losses from the extinguishment of debt	—	242	—
Data processing fees	251	250	263
Other non-interest expense	3,462	3,259	2,793
Total non-interest expenses	<u>\$ 18,601</u>	<u>\$ 18,186</u>	<u>\$ 16,363</u>

Total non-interest expenses increased by \$415,000, or 2.3%, in 2017. This compares to an increase of \$1.8 million, or 11.1%, in 2016.

During 2017, expenditures for salaries and employee benefits increased by \$462,000, or 4.5%, and in 2016 increased by \$858,000, or 9.2%. The personnel increase for both years was partially driven by new branches, and continuing initiatives to geographically expand mortgage origination, commercial lending and private banking, which engages higher compensated employees. Full-time equivalent employment averaged 160 in 2017 compared to 163 in 2016 and 152 in 2015.

Salaries and employee benefits represent 57.2% of all non-interest expenses in 2017, 55.9% in 2016 and 56.9% in 2015. The following table details components of these increases and decreases.

	Amounts (in thousands)			Percentages		
	December 31,			December 31,		
	2017	2016	2015	2017	2016	2015
Salaries	\$ 330	\$ 813	\$ 176	4.1%	11.2%	2.5%
Employee benefits	122	115	132	4.8	4.7	5.7
	452	928	308	4.3	9.6	3.3
Deferred loan origination costs	10	(70)	(144)	(2.3)	19.6	67.3
Total	<u>\$ 462</u>	<u>\$ 858</u>	<u>\$ 164</u>	<u>4.5%</u>	<u>9.2%</u>	<u>1.8%</u>

Salary expense per employee averaged \$52,000 in 2017 and \$49,000 in 2016 and \$48,000 in 2015. Average earning assets per employee measured approximately \$4.1 million in 2017 and \$3.8 million in 2016 and \$3.5 million in 2015.

Charges for insurance premiums paid to the FDIC decreased from 2015 amounts because of a reduction in assessment rates effective September 30, 2016. Deposits are insured by the FDIC up to a maximum amount, which is generally \$250,000 per depositor subject to aggregation rules. As an FDIC-insured institution, the Bank is required to pay deposit insurance premium assessments to the FDIC. State and local taxes increased by \$8,000, or 1.8%, in 2017, compared to an increase of \$66,000, or 17.0%, in 2016, reflecting the growing shareholders' equity on which the state tax is based. Advertising and marketing expenses decreased by \$49,000, or 9.3%, from 2016 to 2017 compared to an increase of \$73,000, or 16.1%, from 2015 to 2016. The increase in 2016 is due to the initiative to rebrand the Bank, increased community support and advertising and promoting the new Kasasa suite of products. In 2016, there was a one-time loss from the extinguishment of debt of \$242,000. This loss is related to the early payoff of long term advances with the Federal Home Loan Bank and was offset by securities gains. Additionally, payoff of this debt will result in annual savings in interest expense. All other categories of non-interest expenses increased \$289,000, or 4.3%, in 2017 compared to an increase of \$637,000, or 10.8%, in 2016. These expense categories are subject to fluctuation due to non-recurring items. Contributing to increased expenses in 2017 were expenses relating to a new full-service branch which opened in 2017 and continued investment into information technology relative to improved security monitoring, improved operational performance and enhanced customer account analysis. Contributing to increased expenses in 2016 were ongoing expenses relating to the new full-service branch which opened in September of 2015, and two financial service centers which opened in 2015, rebranding related charges and expenses relating to the preparations of opening the new full-service branch in early January 2017.

Income before federal income tax expense amounted to \$6.8 million for 2017, compared to \$6.0 million and \$5.6 million for 2016 and 2015, respectively. The effective tax rate was 35.7% in 2017, 18.8% in 2016 and 21.8% in 2015, resulting in income tax expense of \$2.4 million in 2017, \$1.1 million in 2016 and \$1.2 million in 2015. The increase in the effective tax rate in 2017 was a result of the

Tax Act, which increased the deferred tax charges by \$1.2 million, or 18.4%. A \$93,000 reversal of a deferred tax valuation reserve, recognized in 2016, contributed to the lower effective tax rate in 2016. The 2015 effective rate is normalized based on the current rate of profitability and tax-free components of the revenue stream.

The effective federal income tax rate varies from the applicable U.S. statutory federal income tax rate of 34% due to the following differences:

	December 31,		
	2017	2016	2015
Provision at statutory rate	<b>34.00%</b>	34.00%	34.00%
(Deduct) add tax effects of:			
Earnings on bank-owned life insurance-net	<b>(6.11)</b>	(1.86)	(2.05)
Non-taxable interest income	<b>(9.80)</b>	(10.47)	(10.72)
Change in corporate tax rate	<b>18.41</b>	—	—
Low income housing tax credits	<b>(2.21)</b>	(2.37)	(0.97)
Deferred tax valuation reversal	—	(2)	—
Non-deductible expenses	<b>1.43</b>	1.04	1.52
Federal income tax effective rate	<b><u>35.72%</u></b>	<u>18.79%</u>	<u>21.78%</u>

Net income registered \$4.4 million in 2017, \$4.9 million in 2016 and \$4.4 million in 2015, representing per share amounts of \$0.99 in 2017, \$1.11 in 2016 and \$0.97 in 2015. Cash dividends of \$0.39, \$0.28 and \$0.24 per share were paid to shareholders of record in 2017, 2016 and 2015, respectively.

The following table shows unaudited financial results by quarter:

	(Amounts in thousands)							
	For the 2017 quarter ended:				For the 2016 quarter ended:			
	Dec. 31	Sept. 30	June 30	Mar. 31	Dec. 31	Sept. 30	June 30	Mar. 31
Interest income	<b>\$ 6,129</b>	<b>\$ 5,862</b>	<b>\$ 5,805</b>	<b>\$ 5,696</b>	\$ 5,762	\$ 5,660	\$ 5,740	\$5,393
Interest expense	<b>848</b>	<b>800</b>	<b>783</b>	<b>759</b>	764	743	719	692
Net interest income	<b>5,281</b>	<b>5,062</b>	<b>5,022</b>	<b>4,937</b>	4,998	4,917	5,021	4,701
Loan loss provision	—	<b>100</b>	—	—	—	50	—	—
Security gains (losses), net	<b>(17)</b>	<b>(7)</b>	<b>22</b>	<b>9</b>	8	83	4	324
Mortgage banking gains, net	<b>243</b>	<b>315</b>	<b>322</b>	<b>194</b>	93	341	465	349
Other income	<b>721</b>	<b>1,879</b>	<b>788</b>	<b>697</b>	804	696	696	734
Other expenses	<b>4,603</b>	<b>4,665</b>	<b>4,686</b>	<b>4,647</b>	4,489	4,479	4,734	4,484
Income before tax	<b>1,625</b>	<b>2,484</b>	<b>1,468</b>	<b>1,190</b>	1,414	1,508	1,452	1,624
Federal income tax expense	<b>1,604</b>	<b>337</b>	<b>286</b>	<b>190</b>	273	313	279	262
Net income	<b><u>\$ 21</u></b>	<b><u>\$ 2,147</u></b>	<b><u>\$ 1,182</u></b>	<b><u>\$ 1,000</u></b>	<u>\$ 1,141</u>	<u>\$ 1,195</u>	<u>\$ 1,173</u>	<u>\$1,362</u>
Net income per share	<b><u>\$ 0.01</u></b>	<b><u>\$ 0.49</u></b>	<b><u>\$ 0.26</u></b>	<b><u>\$ 0.23</u></b>	<u>\$ 0.26</u>	<u>\$ 0.27</u>	<u>\$ 0.27</u>	<u>\$ 0.31</u>
Net interest income (fully tax-equivalent basis)	<b>\$ 5,524</b>	<b>\$ 5,301</b>	<b>\$ 5,248</b>	<b>\$ 5,174</b>	\$ 5,230	\$ 5,147	\$ 5,262	\$4,919
Net interest rate spread	<b>3.45%</b>	<b>3.43%</b>	<b>3.39%</b>	<b>3.36%</b>	3.41%	3.45%	3.60%	3.42%
Net interest margin	<b>3.65%</b>	<b>3.61%</b>	<b>3.56%</b>	<b>3.52%</b>	3.58%	3.63%	3.77%	3.58%

## ALLOWANCE FOR LOAN LOSSES

The allowance for loan losses is a reserve established through a provision for loan losses charged to expense, which represents management's best estimate of probable losses that have been incurred within the existing portfolio of loans. The allowance, with the judgment of management, is necessary to reserve for estimated loan losses on risks inherent in the loan portfolio. Accordingly, the methodology to establish the amount of the allowance is based on historical loss experience by type of credit and internal risk grade, specific homogeneous risk pools, and specific loss allocations, with adjustments for current events and conditions. The Company's process for determining the appropriate level of the allowance for loan losses is designed to account for credit deterioration as it occurs.

The Company's allowance for loan loss methodology consists of three elements: (i) specific valuation allowances on probable losses on specific loans; (ii) historical valuation allowances based on historical loan loss experience for similar loans with similar characteristics and trends; and (iii) general valuation allowances based on general economic conditions and other qualitative risk factors both internal and external to the Company.

The allowances established for probable losses on specific loans are based on recurring analyses and evaluations of classified loans. Loans are categorized into risk grade classifications based on an internal credit risk grading process that evaluates, among other things: (i) the obligor's ability to repay; (ii) the underlying collateral, if any; and (iii) the economic environment and industry in which the borrower operates. The Bank currently divides the loan and lease portfolio into the following major categories: 1) Pooled Loans (unclassified) with similar risk characteristics; 2) Substandard Loans (classified) defined as being inadequately protected by current sound net worth, paying capacity of the borrower, or pledged collateral; 3) Special Mention (classified) defined as having potential weaknesses that deserve management's close attention. If left uncorrected, these potential weaknesses may, at some future date, result in the deterioration of the repayment prospects for the credit or the Bank's credit position; 4) Loss or doubtful loans (classified) have all the weaknesses of the previous classifications, with the added characteristic that the weaknesses make collection or liquidation in full, on the basis of currently existing facts, conditions, and values highly questionable and improbable; and 5) Impaired Loans which generally include non-accrual loans. Once a loan is assigned a risk grade of classified, the loan review officer assesses whether the loan is to be evaluated for impairment based on the Company policy. A portion of the allowance for loan loss is specifically allocated to those loans which are evaluated for impairment and determined to be impaired. Specific valuation allowances are determined by analyzing the borrower's ability to repay amounts owed, collateral deficiencies, the relative risk grade of the loan and economic conditions affecting the borrower's industry, among other things. If after review, the loan is not considered to be impaired, the loan is included with a pool of similar loans that is assigned a valuation allowance calculated based on the historical loss experience and qualitative factors of the pool type. The valuation allowance is calculated based on the historical loss experience of specific types of classified loans. The Company calculates historical loss ratios for pools of loans with similar characteristics based on the proportion of actual charge-offs experienced to the total population of loans in the pool. The historical loss ratios are updated quarterly based on actual charge-off experience.

A general valuation allowance is established for pools of homogeneous loans based upon the product of the historical loss ratio adjusted for qualitative factors and the total dollar amount of the loans in the pool. Specific qualitative factors considered by management include trends in volume or terms, changes in lending policy levels and trends in charge-offs, classification and non-accrual loans, concentrations of credit and local and national economic factors. The Company's pools of similar loans include similarly risk-graded groups of commercial loans, commercial real estate loans, residential real estate loans, home equity loans and other consumer loans. Beginning at year-end 2017, due to their growing significance, the pools of commercial and commercial real estate loans are also broken out further by industry sectors when analyzing the related pools. These industry sectors include non-residential buildings; skilled nursing and nursing care; residential real estate lessors, agents and managers; hotel and motels and trucking. Additional factors are used on pools of loans considered special mention; specifically, levels and trends in classification, declining trends in financial performance, structure and lack of performance measures and migration from special mention to substandard. For loans graded as substandard, a separate historical loss rate is calculated as a percent of charge-offs net of recoveries to the balance of substandard loans, which results in a higher historical loss factor. This is also adjusted for the qualitative factors discussed previously.

Loans identified as losses by management, internal loan review and/or bank examiners are charged off. Furthermore, consumer loan accounts are charged off in accordance with regulatory requirements.

The Company maintains an allowance for losses on unfunded commercial lending commitments to provide for the risk of loss inherent in these arrangements. The allowance is computed using a methodology similar to that used to determine the allowance for loan losses. This allowance is reported as a liability on the consolidated balance sheets within other liabilities, while the corresponding provision for these losses is recorded as a component of other non-interest expenses. At both December 31, 2017 and 2016, this allowance was \$84,000.

Portions of the allowance may be allocated for specific credits; however, the entire allowance is available for any credit that, in management's judgment, should be charged off. While management utilizes its best judgment and information available, the ultimate adequacy of the allowance is dependent upon a variety of factors beyond the Company's control, including the performance of the Company's loan portfolio, the economy, changes in interest rates and the view of the regulatory authorities toward loan classifications.

Although management believes the Company uses the best information available to make allowance for loan loss determinations, future adjustments could be necessary if circumstances or economic conditions differ substantially from the assumptions used in making our initial determinations. Increased levels of job loss and high unemployment, home foreclosures and business failures could result in increased levels of nonperforming assets and charge-offs, increased loan loss provisions and reductions in income. Additionally, as an integral part of their examination process, bank regulatory agencies periodically review our allowance for loan losses. The banking agencies could require the recognition of additions to the allowance for loan loss based on their judgment of information available to them at the time of their examination.

The following is an analysis of changes in the allowance for loan losses for the period ended:

	(Amounts in thousands)				
	December 31,				
	2017	2016	2015	2014	2013
Balance at beginning of year	\$ 4,868	\$ 5,194	\$ 5,202	\$ 3,764	\$ 3,825
Loan losses:					
Commercial	—	—	(470)	(123)	(1)
Commercial real estate	(654)	(287)	(84)	(186)	(782)
Residential real estate	(14)	(35)	(45)	(93)	(81)
Consumer - home equity	(26)	(144)	—	(48)	(12)
Consumer - other	(146)	(148)	(124)	(144)	(146)
Total	(840)	(614)	(723)	(594)	(1,022)
Recoveries on previous loan losses:					
Commercial	388	117	134	274	167
Commercial real estate	—	35	10	3	11
Residential real estate	5	2	37	16	26
Consumer - home equity	10	23	17	24	18
Consumer - other	47	61	62	77	89
Total	450	238	260	394	311
Net loan losses	(390)	(376)	(463)	(200)	(711)
Provision charged to operations	100	50	455	1,638	650
Balance at end of year	<u>\$ 4,578</u>	<u>\$ 4,868</u>	<u>\$ 5,194</u>	<u>\$ 5,202</u>	<u>\$ 3,764</u>
Ratio of net loan losses to average total loans outstanding	<u>0.09%</u>	<u>0.10%</u>	<u>0.13%</u>	<u>0.06%</u>	<u>0.23%</u>
Ratio of loan loss allowance to total loans	<u>0.94%</u>	<u>1.16%</u>	<u>1.32%</u>	<u>1.44%</u>	<u>1.09%</u>

Included in the \$654,000 commercial real estate charge-off in 2017 is a loan for \$352,000 which had a \$148,000 specific reserve. The \$470,000 commercial charge-off in 2015 contains a \$468,000 charge-off to an isolated credit relationship that already had a specific reserve in place. The \$782,000 commercial real estate charge-off in 2013 contains \$710,000 in charge-offs to a single borrower which had \$530,000 in a related specific allowance prior to the charge-off.

The following is an allocation of the year end allowance for loan losses and the percentage to total loans. The allowance has been allocated according to the amount deemed to be reasonably necessary to provide for the possibility of losses being incurred within the following categories of loans as of:

	(Amounts in thousands)									
	December 31,									
	2017		2016		2015		2014		2013	
	Balance	%	Balance	%	Balance	%	Balance	%	Balance	%
Commercial	\$ 1,591	0.3	\$ 1,394	0.3	\$ 1,977	0.5	\$ 2,064	0.6	\$ 593	0.2
Commercial real estate	2,702	0.6	3,072	0.7	2,926	0.7	2,754	0.8	2,638	0.8
Residential real estate	117	—	163	—	153	—	229	0.1	356	0.1
Consumer - home equity	70	—	150	—	52	—	60	—	88	—
Consumer - other	98	—	89	—	86	—	95	—	89	—
Total	<u>\$ 4,578</u>		<u>\$ 4,868</u>		<u>\$ 5,194</u>		<u>\$ 5,202</u>		<u>\$ 3,764</u>	

The allocations of the allowance as shown in the previous table should not be interpreted as an indication that future loan losses will occur in the same proportions or that the allocations indicate future loan loss trends. Furthermore, the portion allocated to each loan category is not the total amount available for future losses that might occur within such categories since the total allowance is applicable to the entire portfolio, and allocation of a portion of the allowance to one category of loans does not preclude availability to absorb losses in other categories.

## LOAN PORTFOLIO

The following table represents the composition of the loan portfolio as of:

	(Amounts in thousands)									
	December 31,									
	2017		2016		2015		2014		2013	
	Balance	%	Balance	%	Balance	%	Balance	%	Balance	%
Commercial	\$113,341	23.3	\$ 96,281	22.9	\$ 84,613	21.5	\$ 72,330	20.1	\$ 73,643	21.2
Commercial real estate	283,135	58.1	238,692	56.9	237,137	60.1	223,536	62.1	206,744	59.6
Residential real estate	62,071	12.7	57,008	13.6	45,414	11.5	38,875	10.8	42,288	12.2
Consumer - home equity	26,018	5.3	25,061	6.0	23,334	5.9	21,328	5.9	19,510	5.6
Consumer - other	2,925	0.6	2,726	0.6	3,756	1.0	4,116	1.1	4,648	1.4
Total loans	<u>\$487,490</u>		<u>\$419,768</u>		<u>\$394,254</u>		<u>\$360,185</u>		<u>\$346,833</u>	

The following schedule sets forth maturities based on remaining scheduled repayments of principal or next re-pricing opportunity for loans (excluding residential real estate, consumer- home equity and consumer-other).

	(Amounts in thousands)			
	December 31, 2017			
	1 Year or Less	Over 1 Year to 5 Years	Over 5 Years	Total
Commercial	\$ 82,319	\$ 17,976	\$ 13,046	\$ 113,341
Commercial real estate	70,243	118,174	94,718	283,135
Total loans	<u>\$ 152,562</u>	<u>\$ 136,150</u>	<u>\$ 107,764</u>	<u>\$ 396,476</u>

The following schedule sets forth loans based on next re-pricing opportunity for floating and adjustable interest rate products, and by remaining scheduled principal payments for loan products with fixed rates of interest. Residential real estate, consumer - home equity and consumer – other loans have again been excluded.

	(Amounts in thousands)		
	December 31, 2017		
	1 Year or Less	Over 1 Year	Total
Floating or adjustable rates of interest	\$ 148,200	\$ 119,119	\$ 267,319
Fixed rates of interest	4,362	124,795	129,157
Total loans	<u>\$ 152,562</u>	<u>\$ 243,914</u>	<u>\$ 396,476</u>

The Company recorded an increase of \$67.7 million in the loan portfolio in 2017 from the level of \$419.8 million recorded at December 31, 2016. Gross loans as a percentage of earning assets stood at 73.6% as of December 31, 2017 and 68.6% at December 31, 2016. The loan-to-deposit ratio at December 31, 2017 was 83.7% as compared to 78.6% at December 31, 2016. Despite the slow economic recovery in the region, the Bank posted year-over-year growth in total loans of 16.1%. As the balance sheet is adequately structured to accommodate additional loan growth, management remains committed to fulfilling the credit needs of creditworthy customers. Included in year-end total loans are 60-day or less loans closed in December 2017 for \$43.0 million, compared to \$29.7 million in 2016. Absent the short-term year end transaction, the Company reported core loan year over year growth of 14% and 5.6 %, respectively for 2017 and 2016. At December 31, 2017, the loan loss allowance of \$4.6 million represented approximately 0.9% of outstanding loans, and at December 31, 2016, the loan loss allowance of \$4.9 million represented approximately 1.2% of outstanding loans.

The portion of the loan portfolio represented by commercial loans (including commercial real estate) modestly increased from 79.8% in 2016 to 81.4% in 2017. Consumer loans (including home equity loans) were approximately 5.9% of the loan portfolio in 2017 and 6.6% in 2016. Between 2016 and 2017, the balance of residential real estate loans in relationship to total loans decreased slightly from 13.6% to 12.7%. However, year over year balances grew \$5.1 million or 8.9% as the bank placed quality, non-secondary market qualified and construction loans in the portfolio. The Bank's majority of mortgage originations are sold to the secondary market in order to take advantage of historically low interest rates as management does not intend to take on material long term interest rate risk within the portfolio yields.



Commercial, commercial real estate and residential real estate loans continue to comprise the largest share of the Company's loan portfolio. At the end of 2017, commercial, commercial real estate and residential real estate loans comprised a combined 94.1% of the portfolio compared to 93.0% at December 31, 2013, reflecting a consistent strategy of portfolio diversification over the five-year period. The loan portfolio at December 31, 2017 also included home equity loans at 5.3% and consumer installment loans at 0.6%. These percentages compare to home equity loans at 5.6% and consumer installment loans at 1.4% on December 31, 2013.

The commercial loan portfolio, which includes both commercial and commercial real estate (CRE) loans, is \$396.5 million at December 31, 2017, an increase of \$61.5 million from the balance of \$335.0 million recorded at December 31, 2016, and represents 18.4% growth. Commercial loans, including lines of credit, increased by \$17.1 million, or 17.7%, during the year and represented 23.3% of the portfolio, or a 0.4% composition increase over the prior period. CRE loans increased \$44.4 million, or 18.6%, which substantially represents investment real estate supported by third-party rents and leases along with other known Bank concentrations such as Skilled Nursing, Assisted Living, Residential Lessors (including Multi-family) and Hotels that are classified as non-owner occupied CRE. At December 31, 2017, the total CRE portfolio consisted of 26.6% in owner-occupied real estate and 73.4% in non-owner occupied real estate. The increase in CRE loans was a direct result of management taking strategic advantage of competitive market conditions and the Bank's considerable liquidity position since 2010. The CRE portfolio was also enhanced by lending into the Skilled Nursing, Personal Health Care industries and Multi-family. In 2006, the federal banking regulatory agencies published interagency guidance on CRE Concentration Risk Management stating that if total commercial real estate concentration exceeded 300% of a bank's total capital (or if the CRE portfolio increased by over 50% in the preceding 3 years), the portfolio may represent significant concentration risk and additional monitoring may be required. The Bank's CRE concentration, excluding owner-occupied real estate, as of December 31, 2017 was \$210.5 million, which is 298.5% of total unimpaired or risk-based capital, compared to 252.2% for 2016. Although the Company reflected 18.6% CRE balance growth and slightly increased its concentration risk relative to capital, CRE reflected a nominal 0.6% growth in the prior year 2016 and a 26.7% growth over the past three years. Management also believes that its current level of credit review, portfolio monitoring and stress testing adequately assures that the Bank is mitigating CRE concentration levels. In a strategic effort to diversify, the Bank continues to develop its commercial loans and, as such, the December 31, 2017 balance of \$113.3 million represents 28.6% of the total commercial loan portfolio, which approximates the period ended December 31, 2016. However, excluding the year-end, 60-day or less, cash-secured loans that were increased by \$13.3 million from 2016 to 2017, commercial loans grew by \$4.0 million, or 6.0%, from 2016 to 2017. In addition, residential loans grew by \$5.1 million, or 8.9%, for the same period.

Loan personnel will continue to aggressively pursue both commercial and small business opportunities supported by product incentives and marketing efforts. When necessary, management will continue to offer competitive fixed-rate and derivative pricing options on commercial real estate products to qualifying customers in an effort to establish new business relationships, retain existing relationships, and capture additional market share. The Bank's lending function continues to provide business services to a wide array of medium and small businesses, including but not limited to, commercial and industrial accounts such as health care facilities, grocery stores, manufacturers, trucking companies, physicians and medical groups, service contractors, restaurants, hospitality industry companies, retailers, wholesalers, educational institutions and other political subdivisions as well as commercial and residential real estate lessors, developers and builders.

Commercial and small business loans are originated by commercial loan personnel and other loan personnel assigned to the Bank's offices within various geographical regions. These loans are all processed in accordance with established business loan underwriting standards and practices.

The following table provides an overview of commercial loans by various business sectors reflecting the areas of largest concentration. It should be noted that these are current loan balances including executed commitments to fund and do not reflect existing commitments that have not been accepted or executed.

	(Amounts in thousands)					
	2017		December 31, 2016		2015	
	Balances	% of Portfolio	Balances	% of Portfolio	Balances	% of Portfolio
Non-residential building/apartment building	\$ 79,918	20.16	\$ 70,399	21.02	\$ 65,308	20.30
Residential real estate lessors, agents and managers (including multi-family)	51,431	12.97	27,016	8.07	16,032	4.98
Skilled nursing	26,805	6.76	29,929	8.93	36,119	11.23
Hotels/motels	22,072	5.57	23,285	6.95	29,215	9.08
Trucking/courier services	21,613	5.45	21,329	6.37	19,941	6.20

The most substantial increase in concentrations since 2015 comes from residential real estate lessors, agents and managers (including multi-family) and non-residential building/apartment building, which was a result of a 2016 strategic initiative into multi-family to further diversify CRE into a growing market segment. This increase remains the second largest concentration relative to the total portfolio composition. The single largest customer relationship had an aggregate balance at year end 2017 of \$14.8 million compared to \$11.8 million in 2016. This balance represented approximately 3.7% of the total commercial and CRE portfolio in 2017 and 3.5% in 2016. It is important to note that within this relationship, there is a 60-day or less note for \$7 million in 2017 and \$10 million in 2016, which were fully secured by segregated deposit accounts with the Bank at the time of origination.

Since 2015, the price of oil declined significantly. This occurrence negatively affected several industries, particularly those whose revenues are derived from oil and oil-related products. The Company reviewed its borrowers to identify and measure any potential credit losses relating to oil. Nothing of significance was noted and no additional provisions are considered necessary.

The Bank continues to be active in home equity financing. Home equity term loans and credit lines (HELOCs) remain popular with consumers wishing to finance home improvement costs, education expenses, vacations and consumer goods purchased at favorable interest rates. In order to improve customer retention and provide better overall balance, management will continue to evaluate and reposition the Company's portfolio product offerings during 2018.

In the consumer lending area, the Company provides financing for a variety of consumer purchases, such as: fixed- and variable-rate amortizing mortgage products that consumers utilize for home improvements; the purchase of consumer goods of all types; and education, travel and other personal expenditures. The consolidation of credit card balances and other existing debt into term payouts continues to remain a popular financing option among consumers. In an effort to increase consumer relationship banking, the Company implemented a Private Bank product line in 2016 that focuses on high net worth and income consumers, the balances from which are modest and primarily reside in home equity lines.

Additional information regarding the loan portfolio can be found in Item 8, Notes 1, 3, 8, 11 and 14 to the Consolidated Financial Statements.

## **MORTGAGE BANKING**

Since the May 2013 Taper Tantrum when mortgage rates rose dramatically, the Company shifted its focus from wholesale to retail origination. With the majority of loans sold into the secondary market, the resulting gains have enhanced non-interest revenue, providing \$1.1 million and \$1.2 million in net gains in 2017 and 2016. In 2017, the Company reported net gains on saleable loans of \$1.1 million, representing a modest decrease from the prior year's balance of \$1.2 million due to margin compression caused by increasing interest rates and slightly less volume for secondary market loans. As originators were added in the retail footprint, as well as expanding into adjacent markets, originations grew from \$18.4 million in 2014 to a high of \$76.0 million in 2016 and were reported at \$72.2 million in 2017. As previously referenced, the residential portfolio grew by \$5.1 million, or 8.9%, with quality, non-secondary market qualified and construction loans. The Company continues to diversify its portfolio with expansion into new geographic markets and new personnel within its footprint.

Currently, the Company is not retaining the servicing on loans sold. Although the Company's primary strategy is to sell long-term residential mortgages, loans are occasionally retained in the portfolio when requested by a customer or to enhance account relationships, and tend to be variable rate or shorter term. The mix of portfolio retained to those sold to investors will vary from year to year.

The Company maintains reserves for mortgage loans sold to agencies and investors in the event that, either through error or disagreement between the parties, the Company is required to indemnify the purchase. The reserves take into consideration risks associated with underwriting, key factors in the mortgage industry, loans with specific reserve requirements, past due loans and potential indemnification by the Company. Reserves are estimated based on consideration of factors in the mortgage industry, such as declining collateral values and rising levels of delinquency, default and foreclosure, coupled with increased incidents of quality reviews at all levels of the mortgage industry seeking justification for pushing back losses to loan originators and wholesalers. As of December 31, 2017 and 2016, the Company had reserves for mortgage loans sold of \$700,000 and \$721,000, respectively, and recorded a recovery of \$21,000 and expense of \$2,000, respectively. For the years ended December 31, 2017 and 2016, the Company did not repurchase any mortgage loans sold.

## **INVESTMENT SECURITIES**

Investment securities are segregated into three separate portfolios: available-for-sale, held-to-maturity and trading. Each portfolio type has its own method of accounting. The Company currently does not maintain a held-to-maturity portfolio. Securities classified as available-for-sale are those that could be sold for liquidity, investment management, or similar reasons even though management has no present intentions to do so. Securities available-for-sale are carried at fair value using the specific identification method. Changes in the unrealized gains and losses on available-for-sale securities are recorded net of tax effect as a component of comprehensive income.

Held-to-maturity securities are recorded at historical cost and adjusted for amortization of premiums and accretion of discounts. Securities designated by the Company as held-to-maturity tend to be higher yielding but less liquid either due to maturity, size or other characteristics of the issue. The Company must have both the intent and the ability to hold such securities to maturity. The Company has no securities classified as held-to-maturity.

Trading securities were an investment in obligations of states and political subdivisions and a short duration bond fund. Management had purchased these securities principally for the purpose of selling them in the near term. Trading securities were carried at fair value with valuation adjustments included in other non-interest income. The Company no longer has any investment in trading securities.

Securities the Company has designated as available-for-sale may be sold prior to maturity in order to fund loan demand, to adjust for interest rate sensitivity, to reallocate bank resources or to reposition the portfolio to reflect changing economic conditions and shifts in the relative values of market sectors. Available-for-sale securities tend to be more liquid investments and generally exhibit less price volatility as interest rates fluctuate.

Securities are evaluated periodically to determine whether a decline in their value is other-than-temporary. Management utilizes criteria such as the magnitude and duration of the decline, in addition to the reasons underlying the decline, to determine whether the loss in value is other-than-temporary. The OTTI is not intended to indicate that the decline is permanent, but indicates that the prospect for a near-term recovery of value is not necessarily favorable, or that there is a lack of evidence to support a realizable value equal to or greater than the carrying value of the investment. Once a decline in value is determined to be an OTTI, the credit-related OTTI is recognized in earnings while the non-credit related OTTI on securities not expected to be sold is recognized in other comprehensive income (loss).

The following table shows the fair value of available-for-sale securities by type of obligation at:

	(Amounts in thousands)		
	December 31,		
	2017	2016	2015
U.S. Treasury and U.S. Government agencies and corporations	\$ 3,205	\$ 7,988	\$ 12,623
Obligations of states and political subdivisions	72,116	66,770	51,405
U.S. Government-sponsored mortgage-backed and related securities	83,625	101,055	86,046
Trust preferred securities	895	825	778
Federal Home Loan Bank and Federal Reserve Bank stock	2,581	2,581	3,049
Total fair value of investment securities available-for-sale	<u>\$ 162,422</u>	<u>\$ 179,219</u>	<u>\$ 153,901</u>

### Impairment Analysis of Investment Securities

Item 8, Note 2 in the Notes to the Consolidated Financial Statements contains the accounting and disclosures for securities impairment.

### Fair Value

The Company owns two trust preferred securities totaling \$2.0 million (original face) consisting of obligations of banks, thrifts and insurance companies. The market for these securities at December 31, 2017 is not fully active and markets for similar securities are also not completely active. Given conditions in the debt markets today and the absence of observable transactions in the secondary and new issue markets, the Company determined the few observable transactions and market quotations that are available are not reliable for purposes of determining fair value at December 31, 2017. It was decided that an income valuation approach technique (present value technique) that maximizes the use of relevant observable inputs and minimizes the use of unobservable inputs would be more representative of fair value than the market approach valuation technique used at measurement dates prior to 2008.

The Company enlisted the aid of an independent third party to perform the trust preferred securities valuations. The approach to determining fair value involved the following process:

1. Estimate the credit quality of the collateral using average probability of default values for each issuer (adjusted for rating levels).
2. Consider the potential for correlation among issuers within the same industry for default probabilities (e.g. banks with other banks).
3. Forecast the cash flows for the underlying collateral and apply to each trust preferred security tranche to determine the resulting distribution among the securities.

4. Discount the expected cash flows to calculate the present value of the security.

The PreTSL XXIII cash flows are discounted at 14.74% through its maturity date of December 2036 and would have to experience an additional \$209 million of nonperforming collateral (of \$861 million performing) in order to incur any impairment. The aggregate cash flows for the C-2 tranche are estimated to be \$42.6 million on a current principal of \$26.1 million. The Trapeza IX cash flows are discounted at 9.10% through its maturity of January 2038 and would experience additional impairment upon further occurrence of nonperforming collateral of \$6.8 million (of \$200 million performing). The aggregate cash flows for the B-1 tranche are estimated to be \$41.6 million on a current principal of \$23.8 million.

Based upon the results of the analysis, the Company currently believes that a weighted average price of approximately \$0.51 per \$1.00 of par value is representative of the fair value of the two trust preferred securities, with individual securities therein ranging from \$0.44 to \$0.56.

The Company considered all information available as of December 31, 2017 to estimate the impairment and resulting fair value of the trust preferred securities. These securities are supported by a number of banks and insurance companies located throughout the country. While the number of bank failures has declined since the historically high failure rates of 2009, 2010 and 2011, there is still the potential for troubled banks to fail. The Company did not recognize any credit related impairment during 2017 or 2016. If the conditions of the underlying banks in the trust preferred securities worsen, there may be additional impairment to recognize in 2018 or later.

A summary of securities held at December 31, 2017, classified according to the earlier of next re-pricing or the maturity date and the weighted average yield for each range of maturities, is set forth below. Fixed-rate mortgage-backed securities are classified by their estimated contractual cash flow, adjusted for current prepayment assumptions. Actual maturities may differ from contractual maturities because borrowers may have the right to call or prepay obligations with or without call or prepayment penalties.

	(Amounts in thousands)	
	Fair Value	Weighted Average Yield (1)
U.S. Government agencies and corporations:		
Maturing or repricing within one year	\$ —	—%
Maturing or repricing after one year but within five years	345	2.199
Maturing or repricing after five years but within ten years	2,860	2.190
Maturing or repricing after ten years	—	—
Total U.S. Government agencies and corporations	<u>\$ 3,205</u>	<u>2.191%</u>
Obligations of states and political subdivisions:		
Maturing or repricing within one year	\$ 10	6.296%
Maturing or repricing after one year but within five years	548	5.720
Maturing or repricing after five years but within ten years	5,388	4.309
Maturing or repricing after ten years	66,170	3.439
Total obligations of states and political subdivisions	<u>\$ 72,116</u>	<u>3.522%</u>
U.S. Government mortgage-backed and related securities:		
Maturing or repricing within one year	\$ —	—%
Maturing or repricing after one year but within five years	6,302	1.991
Maturing or repricing after five years but within ten years	4,134	2.126
Maturing or repricing after ten years	73,189	2.254
Total U.S. Government mortgage-backed and related securities	<u>\$ 83,625</u>	<u>2.228%</u>
Other securities (2):		
Maturing or repricing within one year	\$ 895	2.580%
Maturing or repricing after one year but within five years	—	—
Maturing or repricing after five years but within ten years	—	—
Maturing or repricing after ten years	2,581	4.539
Total other securities	<u>\$ 3,476</u>	<u>4.034%</u>

- (1) The weighted-average yield has been computed by dividing the total interest income adjusted for amortization of premium or accretion of discount over the life of the security by the amortized cost of the securities outstanding. The weighted-average yield of tax-exempt obligations of states and political subdivisions has been calculated on a fully taxable equivalent basis. The amount of adjustment to interest, which is based on the statutory tax rate of 21%, was \$500,000.

- (2) Regulatory stock is included in the amount maturing or repricing after ten years, and although pays dividends, is not contractually obligated.

As of December 31, 2017, there were \$2.8 million in callable U.S. Government agency securities and \$4.3 million in callable obligations of states and political subdivisions that, given current and expected interest rate environments, have the possibility of being called within the one-year time horizon. These securities are categorized according to their contractual maturities, with none classified as maturing or repricing within one year, none classified as maturing after one year but within five years, \$6.0 million classified as maturing after five years but within ten years and \$1.1 million of the callable investments classified as maturing after 10 years.

As of December 31, 2017, there were no callable U.S. Government agency securities and \$7.1 million in callable obligations of states and political subdivisions that, given current and expected interest rate environments, have the possibility of being called within the time frame defined as after one year but within five years. These securities are categorized according to their contractual maturities, with none maturing after one year but within five years, \$800,000 maturing after five years but within ten years and \$6.3 million maturing after 10 years.

As of December 31, 2017, the carrying value of all investment securities totaled \$162.4 million, a decrease of \$16.8 million, or 9.4%, from the prior year. The investment portfolio functions as the balancing factor among the swings in loans and deposits, along with short term borrowings and near the year-end of 2016, all excess liquidity was fully allocated to the investment portfolio, thereby leaving the invested balances at a high point. The investment portfolio represents 27.7% of each deposit dollar, down from 33.2% at the prior year end. The allocation between single maturity investment securities and mortgage-backed securities shifted to a 48/52 split versus the 44/56 division of the previous year.

Holdings of U.S. Government-sponsored mortgage-backed securities decreased by \$12.1 million, or 15.2%. This decrease was primarily the result of sales of \$15.4 million and principal paydowns of \$11.3 million, offset by purchases of \$15.6 million. This sector was reduced with the intention of allocating more to obligations of states and political subdivisions, which increased \$5.3 million.

Holdings of U.S. Government agencies and corporations decreased \$4.8 million, or 59.9%. This decrease was due to sales of \$4.8 million, primarily to take advantage of market value gains.

Holdings of other securities remained relatively unchanged during the year.

The current year mortgage-backed securities and related portfolio is comprised of investments in mortgage-backed securities of \$67.7 million, collateralized mortgage obligations of \$6.3 million and U.S. Government-guaranteed small business administration pools of \$9.7 million. The prior year mortgage-backed securities and related portfolio is comprised of investments in mortgage-backed securities of \$79.8 million, collateralized mortgage obligations of \$9.3 million and U.S. Government-guaranteed small business administration pools of \$11.9 million. Both the current and prior year portfolios were comprised solely of fixed rate products and provides a desirable diversification of cash flows.

At December 31, 2017, a net unrealized loss of \$1.8 million, net of tax, was included in shareholders' equity as a component of other comprehensive income, as compared to a net unrealized loss of \$2.9 million, net of tax, as of December 31, 2016. Rising interest rates, such as that occurred in the post-presidential election period of late 2016, generally result in depreciation in the market value of debt securities, while lower interest rates generally translate into more favorable market prices for debt securities.

The Company continues to hold two investments considered to be structured notes as of December 31, 2017, whose fair value increased to \$895,000 from \$825,000 one year ago. The Company has no investments in other derivative products.

Additional information regarding investment securities can be found in Item 8, Notes 1 and 2 to the Consolidated Financial Statements.

## **DEPOSITS**

The Company's deposits are primarily derived from the individuals and businesses located in its market area. Total deposits at year-end exhibited an increase of 8.5% to \$585.9 million at December 31, 2017, as compared to \$539.9 million at December 31, 2016.

The Company's deposit base consists of demand deposits, savings, money market and time deposit accounts. Noninterest-bearing deposits increased 5.2% during 2017, while interest-bearing deposits increased by 9.4%.



At December 31, 2017, noninterest-bearing deposits were \$123.3 million, or 21.1%, compared to \$117.2 million or 21.7% of total deposits in 2016.

Core deposits, which are deposits exclusive of certificates of deposit greater than \$250,000, brokered deposits, one-way CDAR'S and ICS deposits and deposits through listed services represented 88.9% of total deposits at year-end 2017 compared to 91.6% in 2016.

The Company's portfolio of certificates of deposit is sourced primarily from customers in the Bank's immediate market area and includes an insignificant amount of brokered deposits.

Average noninterest-bearing and interest-bearing checking accounts now comprise 31.6% of total deposits compared to 27.7% five years ago. The largest shift, however, is the flow of funds from CD's into money market accounts. The preference is to park funds into this demand account while awaiting interest rate and market movement. This is reflective of the unwillingness of customers to commit to longer terms in the low interest rate environment, and the expectation of rising rates on the horizon.

The following table depicts how the average deposit mix has shifted during this five-year time frame.

	(In percentages)	
	December 31,	
	2017	2013
Checking	<b>22.1</b>	19.7
NOW	<b>9.5</b>	8.0
Money market	<b>22.4</b>	13.0
Savings	<b>21.7</b>	27.0
CDs	<b>24.3</b>	32.3

Additional information regarding interest-bearing deposits can be found in Item 8, Note 5 to the Consolidated Financial Statements.

#### **OTHER ASSETS AND OTHER LIABILITIES**

Premises and equipment totaled \$9.0 million at December 31, 2017, a decrease of \$94,000 from \$9.1 million at December 31, 2016, reflecting minimal investment in facilities in 2017. Bank-owned life insurance had a cash surrender value of \$17.7 million at December 31, 2017 and \$17.4 million at December 31, 2016, which comprised approximately 25% of regulatory capital in both years. In 2017, there was a \$931,000 reduction in the cash value of a policy triggered by the death of a former executive, which was offset by a \$900,000 insurance purchase. Management does not intend to make any further significant insurance purchases. Other assets increased to \$17.2 million at December 31, 2017 from \$14.7 million at December 31, 2016. Net deferred tax assets measured \$2.9 million at December 31, 2017 versus \$4.9 million at December 31, 2016. The decrease was mainly due to the revaluation of net deferred tax assets as a result of the Tax Act, which totaled \$1.2 million.

In 2017, a \$4.8 million investment in a partnership fund is included in other assets and \$4.2 million at 2016, with an offsetting \$2.9 million in other liabilities in 2017 and \$2.5 million in 2016, which is the commitment to fund this affordable housing investment. Also included in other assets is an investment of \$5.5 million in 2017 and \$2.0 million in 2016 into a privately managed pooled fund of small business administration loans. Both of these investments are intended to satisfy Community Reinvestment Act requirements.

Other liabilities measured \$9.8 million at December 31, 2017 and \$9.3 million at December 31, 2016. In addition to the commitment described above, other major components are accrued interest on deposits and borrowings which measured \$325,000 and \$288,000 in 2017 and 2016. Accrued expenses measured \$4.4 million at December 31, 2017 and \$4.3 million at December 31, 2016. Post-retirement benefits is the largest accrued expense item, which measured \$3.2 million at December 31, 2017 and \$3.0 million at December 31, 2016.

## ASSET-LIABILITY MANAGEMENT

The Company's executive management and Board of Directors routinely review the Company's balance sheet structure for stability, liquidity and capital adequacy. The Company has defined a set of key control parameters which provide various measures of the Company's exposure to changes in interest rates. The Company's asset-liability management goal is to produce a net interest margin that is relatively stable despite interest rate volatility, while maintaining an acceptable level of earnings. Net interest income is the difference between total interest earned on a fully taxable equivalent basis and total interest expensed. The net interest margin ratio expresses this difference as a percentage of average earning assets. In the past five years, the net interest margin has averaged 3.59% ranging between 3.41% and 3.67% as depicted in the following table.

	(In percentages)				
	December 31,				
	2017	2016	2015	2014	2013
Net interest margin	3.59	3.63	3.65	3.67	3.41

Included among the various measurement techniques used by the Company to identify and manage exposure to changing interest rates is the use of computer-based simulation models. Computerized simulation techniques enable the Company to explore and measure net interest income volatility under alternative asset deployment strategies, different interest rate environments, various product offerings and changing growth patterns.

During 2017, the effective maturities of earning assets remained fairly stable with less than a 6 month increase in average life, as rates in the credit markets remained extremely low. Federal Reserve policy makers raised rates three times in 2017, with the resulting Fed Fund target now at 1.50% to ease strains in the financial market, stimulate spending and help improve the recovery. During the year, management invested any excess funds, with an allocation towards municipal bonds for yield, and mortgage-backed securities for cash flow.

The computerized simulation techniques utilized by management provide a more sophisticated measure of the degree to which the Company's interest sensitive assets and liabilities may be impacted by changes in the general level of interest rates. These analyses show the Company's net interest income remaining in an acceptable range within the economic and interest rate scenarios anticipated by management. As previously noted, the Company's net interest margin has remained in the range of 3.41% to 3.67% over the past five years, a period characterized by significant shifts in the mix of earning assets and the direction and level of interest rates. The targeted Federal funds rate during that period ranged from a low of 0.00% to 1.50%, as Federal Reserve monetary policy turned from guarding against deflation to warding off inflationary threats to attempting to recover from a recession and softening the effects of the housing correction.

## LIQUIDITY

The central role of the Company's liquidity management is to (1) ensure sufficient liquid funds to meet the normal transaction requirements of its customers, (2) take advantage of market opportunities requiring flexibility and speed, and (3) provide a cushion against unforeseen liquidity needs.

Liquidity risk arises from the possibility that the Company may not be able to satisfy current or future financial commitments or may become unduly reliant on alternative funding sources. The objective of liquidity management is to ensure the Company has the ability to fund balance sheet growth and meet deposit and debt obligations in a timely and cost-effective manner. Management monitors liquidity through a regular review of asset and liability maturities, funding sources, and loan and deposit forecasts. The Company maintains strategic and contingency liquidity plans to ensure sufficient available funding to satisfy requirements for balance sheet growth, properly manage capital markets funding sources and address unexpected liquidity requirements.

Principal sources of liquidity available to the Company include assets considered relatively liquid, such as interest-bearing deposits in other banks, federal funds sold, and cash and due from banks, as well as cash flows from maturities and repayments of loans, investment securities and mortgage-backed securities.

Principal repayments on mortgage-backed securities, collateralized mortgage obligations and small business administration pools, along with investment securities maturing or called amounted to \$17.3 million during 2017, representing 10.6% of the total combined portfolio, compared to \$21.2 million, or 12.0%, of the portfolio a year ago. Loan amortization provides in excess of \$50 million annually.

In order to address the concern of FDIC insurance of larger depositors, the Bank is a member of the Certificate of Deposit Account Registry Service (CDARS<sup>®</sup>) program and the Insured Cash Sweep (ICS) program. Through CDARS<sup>®</sup>, the Bank's customers can increase their FDIC insurance by up to \$50.0 million through reciprocal certificate of deposit accounts and likewise through ICS, they can accomplish the same through money market savings accounts. This is accomplished by the Bank entering into reciprocal depository relationships with other member banks. The individual customer's large deposit is broken into amounts below \$250,000 and placed with other banks that are members of the network. The reciprocal member bank issues certificates of deposit or money market savings accounts in amounts that ensure that the entire deposit is eligible for FDIC insurance. The Bank can also enter into one-way buy or sell transactions which are not reciprocated. At December 31, 2017, the Bank had \$26.4 million in deposits in the CDARS<sup>®</sup> program, and \$22.8 million of deposits in the ICS money market program, of which \$24.3 million was executed as one-way buy transactions. For regulatory purposes, CDARS<sup>®</sup> and ICS are considered a brokered deposit even though reciprocal deposits are generally matched with funds from customers in the local market.

Along with its liquid assets, the Bank has other sources of liquidity available to it which help to ensure that adequate funds are available as needed. These other sources include, but are not limited to, the ability to obtain deposits through the adjustment of interest rates, the purchasing of federal funds, correspondent bank lines of credit and access to the Federal Reserve Discount Window. The Bank is also a member of the Federal Home Loan Bank of Cincinnati, which provides its largest source of liquidity. At December 31, 2017, the Bank had approximately \$11.0 million available of collateral-based borrowing capacity at FHLB of Cincinnati, supplementing the \$5.7 million of availability with the Federal Reserve Discount window. Additionally, the FHLB has committed a \$31.6 million cash management line, of which nothing has been disbursed, subject to posting additional collateral. The Bank, by policy, has access to approximately 15% of total deposits in various forms of wholesale deposits that could be used as an additional source of liquidity. At December 31, 2017, there was \$46.4 million in outstanding balances in wholesale deposits including internet-based deposits with access to an additional \$41.5 million. The Company was also granted a total of \$13.5 million in unsecured, discretionary Federal Funds lines of credit with no funds drawn upon as of December 31, 2017. Unpledged securities of \$53.9 million are also available for borrowing under repurchase agreements or as additional collateral for FHLB lines of credit or to sell to generate liquidity.

The Company has other more limited sources of liquidity. In addition to its existing liquid assets, it can raise funds in the securities market through debt or equity offerings or it can receive dividends from the Bank. Generally, the Bank may pay dividends without prior approval as long as the dividend is not more than the total of the current calendar year-to-date earnings plus any earnings from the previous two years not already paid out in dividends, as long as the Bank remains well-capitalized after the dividend payment. The amount available for dividends in 2018 is \$6.7 million plus 2018 profits retained up to the date of the dividend declaration. Future dividend payments by the Bank to the Company are based upon future earnings. The Company had cash of \$261,000 at December 31, 2017 available to meet cash needs. It also held a \$6.0 million note receivable, the cash flow from which approximates the debt service on the Junior Subordinated Debentures. Cash is generally used by the Company to pay quarterly interest payments on the debentures, to pay dividends to common shareholders and to fund operating expenses.

Cash and cash equivalents increased from \$15.4 million in 2016 to \$19.1 million in 2017. The following table details the cash flows from operating activities for the years ended 2017, 2016 and 2015.

	(Amounts in thousands)		
	December 31,		
	2017	2016	2015
Net income	\$ 4,350	\$ 4,871	\$ 4,378
Adjustments to reconcile net income to net cash flow from operating activities:			
Depreciation, amortization and accretion	2,735	2,770	2,534
Provision for loan losses	100	50	455
Investment securities available-for-sale gains, net	(7)	(466)	(75)
Decrease (increase) in trading account	—	8,134	(273)
Originations of mortgage banking loans held for sale	(51,730)	(61,003)	(39,191)
Proceeds from the sale of mortgage banking loans	54,578	61,730	36,575
Mortgage banking gains, net	(1,074)	(1,248)	(785)
Earnings on bank-owned life insurance	(1,203)	(328)	(338)
Other real estate gains	(170)	(13)	—
Changes in:			
Deferred taxes	1,218	(129)	303
Equity compensation	143	75	—
Federal income tax receivable	(243)	281	(260)
Other assets and liabilities	436	(622)	523
Net cash flow from operating activities	<u>\$ 9,133</u>	<u>\$ 14,102</u>	<u>\$ 3,846</u>

Key variations stem from: 1) The decreased provision for loan losses amount in 2016 is because of a favorable outcome on a credit relationship which the specific reserve previously set aside was able to be used for other problem loans. 2) Gains were recognized on the sale of available-for-sale investments of \$466,000 in 2016, mainly due to sales made to offset the loss on extinguishment of debt. 3) During 2016, the trading account was fully liquidated with a \$8.1 million decrease compared to an increase of \$273,000 in 2015. 4) Earnings on bank-owned life insurance increased in 2017 due to a gain on proceeds from a policy of \$898,000. 5) An additional \$4.2 million of capital contributions were made to partnership funds in 2017 compared to \$857,000 in 2016 and \$2.5 million in 2015 to satisfy CRA commitments. 6) Change in deferred tax is due to the Tax Act, which accounted for \$1.2 million of the decrease. Refer to the Consolidated Statements of Cash Flows in item 8 for a summary of the sources and uses of cash for 2017, 2016 and 2015.

## CONTRACTUAL OBLIGATIONS AND COMMITMENTS

The Company has various obligations, including contractual obligations and commitments that may require future cash payments.

Contractual Obligations: The following table presents significant fixed and determinable contractual obligations to third parties by payment date. Further discussion of the nature of each obligation is included in the referenced Item 8, Notes to the Consolidated Financial Statements.

	See Note	(Amounts in thousands)					Total
		December 31, 2017					
		One Year or Less	One to Three Years	Three to Five Years	Over Five Years		
Non-interest bearing deposits		\$ 123,291	\$ —	\$ —	\$ —	\$ 123,291	
Interest bearing deposits (a)	5	335,271	—	—	—	335,271	
Average rate (b)		0.37%				0.37%	
Certificates of deposit (a)	5	80,664	19,256	19,654	7,715	127,289	
Average rate (b)		1.11%	2.35%	2.41%	2.01%	1.55%	
Federal funds purchased and security repurchase agreements (a)	6	2,678	—	—	—	2,678	
Average rate (b)		0.34%				0.34%	
FHLB advances (a)	6	36,000	10,000	—	—	46,000	
Average rate (b)		1.36%	1.64%			1.42%	
Subordinated debt	7	—	—	—	5,155	5,155	
Average rate (b)					3.04%	3.04%	
Operating leases	8	175	302	—	—	477	

(a) Excludes present and future accrued interest.

(b) Variable-rate obligations reflect interest rates in effect at December 31, 2017.

The Company's operating lease obligations represent short- and long-term lease and rental payments for the Bank's branch facilities.

The Company also has obligations under its supplemental retirement plans as described in Item 8, Note 9 to the Consolidated Financial Statements. The postretirement benefit payments represent actuarially-determined future benefit payments to eligible plan participants. The Company does not have any commitments or obligations to the defined contribution retirement plan (401(k) plan) at December 31, 2017 due to the funded status of the plan. Additional information regarding benefit plans can be found in Item 8, Note 9 to the Consolidated Financial Statements.

Off-balance sheet arrangements/commitments: The following table details the amounts and expected maturities of significant off-balance sheet commitments. Additional information regarding commitments can be found in Item 8, Note 8 to the Consolidated Financial Statements.

	(Amounts in thousands)					Total
	December 31, 2017					
	One Year or Less	One to Three Years	Three to Five Years	Over Five Years		
Commitments to extend credit:						
Commercial (including commercial real estate)	\$ 13,331	\$ 4,725	\$ 14,140	\$ 21,477	\$ 53,673	
Revolving home equity	16,622	—	—	8,310	24,932	
Overdraft protection	9,636	—	—	—	9,636	
Other	979	—	—	—	979	
Residential real estate	2,087	—	—	7,115	9,202	
Standby letters of credit	3,580	20	—	—	3,600	

Commitments to extend credit, including loan commitments, standby letters of credit, and commercial letters of credit do not necessarily represent future cash requirements since these commitments often expire without being drawn upon.



## **CAPITAL RESOURCES**

Regulatory standards for measuring capital adequacy require banks and bank holding companies to maintain capital based on “risk-adjusted” assets so that categories of assets of potentially higher credit risk require more capital backing than assets with lower risk. In addition, banks and bank holding companies are required to maintain capital to support, on a risk-adjusted basis, certain off-balance sheet activities such as standby letters of credit and interest rate swaps.

Common equity for the common equity tier 1 capital ratio includes common stock (plus related surplus) and retained earnings, plus limited amounts of minority interests in the form of common stock, less the majority of certain regulatory deductions.

Tier 1 capital includes common equity as defined for the common equity tier 1 capital ratio, plus certain non-cumulative preferred stock and related surplus, cumulative preferred stock and related surplus and trust preferred securities that have been grandfathered (but which are not permitted going forward), and limited amounts of minority interests in the form of additional Tier 1 capital instruments, less certain deductions.

Tier 2 capital, which can be included in the total capital ratio, includes certain capital instruments (such as subordinated debt) and limited amounts of the allowance for loan and lease losses, subject to new eligibility criteria, less applicable deductions.

The Federal Financial Institutions Examination Council (FFIEC) determines the risk weightings of direct credit substitutions that have been downgraded below investment grade. Included in the definition of a direct credit substitute are mezzanine and subordinated tranches of trust preferred securities and non-agency collateralized mortgage obligations. Following these guidelines results in an increase in total risk-weighted assets with an attendant decrease in the risk-based capital and Tier 1 risk-based capital ratios.

The Company met all capital adequacy requirements to which it was subject as of December 31, 2017 and December 31, 2016.

In early September 2013, the regulatory bodies substantially revised the capital requirements for all banks, varying with the size of the institution. The new requirements became effective January 1, 2015 and are to be phased in over four years. The Company does not expect a material change to its excess capital position currently enjoyed.

Additional information regarding regulatory matters, including capital requirements, can be found in Item 8, Note 13 to the Consolidated Financial Statements and in the Supervision and Regulation portion of Item 1 - Business.

## **INTEREST RATE RISK**

Interest rate risk is measured as the impact of interest rate changes on the Company’s net interest income. Components of interest rate risk comprise re-pricing risk, basis risk and yield curve risk. Re-pricing risk arises due to timing differences in the re-pricing of assets and liabilities as interest rate changes occur. Basis risk occurs when re-pricing assets and liabilities reference different key rates. Yield curve risk arises when a shift occurs in the relationship among key rates across the maturity spectrum.

The effective management of interest rate risk seeks to limit the adverse impact of interest rate changes on the Company’s net interest margin, providing the Company with the best opportunity for maintaining consistent earnings growth. Toward this end, management uses computer simulation to model the Company’s financial performance under varying interest rate scenarios. These scenarios may reflect changes in the level of interest rates, changes in the shape of the yield curve, and changes in interest rate relationships.

The simulation model allows management to test and evaluate alternative responses to a changing interest rate environment. Typically when confronted with a heightened risk of rising interest rates, the Company will evaluate strategies that shorten investment and loan re-pricing intervals and maturities, emphasize the acquisition of floating rate over fixed rate assets, and lengthen the maturities of liability funding sources. When the risk of falling rates is perceived, management will consider strategies that shorten the maturities of funding sources, lengthen the re-pricing intervals and maturities of investments and loans, and emphasize the acquisition of fixed rate assets over floating rate assets. The Company does not currently use financial derivatives, such as interest rate options, caps, floors or other similar instruments. Interest rate swaps are currently used to accommodate large commercial borrowers desiring longer term fixed rates.

Run-off rate assumptions for loans are based on the consensus speeds for the various loan types. Investment speeds are based on the characteristics of each individual investment. Re-pricing characteristics are based upon actual information obtained from the Bank’s information system data and other related programs. Actual results may differ from simulated results not only due to the timing, magnitude and frequency of interest rate changes, but also due to changes in general economic conditions, changes in customer preferences and behavior, and changes in strategies by both existing and potential competitors.

The following table shows the Company's current estimate of interest rate sensitivity based on the composition of its balance sheet at December 31, 2017. For purposes of this analysis, short-term interest rates as measured by the federal funds rate and the prime lending rate are assumed to increase (decrease) gradually over the next twelve months reaching a level 300 basis points higher (and 100 basis points lower) than the rates in effect at December 31, 2017. Because rates on the short end of the curve are below 3%, it is not practical to review results to the degree of 300 basis points lower. Under both the rising rate scenario and the falling rate scenario, the yield curve is assumed to exhibit a parallel shift.

During 2017, the Federal Reserve raised the federal funds rate three times. At December 31, 2017, the difference between the yield on the ten-year Treasury and the three-month Treasury substantially decreased to a positive 101 from the positive 194 basis points that existed at December 31, 2016, indicating that the yield curve had flattened. At December 31, 2017, rates peaked at the 30-year point on the Treasury yield curve. The yield curve remains only slightly positively sloping as interest rates continue to increase on the short end, with little movement at the long-end of the Treasury yield curve.

The base case against which interest rate sensitivity is measured assumes no change in short-term rates. The base case also assumes no growth in assets and liabilities and no change in asset or liability mix. Under these simulated conditions, the base case projects net interest income of \$22.9 million for the year ending December 31, 2018.

	(Amounts in thousands)		
	December 31, 2018		
	Net Interest Income	\$ Change	% Change
<b>Change in interest rates:</b>			
Graduated increase of +300 basis points	\$ 24,269	\$ 1,414	6.2%
Short-term rates unchanged (base case)	22,855		
Graduated decrease of -100 basis points	22,254	(601)	(2.6)%

The level of interest rate risk indicated is within limits that management considers acceptable. However, given that interest rate movements can be sudden and unanticipated and are increasingly influenced by global events and circumstances beyond the purview of the Federal Reserve, no assurances can be made that interest rate movements will not impact key assumptions and parameters in a manner not presently embodied by the model.

It is management's opinion that hedging instruments currently available are not a cost effective means of controlling interest rate risk for the Company. Accordingly, the Company does not currently use financial derivatives, such as interest rate options, swaps, caps, floors or other similar instruments, but does utilize swaps to accommodate large commercial borrowers that desire longer term fixed rates.

## IMPACT OF INFLATION

Consolidated financial information included herein has been prepared in accordance with U.S. Generally Accepted Accounting Principles, which require the Company to measure financial position and operating results in terms of historical dollars. Changes in the relative value of money due to inflation are generally not considered. Neither the price, timing nor magnitude of changes directly coincides with changes in interest rates.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk – Not applicable to the Company because it is a smaller reporting company.

Item 8. Financial Statements and Supplementary Data

Consolidated Financial Statements included in this Annual Report:

Management’s Annual Report on Internal Control Over Financial Reporting .....	52
Report of Independent Registered Public Accounting Firm .....	53
Consolidated Balance Sheets as of December 31, 2017 and 2016 .....	54
Consolidated Statements of Income for the Years Ended December 31, 2017, 2016 and 2015 .....	55
Consolidated Statements of Comprehensive Income for the Years Ended December 31, 2017, 2016 and 2015 .....	56
Consolidated Statements of Shareholders’ Equity for the Years Ended December 31, 2017, 2016 and 2015.....	57
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## MANAGEMENT'S ANNUAL REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Management of the Company is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. The Company's internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

A material weakness is a significant deficiency (as defined in Public Company Accounting Oversight Board Auditing Standard No. 5), or a combination of significant deficiencies, that results in there being more than a remote likelihood that a material misstatement of the annual or interim financial statements will not be prevented or detected on a timely basis by management or employees in the normal course of performing their assigned functions.

Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2017. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) 2013 Internal Control-Integrated Framework. Based on this assessment, management believes that, as of December 31, 2017, the Company's internal control over financial reporting was effective.

This annual report does not include an attestation report of the Company's independent registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by the Company's independent registered public accounting firm pursuant to a provision of the Dodd-Frank Act which eliminates such requirements for "smaller reporting companies" as defined by the Securities and Exchange Commission regulations.

/s/ James M. Gasior

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James M. Gasior  
President and Chief Executive Officer  
(Principal Executive Officer)

Cortland, Ohio  
March 22, 2018

/s/ David J. Lucido

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David J. Lucido  
Senior Vice President and Chief Financial Officer  
(Principal Financial and Accounting Officer)

Cortland, Ohio  
March 22, 2018

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors  
Cortland Bancorp

**Opinion on the Financial Statements**

We have audited the accompanying consolidated balance sheets of Cortland Bancorp and subsidiaries (the “Company”) as of December 31, 2017 and 2016; the related consolidated statements of income, comprehensive income, changes in shareholders’ equity, and cash flows for each of the three years in the period ended December 31, 2017; and the related notes to the consolidated financial statements (collectively, the financial statements). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, in conformity with accounting principles generally accepted in the United States of America.

**Basis for Opinion**

These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

We have served as the Company’s auditor since 2008.

/s/ S.R. Snodgrass, P.C.

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S.R. Snodgrass, P.C.

Cranberry Township, Pennsylvania

March 22, 2018



**CORTLAND BANCORP AND SUBSIDIARIES**  
**CONSOLIDATED BALANCE SHEETS**  
(Amounts in thousands, except share data)

	December 31, 2017	December 31, 2016
<b>ASSETS</b>		
Cash and due from banks	\$ 9,741	\$ 7,021
Interest-earning deposits	9,384	8,330
Total cash and cash equivalents	19,125	15,351
Investment securities available-for-sale (Note 2)	162,422	179,219
Loans held for sale	2,780	4,554
Total loans (Note 3)	487,490	419,768
Less allowance for loan losses (Note 3)	(4,578)	(4,868)
Net loans	482,912	414,900
Premises and equipment	9,038	9,132
Bank-owned life insurance	17,650	17,376
Other assets	17,174	14,652
<b>Total assets</b>	<b>\$ 711,101</b>	<b>\$ 655,184</b>
<b>LIABILITIES</b>		
Noninterest-bearing deposits	\$ 123,291	\$ 117,225
Interest-bearing deposits (Note 5)	462,560	422,625
Total deposits	585,851	539,850
Short-term borrowings	2,678	2,702
Federal Home Loan Bank advances - short-term (Note 6)	32,000	23,000
Federal Home Loan Bank advances - long term (Note 6)	14,000	17,500
Subordinated debt (Note 7)	5,155	5,155
Other liabilities	9,787	9,307
<b>Total liabilities</b>	<b>649,471</b>	<b>597,514</b>
<b>SHAREHOLDERS' EQUITY</b>		
Common stock - \$5.00 stated value - authorized 20,000,000 shares; issued 4,728,267 shares in 2017 and 2016; outstanding shares, 4,420,136 in 2017 and 4,420,255 in 2016	23,641	23,641
Additional paid-in capital	20,928	20,878
Retained earnings	24,403	21,485
Accumulated other comprehensive loss	(1,825)	(2,961)
Treasury stock, at cost, 308,131 shares in 2017 and 308,012 shares in 2016	(5,517)	(5,373)
<b>Total shareholders' equity</b>	<b>61,630</b>	<b>57,670</b>
<b>Total liabilities and shareholders' equity</b>	<b>\$ 711,101</b>	<b>\$ 655,184</b>

See accompanying notes to consolidated financial statements

**CORTLAND BANCORP AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF INCOME**  
(Amounts in thousands, except per share data)

	For the years ended December 31,		
	2017	2016	2015
<b>INTEREST INCOME</b>			
Interest and fees on loans	\$ 19,243	\$ 18,554	\$ 16,909
Interest and dividends on investment securities:			
Taxable interest	2,098	2,026	2,343
Nontaxable interest	1,922	1,814	1,716
Dividends	131	117	126
Other interest income	98	44	19
Total interest and dividend income	23,492	22,555	21,113
<b>INTEREST EXPENSE</b>			
Deposits	2,571	2,093	1,668
Short-term borrowings	7	7	4
Federal Home Loan Bank advances - short term	175	73	40
Federal Home Loan Bank advances - long term	299	633	804
Subordinated debt	138	112	91
Total interest expense	3,190	2,918	2,607
Net interest income	20,302	19,637	18,506
<b>PROVISION FOR LOAN LOSSES (Note 3)</b>	<b>100</b>	<b>50</b>	<b>455</b>
<b>NET INTEREST INCOME AFTER PROVISION FOR LOAN LOSSES</b>	<b>20,202</b>	<b>19,587</b>	<b>18,051</b>
<b>NON-INTEREST INCOME</b>			
Fees for customer services	2,241	2,103	2,019
Investment securities available-for-sale gains, net	7	466	75
Trading security losses, net	—	(47)	(11)
Mortgage banking gains, net	1,074	1,248	785
Earnings on bank-owned life insurance	1,203	328	338
Wealth management	35	95	435
Other real estate gains	170	13	—
Other non-interest income	436	391	268
Total non-interest income	5,166	4,597	3,909
<b>NON-INTEREST EXPENSES</b>			
Salaries and employee benefits	10,631	10,169	9,311
Net occupancy and equipment	2,331	2,151	2,019
State and local taxes	463	455	389
FDIC insurance	199	251	304
Professional fees	786	882	830
Advertising and marketing	478	527	454
Net losses from the extinguishment of debt	—	242	—
Data processing fees	251	250	263
Other operating expenses	3,462	3,259	2,793
Total non-interest expenses	18,601	18,186	16,363
<b>INCOME BEFORE FEDERAL INCOME TAX EXPENSE</b>	<b>6,767</b>	<b>5,998</b>	<b>5,597</b>
Federal income tax expense (Note 10)	2,417	1,127	1,219
<b>NET INCOME</b>	<b>\$ 4,350</b>	<b>\$ 4,871</b>	<b>\$ 4,378</b>
<b>EARNINGS PER SHARE BASIC AND DILUTED (Note 1)</b>	<b>\$ 0.99</b>	<b>\$ 1.11</b>	<b>\$ 0.97</b>
<b>CASH DIVIDENDS DECLARED PER SHARE</b>	<b>\$ 0.39</b>	<b>\$ 0.28</b>	<b>\$ 0.24</b>

See accompanying notes to consolidated financial statements

**CORTLAND BANCORP AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME**  
(Amounts in thousands)

	For the years ended December 31,		
	2017	2016	2015
Net income	\$ 4,350	\$ 4,871	\$ 4,378
Other comprehensive income (loss):			
Securities available for sale:			
Unrealized holding gains (losses) on available-for-sale securities	2,153	(3,719)	(692)
Tax effect	(733)	1,265	235
Reclassification adjustment for net gains realized in net income	(7)	(466)	(75)
Tax effect	3	158	26
Total securities available-for-sale	1,416	(2,762)	(506)
Change in post-retirement obligations	14	39	(108)
Total other comprehensive income (loss)	1,430	(2,723)	(614)
Total comprehensive income	<u>\$ 5,780</u>	<u>\$ 2,148</u>	<u>\$ 3,764</u>

See accompanying notes to consolidated financial statements

**CORTLAND BANCORP AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY**  
(Amounts in thousands, except per share data)

	Common Stock	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive (Loss) Income	Treasury Stock	Total Shareholders' Equity
<b>Balance at December 31, 2014</b>	\$ 23,641	\$ 20,833	\$ 14,555	\$ 376	\$ (3,553)	\$ 55,852
Net income	—	—	4,378	—	—	4,378
Other comprehensive loss	—	—	—	(614)	—	(614)
Cash dividend declared (\$0.24 per share)	—	—	(1,082)	—	—	(1,082)
Treasury shares purchased net of 1 share reissued (123,065 shares)	—	—	—	—	(1,850)	(1,850)
<b>Balance at December 31, 2015</b>	23,641	20,833	17,851	(238)	(5,403)	56,684
Net income	—	—	4,871	—	—	4,871
Other comprehensive loss	—	—	—	(2,723)	—	(2,723)
Cash dividend declared (\$0.28 per share)	—	—	(1,237)	—	—	(1,237)
Equity compensation	—	45	—	—	30	75
<b>Balance at December 31, 2016</b>	23,641	20,878	21,485	(2,961)	(5,373)	57,670
Net income	—	—	4,350	—	—	4,350
Other comprehensive income	—	—	—	1,430	—	1,430
Reclassification of certain income tax effects from accumulated other comprehensive income	—	—	294	(294)	—	—
Cash dividend declared (\$0.39 per share)	—	—	(1,726)	—	—	(1,726)
Treasury shares purchased (12,863 shares)	—	—	—	—	(237)	(237)
Equity compensation	—	50	—	—	93	143
<b>Balance at December 31, 2017</b>	<u>\$ 23,641</u>	<u>\$ 20,928</u>	<u>\$ 24,403</u>	<u>\$ (1,825)</u>	<u>\$ (5,517)</u>	<u>\$ 61,630</u>

See accompanying notes to consolidated financial statements

**CORTLAND BANCORP AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(Amounts in thousands)

	For the years ended December 31,		
	2017	2016	2015
<b>Net cash flow from operating activities</b>			
Net income	\$ 4,350	\$ 4,871	\$ 4,378
Adjustments to reconcile net income to net cash flow from operating activities:			
Depreciation, amortization and accretion	2,735	2,770	2,534
Provision for loan losses	100	50	455
Investment securities available-for-sale gains, net	(7)	(466)	(75)
Originations of mortgage banking loans held for sale	(51,730)	(61,003)	(39,191)
Proceeds from the sale of mortgage banking loans	54,578	61,730	36,575
Mortgage banking gains, net	(1,074)	(1,248)	(785)
Decrease (increase) in trading account	—	8,134	(273)
Earnings on bank-owned life insurance	(1,203)	(328)	(338)
Other real estate gains	(170)	(13)	—
Changes in:			
Interest receivable	(152)	(401)	83
Interest payable	37	33	7
Deferred taxes	1,218	(129)	303
Equity compensation	143	75	—
Federal income tax receivable	(243)	281	(260)
Other assets and liabilities	551	(254)	433
Net cash flow from operating activities	<u>9,133</u>	<u>14,102</u>	<u>3,846</u>
<b>Cash deficit from investing activities</b>			
Purchases of available-for-sale securities	(44,962)	(103,032)	(29,055)
Proceeds from sale of available-for-sale securities	44,801	50,862	12,291
Proceeds from call, maturity and principal payments on available-for-sale securities	17,255	21,203	23,708
Net increase in loans made to customers	(68,592)	(25,937)	(34,594)
Proceeds from sale of other real estate	650	121	41
Proceeds from bank-owned life insurance	1,829	280	—
Purchases of bank-owned life insurance	(900)	—	—
Contributions to partnership funds	(4,152)	(857)	(2,459)
Purchases of premises and equipment	(802)	(799)	(2,302)
Net cash deficit from investing activities	<u>(54,873)</u>	<u>(58,159)</u>	<u>(32,370)</u>
<b>Cash flow from financing activities</b>			
Net increase in deposit accounts	46,001	43,446	39,643
Net change in short-term borrowings	(24)	203	(1,760)
Net change in Federal Home Loan Bank advances - short term	9,000	6,000	1,500
Proceeds from Federal Home Loan Bank advances - long term	12,000	2,000	4,000
Repayments of Federal Home Loan Bank advances - long term	(15,500)	(9,500)	(4,000)
Dividends paid	(1,726)	(1,237)	(1,082)
Treasury shares purchased	(237)	—	(1,850)
Net cash flow from financing activities	<u>49,514</u>	<u>40,912</u>	<u>36,451</u>
<b>Net change in cash and cash equivalents</b>	<u>3,774</u>	<u>(3,145)</u>	<u>7,927</u>
<b>Cash and cash equivalents</b>			
Beginning of period	15,351	18,496	10,569
End of period	<u>\$ 19,125</u>	<u>\$ 15,351</u>	<u>\$ 18,496</u>
<b>Supplemental disclosures:</b>			
Cash paid during the period for:			
Income taxes	\$ 1,050	\$ 625	\$ 1,010
Interest	\$ 3,153	\$ 2,885	\$ 2,600
Transfer of loans to other real estate owned	\$ 480	\$ 47	\$ 62

See accompanying notes to consolidated financial statements



## NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The accounting and financial reporting policies of Cortland Bancorp (the Company), and its bank subsidiary, The Cortland Savings and Banking Company (the Bank), reflect banking industry practices and conform to U.S. generally accepted accounting principles. A summary of the significant accounting policies followed by the Company in the preparation of the accompanying consolidated financial statements is set forth below.

Principles of Consolidation: The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries, the Bank, CSB Mortgage Company, Inc. and New Resources Leasing Co. All significant intercompany balances and transactions have been eliminated.

Industry Segment Information: The Company and its subsidiaries operate in the domestic banking industry which accounts for substantially all of the Company's assets, revenues and operating income. The Company, through the Bank, grants residential, consumer, and commercial loans and offers a variety of saving plans to customers located primarily in the Northeastern Ohio and Western Pennsylvania area. Based on the analysis performed by the Company, management has determined that the Company only has one operating segment, which is commercial banking. The chief operating decision-makers use consolidated results to make operating and strategic decisions, and therefore are not required to disclose any additional segment information.

Use of Estimates: The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the Consolidated Balance Sheet and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

Cash Flow: Cash and cash equivalents include cash on hand and amounts due from banks, both interest and non-interest bearing, but excludes the liquid portion of the securities trading account. The Company reports net cash flows for customer loan transactions, deposit transactions and deposits made with other financial institutions.

Investment Securities: Investments in debt and equity securities are classified as held-to-maturity, available-for-sale or trading. Securities classified as held-to-maturity are those that management has the positive intent and ability to hold to maturity. Securities classified as available-for-sale are those that could be sold for liquidity, investment management, or similar reasons, even though management has no present intentions to do so. Securities classified as trading are those that management has bought principally for the purpose of selling in the near term. The Company currently has no securities classified as held-to-maturity or trading.

Available-for-sale securities, other than regulatory stock, are carried at fair value with unrealized gains and losses recorded as a separate component of shareholders' equity, net of tax. Realized gains or losses on dispositions are based on net proceeds and the adjusted carrying amount of securities sold, using the specific identification method. Interest income includes amortization of purchase premium or discount and is amortized on the level-yield method without anticipating payments, except for U.S. Government mortgage-backed and related securities where twelve months of historical prepayments are taken into consideration.

The regulatory stock is carried at cost (its redeemable value) and the Company is required to hold such investments as a condition of membership in order to transact business with the Federal Home Loan Bank (FHLB) of Cincinnati and the Federal Reserve Bank (FRB). The stock is bought from and sold based upon its par value. The stock cannot be traded or sold in any market and as such is classified as restricted stock, carried at cost (its redeemable value) and evaluated by management. The stock's value is determined by the ultimate recoverability of the par value rather than by recognizing temporary declines. The determination of whether the par value will ultimately be recovered is influenced by criteria such as the following: (a) the significance of the decline in net assets of the FHLB and FRB as compared to the capital stock amount and the length of time this situation has persisted, (b) commitments by the FHLB and FRB to make payments required by law or regulation and the level of such payments in relation to the operating performance, (c) the impact of legislative and regulatory changes on the customer base of the FHLB and FRB and (d) the liquidity position of the FHLB and FRB. The Company does not consider these investments to be other-than-temporarily impaired at December 31, 2017.

Other-than-Temporary Investment Security Impairment: Securities are evaluated periodically to determine whether a decline in value is other-than-temporary. Management utilizes criteria such as the magnitude and duration of the decline, along with the reasons underlying the decline, to determine whether the loss in value is other-than-temporary. The term "other-than-temporary" is not intended to indicate that the decline in value is permanent, but indicates that the prospect for a near-term recovery of value is not necessarily favorable and that there is a lack of evidence to support a realizable value equal to or greater than the carrying value of the investment. Unrealized losses on available-for-sale investments have not been recognized into income. However, once a decline in value is determined to be other-than-temporary, the credit related other-than-temporary impairment (OTTI) is recognized in earnings while the non-credit related OTTI on securities not expected to be sold is recognized in other comprehensive income (loss). Unrealized losses on trading securities are recognized in the Consolidated Statements of Income.

Loans: Loans are stated at the principal amount outstanding net of the unamortized balance of deferred loan origination fees and costs. Deferred loan origination fees and costs are amortized as an adjustment to the related loan yield over the contractual life using the level-yield method. Interest income on loans is accrued over the term of the loans based on the amount of principal outstanding. The accrual of interest is discontinued on a loan when management determines that the collection of interest is doubtful. Generally, a loan is placed on non-accrual status once the borrower is 90 days past due on payments, or whenever sufficient information is received to question the collectability of the loan or any time legal proceedings are initiated involving a loan. Interest income accrued up to the date a loan is placed on non-accrual is reversed through interest income. Cash payments received while a loan is classified as non-accrual are recorded as a reduction to principal or reported as interest income according to management's judgment as to the collectability of principal. A loan is returned to accrual status when either all of the principal and interest amounts contractually due are brought current and future payments are, in management's judgment, collectable, or when it otherwise becomes well secured and in the process of collection. When a loan is charged-off, any interest accrued but not collected on the loan is charged against earnings. The same treatment is applied to impaired loans, which means that it is probable that all amounts will not be collected according to the contractual terms of the loan agreement.

Loans Held for Sale: The Company originates certain residential mortgage loans for sale in the secondary mortgage loan market. The Company concurrently sells the rights to service the related loans. These loans are classified as loans held for sale, and carried at the estimated fair value based on secondary market prices. Adjustments to the fair value of loans held for sale are included in "mortgage banking gains" in the Consolidated Statements of Income. Deferred fees and costs related to loans held for sale are not amortized, but included in the cost basis at the time of sale.

Allowance for Loan Losses (ALLL) and Allowance for Losses on Lending Related Commitments: Management establishes the allowance for loan losses based upon its evaluation of the pertinent factors underlying the types and quality of loans in the portfolio. Commercial loans and commercial real estate loans are reviewed on a regular basis with a focus on larger loans, along with loans which have experienced past payment or financial deficiencies. Larger commercial loans and commercial real estate loans are evaluated for impairment in accordance with the Bank's loan review policy. These loans are analyzed to determine if they are impaired. All loans that are delinquent 90 days and are placed on non-accrual status are evaluated on an individual basis. Allowances for loan losses on impaired loans are determined using the estimated future cash flows of the loan, discounted to their present value using the loan's effective interest rate, or in most cases, the estimated fair value of the underlying collateral. If the analysis indicates a collection shortfall, a specific reserve is allocated to loans on an individual basis which are reviewed for impairment. The remaining loans are evaluated and classified as groups of loans with similar risk characteristics.

Estimating the risk of loss and the amount of loss on any loan is necessarily subjective. Accordingly, the allowance is maintained by management at a level considered adequate to cover possible losses that are currently anticipated. Estimates of credit losses should reflect consideration of all significant factors that affect collectability of the portfolio. While historical loss experience provides a reasonable starting point, historical losses, or even recent trends in losses are not, by themselves, a sufficient basis to determine the appropriate level for the ALLL. Management will also consider any factors that are likely to cause estimated credit losses associated with the Bank's current portfolio to differ from historical loss experience. Factors include, but are not limited to, changes in lending policies and procedures, including underwriting standards and collection, charge-offs, and recovery practices; changes in economic trends; changes in the nature and volume of the portfolio; changes in the experience and ability of lending management and the depth of staff; changes in the trend, volume and severity of past-due and classified loans, and trends in the volume of non-accrual loans; the existence and effect of any concentrations of credit and changes in the level of such concentrations; levels and trends in classification; declining trends in performance; structure and lack of performance measures and migration between risk classifications.

Key risk factors and assumptions are updated to reflect actual experience and changing circumstances. While management may periodically allocate portions of the ALLL for specific problem loans, the entire ALLL is available for any charge-offs that occur.

Certain collateral dependent loans are evaluated individually for impairment, based on management's best estimate of discounted cash repayments and the anticipated proceeds from liquidating collateral. The actual timing and amount of repayments and the ultimate realizable value of the collateral may differ from management's estimates.

The expected loss for certain other commercial credits utilizes internal risk ratings. These loss estimates are sensitive to changes in the customer's risk profile, the realizable value of collateral, other risk factors and the related loss experience of other credits of similar risk. Consumer credits generally employ statistical loss factors, adjusted for other risk indicators, applied to pools of similar loans stratified by asset type. These loss estimates are sensitive to changes in delinquency status and shifts in the aggregate risk profile.

The Company maintains an allowance for losses on unfunded commercial lending commitments to provide for the risk of loss inherent in these arrangements. The allowance is computed using a methodology similar to that used to determine the allowance for loan losses. This allowance is reported as a liability on the Consolidated Balance Sheets within other liabilities, while the corresponding provision for these losses is recorded as a component of other operating expense.

Loan Charge-off Policies: Consumer loans are generally fully or partially charged down to the fair value of collateral securing the asset prior to the loan becoming 180 days past due, unless the loan is well secured and in the process of collection. All other loans are generally charged down to the net realizable value when the loan is 90 days past due.

Troubled Debt Restructurings (TDR): A loan is classified as a TDR when management grants a concession for other than an insignificant period of time to the borrower that would not otherwise be considered, except in situations of economic difficulties. Management strives to identify borrowers in financial difficulty early and work with them to modify to more affordable terms before their loan reaches non-accrual status. These modified terms may include rate reductions, principal forgiveness, payment forbearance and other actions intended to minimize the economic loss and to avoid foreclosure or repossession of the collateral. In cases where borrowers are granted new terms that provide for a reduction of either interest or principal, management measures any impairment on the restructuring as noted above for impaired loans. In addition to the allowance for the pooled portfolios, management has developed a separate allowance for loans that are identified as impaired through a TDR. These loans are excluded from pooled loss forecasts and a separate reserve is provided under the accounting guidance for loan impairment.

Premises and Equipment: Land is carried at cost. Premises and equipment are stated at cost less accumulated depreciation. Depreciation is computed generally on the straight-line method over the estimated useful lives (5 to 40 years) of the various assets. Maintenance and repairs are expensed and major improvements are capitalized.

Other Real Estate: Real estate acquired through foreclosure or deed-in-lieu of foreclosure is included in other assets on the Consolidated Balance Sheets. Such real estate is carried at fair value less estimated costs to sell. Any reduction from the carrying value of the related loan to fair value at the time of acquisition is accounted for as a loan loss. Any subsequent reduction in fair value is reflected as a valuation allowance through a charge to income. Costs of significant property improvements are capitalized, whereas costs relating to holding and maintaining the property are charged to expense.

Cash Surrender Value of Life Insurance: Bank-owned life insurance (BOLI) represents life insurance on the lives of certain Company employees, officers and directors who have provided positive consent allowing the Company to be the co-beneficiary of such policies. Since the Company is the owner of the insurance policies, increases in the cash value of the policies, as well as its share of insurance proceeds received, are recorded in noninterest income, and are not subject to income taxes. The cash surrender value of the policies is included on the Consolidated Balance Sheets. The Company reviews the financial strength of the insurance carriers prior to the purchase of BOLI and quarterly thereafter. The amount of BOLI with any individual carrier is limited to 15% of Tier I Capital. The Company has purchased BOLI to provide a long-term asset to offset long-term benefit liabilities, while generating competitive investment yields.

Endorsement Split-Dollar Life Insurance Arrangement: The Company maintains a liability for the death benefit promised under split-dollar life insurance arrangements.

Derivative Instruments: The Company enters into contracts for the future delivery of residential mortgage loans when interest rate locks are entered into in order to economically hedge potential adverse effects of changes in interest rates. These contracts are derivative instruments. All derivative instruments are recognized as either other assets or other liabilities at fair value in the Consolidated Balance Sheets.

Advertising and Marketing: The Company expenses advertising and marketing costs as incurred.

Income Taxes: A deferred tax liability or asset is determined at each balance sheet date. It is measured by applying currently enacted tax laws to future amounts that result from differences in the financial statement and tax bases of assets and liabilities.

Other Comprehensive (Loss) Income: Accumulated other comprehensive (loss) income for the Company is comprised of unrealized holding (losses) gains on available-for-sale securities, net of tax, and post-retirement obligations.

Per Share Amounts: Earnings per share is computed by dividing net income available to common shareholders by the weighted average number of shares of common stock outstanding, net of any treasury shares, during the period. Diluted earnings per share is calculated by dividing net income available to common shareholders by the weighted average number of shares of common stock outstanding, net of any treasury shares, after consideration of the potential dilutive effect of common stock equivalents, based upon the treasury stock method using an average market price for the period. The common stock equivalents are comprised of the restricted share awards.

The following table sets forth the computation of basic earnings per common share:

	Years ended December 31,		
	2017	2016	2015
Net income (amounts in thousands)	\$ 4,350	\$ 4,871	\$ 4,378
Weighted average common shares outstanding	4,407,254	4,406,005	4,497,825
Net effect of dilutive common share equivalents	4,220	1,264	—
Adjusted average shares outstanding - dilutive	4,411,474	4,407,269	4,497,825
Basic earnings per share	\$ 0.99	\$ 1.11	\$ 0.97
Dilutive earnings per share	\$ 0.99	\$ 1.11	\$ 0.97

**Off-Balance Sheet Financial Instruments:** Financial instruments include off-balance sheet credit instruments, such as commitments to make loans and commercial letters of credit, issued to meet customer financing needs. The face amount for these items represents the exposure to loss, before considering customer collateral or ability to repay. Such financial instruments are recorded if and when they are funded.

**Reclassifications:** Certain items in the financial statements for 2016 and 2015 have been reclassified to conform to the 2017 presentation. Such reclassifications did not affect net income or shareholders' equity.

**Authoritative Accounting Guidance:**

In May 2014, the Financial Accounting Standards Board (FASB) issued ASU 2014-09, *Revenue from Contracts with Customers* (a new revenue recognition standard). The Update's core principle is that a company will recognize revenue to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. In addition, this Update specifies the accounting for certain costs to obtain or fulfill a contract with a customer and expands disclosure requirements for revenue recognition. This Update is effective for annual reporting periods beginning after December 15, 2016, including interim periods within that reporting period. The Company is currently evaluating the impact the adoption of the standard will have on the Company's financial position or results of operations. In August 2015, the FASB issued ASU 2015-14, *Revenue from Contracts with Customers* (Topic 606). The amendments in this Update defer the effective date of ASU 2014-09 for all entities by one year. Public business entities, certain not-for-profit entities, and certain employee benefit plans should apply the guidance in ASU 2014-09 to annual reporting periods beginning after December 15, 2017, including interim reporting periods within that reporting period. All other entities should apply the guidance in ASU 2014-09 to annual reporting periods beginning after December 15, 2018, and interim reporting periods within annual reporting periods beginning after December 15, 2019. This Update is not expected to have a significant impact on the Company's financial statements.

In January 2016, the FASB issued ASU 2016-01, *Financial Instruments – Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities*. This Update applies to all entities that hold financial assets or owe financial liabilities and is intended to provide more useful information on the recognition, measurement, presentation, and disclosure of financial instruments. Among other things, this Update (a) requires equity investments (except those accounted for under the equity method of accounting or those that result in consolidation of the investee) to be measured at fair value with changes in fair value recognized in net income; (b) simplifies the impairment assessment of equity investments without readily determinable fair values by requiring a qualitative assessment to identify impairment; (c) eliminates the requirement to disclose the fair value of financial instruments measured at amortized cost for entities that are not public business entities; (d) eliminates the requirement for public business entities to disclose the method(s) and significant assumptions used to estimate the fair value that is required to be disclosed for financial instruments measured at amortized cost on the balance sheet; (e) requires public business entities to use the exit price notion when measuring the fair value of financial instruments for disclosure purposes; (f) requires an entity to present separately in other comprehensive income the portion of the total change in the fair value of a liability resulting from a change in the instrument-specific credit risk when the entity has elected to measure the liability at fair value in accordance with the fair value option for financial instruments; (g) requires separate presentation of financial assets and financial liabilities by measurement category and form of financial asset (that is, securities or loans and receivables) on the balance sheet or the accompanying notes to the financial statements; and (h) clarifies that an entity should evaluate the need for a valuation allowance on a deferred tax asset related to available-for-sale securities in combination with the entity's other deferred tax assets. For public business entities, the amendments in this Update are effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. For all other entities including not-for-profit entities and employee benefit plans within the scope of Topics 960 through 965 on plan accounting, the amendments in this Update are effective for fiscal years beginning after December 15, 2018, and interim periods within fiscal years beginning after December 15, 2019. All entities that are not public business entities may adopt the amendments in this Update earlier as of the fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. The Company is currently evaluating the impact the adoption of the standard will have the Company's financial position or results of operations.



In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*. The standard requires lessees to recognize the assets and liabilities that arise from leases on the balance sheet. A lessee should recognize in the statement of financial position a liability to make lease payments (the lease liability) and a right-of-use asset representing its right to use the underlying asset for the lease term. A short-term lease is defined as one in which (a) the lease term is 12 months or less and (b) there is not an option to purchase the underlying asset that the lessee is reasonably certain to exercise. For short-term leases, lessees may elect to recognize lease payments over the lease term on a straight-line basis. For public business entities, the amendments in this Update are effective for fiscal years beginning after December 15, 2018, and interim periods within those years. For all other entities, the amendments in this Update are effective for fiscal years beginning after December 15, 2019, and for interim periods within fiscal years beginning after December 15, 2020. The amendments should be applied at the beginning of the earliest period presented using a modified retrospective approach with earlier application permitted as of the beginning of an interim or annual reporting period. The Company is currently assessing the practical expedients it may elect at adoption, but does not anticipate the amendments will have a significant impact on the financial statements. Based on the Company's preliminary analysis of its current portfolio, the impact to the Company's balance sheet is estimated to result in less than a 1 percent increase in assets and liabilities. The Company also anticipates additional disclosures to be provided at adoption.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments - Credit Losses: Measurement of Credit Losses on Financial Instruments* ("ASU 2016-13"), which changes the impairment model for most financial assets. This Update is intended to improve financial reporting by requiring timelier recording of credit losses on loans and other financial instruments held by financial institutions and other organizations. The underlying premise of the Update is that financial assets measured at amortized cost should be presented at the net amount expected to be collected, through an allowance for credit losses that is deducted from the amortized cost basis. The allowance for credit losses should reflect management's current estimate of credit losses that are expected to occur over the remaining life of a financial asset. The income statement will be effected for the measurement of credit losses for newly recognized financial assets, as well as the expected increases or decreases of expected credit losses that have taken place during the period. ASU 2016-13 is effective for annual and interim periods beginning after December 15, 2019, and early adoption is permitted for annual and interim periods beginning after December 15, 2018. With certain exceptions, transition to the new requirements will be through a cumulative effect adjustment to opening retained earnings as of the beginning of the first reporting period in which the guidance is adopted. The Company is currently evaluating the impact the adoption of the standard will have on the Company's financial position or results of operations. We expect to recognize a one-time cumulative effect adjustment to the allowance for loan losses as of the beginning of the first reporting period in which the new standard is effective, but cannot yet determine the magnitude of any such one-time adjustment or the overall impact of the new guidance on the consolidated financial statements.

In August 2016, the FASB issued ASU 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments* ("ASU 2016-15"), which addresses eight specific cash flow issues with the objective of reducing diversity in practice. Among these include recognizing cash payments for debt prepayment or debt extinguishment as cash outflows for financing activities; cash proceeds received from the settlement of insurance claims should be classified on the basis of the related insurance coverage; and cash proceeds received from the settlement of bank-owned life insurance policies should be classified as cash inflows from investing activities while the cash payments for premiums on bank-owned policies may be classified as cash outflows for investing activities, operating activities, or a combination of investing and operating activities. The amendments in this Update are effective for public business entities for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. For all other entities, the amendments are effective for fiscal years beginning after December 15, 2018, and interim periods within fiscal years beginning after December 15, 2019. Early adoption is permitted, including adoption in an interim period. If an entity early adopts the amendments in an interim period, any adjustments should be reflected as of the beginning of the fiscal year that includes that interim period. An entity that elects early adoption must adopt all of the amendments in the same period. The amendments in this Update should be applied using a retrospective transition method to each period presented. If it is impracticable to apply the amendments retrospectively for some of the issues, the amendments for those issues would be applied prospectively as of the earliest date practicable. The Company has adopted the standard. See the Company's Consolidated Statements of Cash Flows.

In January 2017, the FASB issued ASU 2017-01, *Business Combinations (Topic 805), Clarifying the Definition of a Business* "ASU 2017-01", which provides a more robust framework to use in determining when a set of assets and activities (collectively referred to as a "set") is a business. The screen requires that when substantially all of the fair value of the gross assets acquired (or disposed of) is concentrated in a single identifiable asset or a group of similar identifiable assets, the set is not a business. This screen reduces the number of transactions that need to be further evaluated. Public business entities should apply the amendments in this Update to annual periods beginning after December 15, 2017, including interim periods within those periods. All other entities should apply the amendments to annual periods beginning after December 15, 2018, and interim periods within annual periods beginning after December 15, 2019. The amendments in this Update should be applied prospectively on or after the effective date. This Update is not expected to have a significant impact on the Company's financial statements.



In February 2017, the FASB issued ASU 2017-05, *Other Income—Gains and Losses from the Derecognition of Nonfinancial Assets (Subtopic 610-20)*. The amendments in this Update clarify what constitutes a financial asset within the scope of Subtopic 610-20. The amendments also clarify that entities should identify each distinct nonfinancial asset or in substance nonfinancial asset that is promised to a counterparty and to derecognize each asset when the counterparty obtains control. There is also additional guidance provided for partial sales of a nonfinancial asset and when derecognition, and the related gain or loss, should be recognized. The amendments in this Update are effective at the same time as the amendments in Update 2014-09. Therefore, for public entities, the amendments are effective for annual reporting periods beginning after December 15, 2017, including interim reporting periods within that reporting period. For all other entities, the amendments in this Update are effective for annual reporting periods beginning after December 15, 2018, and interim reporting periods within annual reporting periods beginning after December 15, 2019. This Update is not expected to have a significant impact on the Company's financial statements.

In March 2017, the FASB issued ASU 2017-08, *Receivables – Nonrefundable Fees and Other Costs (Subtopic 310-20)*. The amendments in this Update shorten the amortization period for certain callable debt securities held at a premium. Specifically, the amendments require the premium to be amortized to the earliest call date. The amendments do not require an accounting change for securities held at a discount; the discount continues to be amortized to maturity. For public business entities, the amendments in this Update are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. For all other entities, the amendments are effective for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Early adoption is permitted, including adoption in an interim period. If an entity early adopts the amendments in an interim period, any adjustments should be reflected as of the beginning of the fiscal year that includes that interim period. An entity should apply the amendments in this Update on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings as of the beginning of the period of adoption. Additionally, in the period of adoption, an entity should provide disclosures about a change in accounting principle. This Update is not expected to have a significant impact on the Company's financial statements.

In May 2017, the FASB issued ASU 2017-09, *Compensation – Stock Compensation (Topic 718)*, which affects any entity that changes the terms or conditions of a share-based payment award. This Update amends the definition of modification by qualifying that modification accounting does not apply to changes to outstanding share-based payment awards that do not affect the total fair value, vesting requirements, or equity/liability classification of the awards. The amendments in this Update are effective for all entities for annual periods, and interim periods within those annual periods, beginning after December 15, 2017. Early adoption is permitted, including adoption in any interim period, for (1) public business entities for reporting periods for which financial statements have not yet been issued and (2) all other entities for reporting periods for which financial statements have not yet been made available for issuance. The amendments in this Update should be applied prospectively to an award modified on or after the adoption date. This Update is not expected to have a significant impact on the Company's financial statements.

In August 2017, the FASB issued ASU 2017-12, *Derivatives and Hedging (Topic 850)*, the objective of which is to improve the financial reporting of hedging relationships to better portray the economic results of an entity's risk management activities in its financial statements. In addition, the amendments in this Update make certain targeted improvements to simplify the application and disclosure of the hedge accounting guidance in current general accepted accounting principles. For public business entities, the amendments in this Update are effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. For all other entities, the amendments are effective for fiscal years beginning after December 15, 2019, and interim periods beginning after December 15, 2020. Early application is permitted in any period after issuance. For cash flow and net investment hedges existing at the date of adoption, an entity should apply a cumulative-effect adjustment related to eliminating the separate measurement of ineffectiveness to accumulated other comprehensive income with a corresponding adjustment to the opening balance of retained earnings as of the beginning of the fiscal year that an entity adopts the amendments in this Update. The amended presentation and disclosure guidance is required only prospectively. This Update is not expected to have a significant impact on the Company's financial statements.

In January 2018, the FASB issued ASU 2018-01, *Leases (Topic 842)*, which provides an optional transition practical expedient to not evaluate under Topic 842 existing or expired land easements that were not previously accounted for as leases under the current lease guidance in Topic 840. An entity that elects this practical expedient should evaluate new or modified land easements under Topic 842 beginning at the date the entity adopts Topic 842; otherwise, an entity should evaluate all existing or expired land easements in connection with the adoption of the new lease requirements in Topic 842 to assess whether they meet the definition of a lease. The effective date and transition requirements for the amendments are the same as the effective date and transition requirements in ASU 2016-02. This Update is not expected to have a significant impact on the Company's financial statements.

In February 2018, the FASB issued ASU 2018-02, *Income Statement – Reporting Comprehensive Income (Topic 220)*. On December 22, 2017, the U.S. federal government enacted a tax bill, H.R.1, *An Act to Provide for Reconciliation Pursuant to Titles II and V of the Concurrent Resolution on the Budget for Fiscal Year 2018 (Tax Cuts and Jobs Act)*, which requires deferred tax liabilities and assets

to be adjusted for the effect of a change in tax laws. The amendments in this Update allow a reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the Tax Cuts and Jobs Act. The amendments in this Update are effective for all entities for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. Early adoption of the amendments in this Update is permitted. The amendments in this Update should be applied either in the period of adoption or retrospectively to each period (or periods) in which the effect of the change in the U.S. federal corporate income tax rate in the Tax Cuts and Jobs Act is recognized. The Company has elected to early adopt this standard as of December 31, 2017, which resulted in a one-time cumulative effect adjustment of \$294,000 between retained earnings and accumulated other comprehensive income on the Consolidated Balance Sheets. The adjustment had no impact on net income or any prior periods presented.

## NOTE 2 - INVESTMENT SECURITIES

The following is a summary of investment securities available-for-sale:

December 31, 2017	Amortized Cost	(Amounts in thousands)		Fair Value
		Gross Unrealized Gains	Gross Unrealized Losses	
U.S. Government agencies and corporations	\$ 3,344	\$ 1	\$ 140	\$ 3,205
Obligations of states and political subdivisions	71,700	740	324	72,116
U.S. Government-sponsored mortgage-backed securities	69,066	6	1,404	67,668
U.S. Government-sponsored collateralized mortgage obligations	6,463	—	161	6,302
U.S. Government-guaranteed small business administration pools	9,911	—	256	9,655
Trust preferred securities	1,618	—	723	895
Total debt securities	162,102	747	3,008	159,841
Federal Home Loan Bank (FHLB) stock	2,355	—	—	2,355
Federal Reserve Bank (FRB) stock	226	—	—	226
Total regulatory stock	2,581	—	—	2,581
Total investment securities available-for-sale	\$ 164,683	\$ 747	\$ 3,008	\$ 162,422

December 31, 2016	Amortized Cost	(Amounts in thousands)		Fair Value
		Gross Unrealized Gains	Gross Unrealized Losses	
U.S. Government agencies and corporations	\$ 8,165	\$ 3	\$ 180	\$ 7,988
Obligations of states and political subdivisions	68,219	582	2,031	66,770
U.S. Government-sponsored mortgage-backed securities	81,281	32	1,546	79,767
U.S. Government-sponsored collateralized mortgage obligations	9,504	—	155	9,349
U.S. Government-guaranteed small business administration pools	12,255	1	317	11,939
Trust preferred securities	1,620	—	795	825
Total debt securities	181,044	618	5,024	176,638
Federal Home Loan Bank (FHLB) stock	2,355	—	—	2,355
Federal Reserve Bank (FRB) stock	226	—	—	226
Total regulatory stock	2,581	—	—	2,581
Total investment securities available-for-sale	\$ 183,625	\$ 618	\$ 5,024	\$ 179,219

Trading securities historically had been an investment in obligations of states and political subdivisions, government and agency bonds, short-term government bonds and included cash equivalent investments for trading liquidity. In the second quarter of 2016, management decided to cease its trading activities and liquidated the investments that were in the trading account. The current interest rate and economic environment mitigated the opportunities to generate revenues with a trading strategy. Both realized and unrealized gains and losses for the years ended December 31, 2016 and 2015 are included in the Consolidated Statements of Income.

	(Amounts in thousands)	
	2016	2015
Unrealized gains	—	\$ 7
Unrealized losses	—	(3)
Net unrealized gains	—	4
Net realized losses	(47)	(15)
Trading securities losses, net	<u>\$ (47)</u>	<u>\$ (11)</u>

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

	(Amounts in thousands)	
	Amortized Cost	Fair Value
Due in one year or less	\$ 10	\$ 10
Due after one year through five years	860	894
Due after five years through ten years	8,437	8,315
Due after ten years	77,266	76,652
Total	86,573	85,871
U.S. Government-sponsored mortgage-backed and related securities	75,529	73,970
Total debt securities	<u>\$ 162,102</u>	<u>\$ 159,841</u>

The following table sets forth the proceeds, gains and losses realized on securities sold or called for each of the years ended December 31:

	(Amounts in thousands)		
	2017	2016	2015
Proceeds on securities sold	\$ 44,801	\$ 50,862	\$ 12,291
Gross realized gains	524	725	135
Gross realized losses	517	259	60

Investment securities with a carrying value of approximately \$105.0 million at December 31, 2017 and \$111.5 million at December 31, 2016 were pledged to secure deposits and for other purposes. The remaining securities provide an adequate level of liquidity.

The following is a summary of the fair value of securities with unrealized losses and an aging of those unrealized losses at December 31, 2017:

	(Amounts in thousands)					
	Less than 12 Months		12 Months or More		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
U.S. Government agencies and corporations	\$ —	\$ —	\$ 2,860	\$ 140	\$ 2,860	\$ 140
Obligations of states and political subdivisions	7,430	24	18,066	300	25,496	324
U.S. Government-sponsored mortgage-backed securities	24,888	241	40,968	1,163	65,856	1,404
U.S. Government-sponsored collateralized mortgage obligations	—	—	6,302	161	6,302	161
U.S. Government-guaranteed small business administration pools	2,532	38	7,123	218	9,655	256
Trust preferred securities	—	—	895	723	895	723
<b>Total</b>	<b>\$ 34,850</b>	<b>\$ 303</b>	<b>\$ 76,214</b>	<b>\$ 2,705</b>	<b>\$ 111,064</b>	<b>\$ 3,008</b>

The above table represents 83 investment securities where the fair value is less than the related amortized cost.

The following is a summary of the fair value of securities with unrealized losses and an aging of those unrealized losses at December 31, 2016:

	(Amounts in thousands)					
	Less than 12 Months		12 Months or More		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
U.S. Government agencies and corporations	\$ 7,643	\$ 180	\$ —	\$ —	\$ 7,643	\$ 180
Obligations of states and political subdivisions	41,668	2,031	—	—	41,668	2,031
U.S. Government-sponsored mortgage-backed securities	68,386	1,487	2,044	59	70,430	1,546
U.S. Government-sponsored collateralized mortgage obligations	9,350	155	—	—	9,350	155
U.S. Government-guaranteed small business administration pools	8,757	317	—	—	8,757	317
Trust preferred securities	—	—	825	795	825	795
<b>Total</b>	<b>\$ 135,804</b>	<b>\$ 4,170</b>	<b>\$ 2,869</b>	<b>\$ 854</b>	<b>\$ 138,673</b>	<b>\$ 5,024</b>

The above table represents 122 investment securities where the current value is less than the related amortized cost.

The trust preferred securities with an unrealized loss represent pools of trust preferred debt issued primarily by bank holding companies. The unrealized losses on the Company's investment in U.S. Government agencies and corporations, obligations of states and political subdivisions, U.S. Government-sponsored-mortgage-backed securities, U.S. Government-sponsored collateralized mortgage obligations, and U.S. Government-guaranteed small business administration pools were caused by changes in market rates and related spreads. It is expected that the securities would not be settled at less than the amortized cost of the Company's investment because the decline in fair value is attributable to changes in interest rates and relative spreads and not credit quality. Also, except for the securities described below, the Company does not intend to sell those investments and it is not more-likely-than-not that the Company will be required to sell the investments before recovery of its amortized cost basis less any current period credit loss. The Company does not consider these investments to be other-than-temporarily impaired at December 31, 2017.

#### Securities Deemed to be Other-Than-Temporarily Impaired

The Company reviews investment debt securities on an ongoing basis for the presence of other-than-temporary impairment (OTTI) with formal reviews performed quarterly.

For debt securities in an unrealized loss position, management assesses whether (a) it has the intent to sell the debt security or (b) it is more-likely-than-not that it will be required to sell the debt security before its anticipated recovery. If either of these conditions is met, an OTTI on the security must be recognized.

In instances in which a determination is made that a credit loss (defined as the difference between the present value of the cash flows expected to be collected and the amortized cost basis) exists but the entity does not intend to sell the debt security and it is not more-likely-than-not that the entity will be required to sell the debt security before the anticipated recovery of its remaining amortized cost basis (i.e., the amortized cost basis less any current-period credit loss), the Company presents the amount of the OTTI recognized in the Consolidated Statements of Income.

In these instances, the impairment is separated into (a) the amount of the total impairment related to the credit loss, and (b) the amount of the total impairment related to all other factors. The amount of the total OTTI related to the credit loss is recognized in earnings. The amount of the total impairment related to all other factors is recognized in other comprehensive income. The total other-than-temporary impairment is presented in the Consolidated Statements of Income with an offset for the amount of the total other-than-temporary impairment that is recognized in other comprehensive income.

As more fully disclosed in Note 11, the Company assessed the impairment of certain securities currently in an illiquid market. The Company records impairment credit losses in earnings (before tax) and non-credit impairment losses in other comprehensive (loss) income (before tax). Through the impairment assessment process, there was no impairment loss recognized in the years ended December 31, 2017, 2016 or 2015.

The following provides a cumulative roll forward of credit losses recognized in earnings for trust preferred securities held for the years ended:

	(Amounts in thousands)		
	December 31,		
	2017	2016	2015
Beginning balance	\$ 140	\$ 140	\$ 140
Reduction for debt securities for which other-than-temporary impairment has been previously recognized and there is no related other comprehensive income	—	—	—
Credit losses on debt securities for which other-than-temporary impairment has not been previously recognized	—	—	—
Additional credit losses on debt securities for which other-than-temporary impairment was previously recognized	—	—	—
Sale of debt securities	—	—	—
Ending balance	<u>\$ 140</u>	<u>\$ 140</u>	<u>\$ 140</u>

At December 31, 2017 and December 31, 2016, there were \$895,000 and \$825,000, respectively, of investment securities considered to be in non-accrual status. This balance is comprised of two trust preferred securities at December 31, 2017 and 2016. As a result of the delay in the collection of interest payments, management placed these securities in non-accrual status. Current estimates indicate that the interest payment delays may exceed ten years.

### NOTE 3 - LOANS AND ALLOWANCE FOR LOAN LOSSES

The Company, through the Bank, grants residential, consumer and commercial loans to customers located primarily in Northeastern Ohio and Western Pennsylvania.

The following represents the composition of the loan portfolio for the period ending:

	(Amounts in thousands)			
	December 31,			
	2017		2016	
	Balance	%	Balance	%
Commercial	\$ 113,341	23.3	\$ 96,281	22.9
Commercial real estate	283,135	58.1	238,692	56.9
Residential real estate	62,071	12.7	57,008	13.6
Consumer - home equity	26,018	5.3	25,061	6.0
Consumer - other	2,925	0.6	2,726	0.6
Total loans	<u>\$ 487,490</u>		<u>\$ 419,768</u>	



Management has an established methodology to determine the adequacy of the allowance for loan losses that assesses the risks and losses inherent in the loan portfolio. For purposes of determining the allowance for loan losses, the Company has segmented loans in the portfolio by product type. Loans are segmented into the following pools: commercial loans, commercial real estate loans, residential real estate loans and consumer loans. The pools of commercial real estate loans and commercial loans are also broken down further by industry sectors when analyzing the related pools. Using the largest concentrations as the qualifier, these industry sectors include non-residential buildings; skilled nursing and nursing care; residential real estate lessors, agents and managers; hotel and motels, and trucking. The Company also sub-segments the consumer loan portfolio into the following two classes: home equity loans and other consumer loans. Historical loss percentages for each risk category are calculated and used as the basis for calculating allowance allocations. These historical loss percentages are calculated over multiple periods for all portfolio segments. Management evaluates these results and utilizes the most reflective period in the calculation. Certain qualitative factors are then added to the historical allocation percentage to get the adjusted factor.

These factors include, but are not limited to, the following:

Factor Considered:	Risk Trend:
Levels of and trends in charge-offs, classifications and non-accruals	Stable
Trends in volume and terms	Increasing
Changes in lending policies and procedures	Stable
Experience, depth and ability of management, including loan review function	Stable
Economic trends, including valuation of underlying collateral	Stable
Concentrations of credit	Decreasing

The following factors are analyzed and applied to loans internally graded with higher risk credit in addition to the above factors for non-classified loans:

Factor Considered:	Risk Trend:
Levels and trends in classification	Stable
Declining trends in financial performance	Stable
Structure and lack of performance measures	Increasing
Migration between risk categories	Stable

The provision charged to operations can be allocated to a loan classification either as a positive or negative value as a result of any material changes to: net charge-offs or recovery which influence the historical allocation percentage, qualitative risk factors or loan balances.

The following is an analysis of changes in the allowance for loan losses for the periods ended:

December 31, 2017	(Amounts in thousands)					
	Commercial	Commercial real estate	Residential real estate	Consumer - home equity	Consumer - other	Total
Balance at beginning of period	\$ 1,394	\$ 3,072	\$ 163	\$ 150	\$ 89	\$ 4,868
Loan charge-offs	—	(654)	(14)	(26)	(146)	(840)
Recoveries	388	—	5	10	47	450
Net loan recoveries (charge-offs)	388	(654)	(9)	(16)	(99)	(390)
Provision charged to operations	(191)	284	(37)	(64)	108	100
Balance at end of period	<u>\$ 1,591</u>	<u>\$ 2,702</u>	<u>\$ 117</u>	<u>\$ 70</u>	<u>\$ 98</u>	<u>\$ 4,578</u>

December 31, 2016	(Amounts in thousands)					
	Commercial	Commercial real estate	Residential real estate	Consumer - home equity	Consumer - other	Total
Balance at beginning of period	\$ 1,977	\$ 2,926	\$ 153	\$ 52	\$ 86	\$ 5,194
Loan charge-offs	—	(287)	(35)	(144)	(148)	(614)
Recoveries	117	35	2	23	61	238
Net loan recoveries (charge-offs)	117	(252)	(33)	(121)	(87)	(376)
Provision charged to operations	(700)	398	43	219	90	50
Balance at end of period	<u>\$ 1,394</u>	<u>\$ 3,072</u>	<u>\$ 163</u>	<u>\$ 150</u>	<u>\$ 89</u>	<u>\$ 4,868</u>

December 31, 2015	(Amounts in thousands)					
	Commercial	Commercial real estate	Residential real estate	Consumer - home equity	Consumer - other	Total
Balance at beginning of period	\$ 2,064	\$ 2,754	\$ 229	\$ 60	\$ 95	\$ 5,202
Loan charge-offs	(470)	(84)	(45)	—	(124)	(723)
Recoveries	134	10	37	17	62	260
Net loan recoveries (charge-offs)	(336)	(74)	(8)	17	(62)	(463)
Provision charged to operations	249	246	(68)	(25)	53	455
Balance at end of period	<u>\$ 1,977</u>	<u>\$ 2,926</u>	<u>\$ 153</u>	<u>\$ 52</u>	<u>\$ 86</u>	<u>\$ 5,194</u>

The total allowance reflects management's estimate of loan losses inherent in the loan portfolio at the Consolidated Balance Sheet date.

The following tables present a full breakdown by portfolio classification, the changes in the allowance for loan losses and the recorded investment in loans for the periods ended December 31, 2017 and 2016:

December 31, 2017	(Amounts in thousands)					
	Commercial	Commercial real estate	Residential real estate	Consumer - home equity	Consumer - other	Total
<b>Allowance for loan losses:</b>						
Ending allowance balance attributable to loans:						
Individually evaluated for impairment	\$ 625	\$ —	\$ —	\$ —	\$ —	\$ 625
Collectively evaluated for impairment	966	2,702	117	70	98	3,953
Total ending allowance balance	<u>\$ 1,591</u>	<u>\$ 2,702</u>	<u>\$ 117</u>	<u>\$ 70</u>	<u>\$ 98</u>	<u>\$ 4,578</u>
<b>Loan Portfolio:</b>						
Individually evaluated for impairment	\$ 5,581	\$ 4,664	\$ —	\$ —	\$ —	\$ 10,245
Collectively evaluated for impairment	107,760	278,471	62,071	26,018	2,925	477,245
Total ending loan balance	<u>\$ 113,341</u>	<u>\$ 283,135</u>	<u>\$ 62,071</u>	<u>\$ 26,018</u>	<u>\$ 2,925</u>	<u>\$ 487,490</u>

December 31, 2016	(Amounts in thousands)					
	Commercial	Commercial real estate	Residential real estate	Consumer - home equity	Consumer - other	Total
<b>Allowance for loan losses:</b>						
Ending allowance balance attributable to loans:						
Individually evaluated for impairment	\$ —	\$ 178	\$ —	\$ —	\$ —	\$ 178
Collectively evaluated for impairment	1,394	2,894	163	150	89	4,690
Total ending allowance balance	<u>\$ 1,394</u>	<u>\$ 3,072</u>	<u>\$ 163</u>	<u>\$ 150</u>	<u>\$ 89</u>	<u>\$ 4,868</u>
<b>Loan Portfolio:</b>						
Individually evaluated for impairment	\$ 106	\$ 6,860	\$ —	\$ —	\$ —	\$ 6,966
Collectively evaluated for impairment	96,175	231,832	57,008	25,061	2,726	412,802
Total ending loan balance	<u>\$ 96,281</u>	<u>\$ 238,692</u>	<u>\$ 57,008</u>	<u>\$ 25,061</u>	<u>\$ 2,726</u>	<u>\$ 419,768</u>

The increase in the total allowance for commercial loans is primarily due to volume of loans in this category. The decrease in the overall allowance in commercial real estate loans is due mainly to a decrease in the overall historical factor when analyzing the pool broken out by industry sectors, which help to offset the full impact of the loan charge-offs. The decrease in residential real estate and consumer – home equity allowance is due primarily to historical factors. Along with the impact of classified loans, the amount of net charge-offs impacts the provision charged to operations for any category of loans. Charge-offs affect the historical rate applied to each category, and the amount needed to replenish the charge off to the allowance. This impacted all categories other than commercial loans.

The following tables represent credit exposures by internally assigned grades for years ended December 31, 2017 and 2016, respectively. The grading analysis estimates the capability of the borrower to repay the contractual obligations of the loan agreements as scheduled or at all. The Company's internal credit risk grading system is based on experiences with similarly graded loans.

The Company's internally assigned grades are as follows:

- *Pass* – loans which are protected by the current net worth and paying capacity of the obligor or by the value of the underlying collateral. Within this category, there are grades of exceptional, quality, acceptable and pass monitor.
- *Special Mention* – loans where a potential weakness or risk exists, which could cause a more serious problem if not corrected.
- *Substandard* – loans that have a well-defined weakness based on objective evidence and are characterized by the distinct possibility that the Bank will sustain some loss if the deficiencies are not corrected.
- *Doubtful* – loans classified as doubtful have all the weaknesses inherent in a substandard asset but with the severity which makes collection in full highly questionable and improbable, based on existing circumstances.
- *Loss* – loans classified as a loss are considered uncollectible, or of such value that continuance as an asset is not warranted. This rating does not mean that the assets have no recovery or salvage value but rather that the assets should be charged off now, even though partial or full recovery may be possible in the future.

The following is a summary of credit quality indicators by internally assigned grade as of December 31, 2017 and 2016.

	(Amounts in thousands)	
	Commercial	Commercial real estate
December 31, 2017		
Pass	\$ 100,436	\$ 252,960
Special Mention	4,836	24,307
Substandard	8,069	5,868
Doubtful	—	—
Ending Balance	<u>\$ 113,341</u>	<u>\$ 283,135</u>

	(Amounts in thousands)	
	Commercial	Commercial real estate
December 31, 2016		
Pass	\$ 80,644	\$ 208,337
Special Mention	12,836	22,633
Substandard	2,801	7,722
Doubtful	—	—
Ending Balance	<u>\$ 96,281</u>	<u>\$ 238,692</u>

The Company evaluates the classification of consumer, home equity and residential loans primarily on a pooled basis. If the Company becomes aware that adverse or distressed conditions exist that may affect a particular loan, the loan is downgraded following the above definitions of special mention and substandard. Nonaccrual loans in these categories are evaluated for charge off or charge down, and the remaining balance has the same allowance factor as pooled loans.

The following is a summary of consumer credit exposure as of December 31, 2017 and 2016.

	(Amounts in thousands)		
	Residential real estate	Consumer - home equity	Consumer- other
December 31, 2017			
Performing	\$ 61,824	\$ 25,889	\$ 2,925
Nonperforming	247	129	—
Total	<u>\$ 62,071</u>	<u>\$ 26,018</u>	<u>\$ 2,925</u>

	(Amounts in thousands)		
	Residential real estate	Consumer - home equity	Consumer- other
December 31, 2016			
Performing	\$ 55,743	\$ 25,006	\$ 2,726
Nonperforming	1,265	55	—
Total	<u>\$ 57,008</u>	<u>\$ 25,061</u>	<u>\$ 2,726</u>

Loans are considered to be nonperforming when they become 90 days past due or on nonaccrual status, though the Company may be receiving partial payments of interest and partial repayments of principal on such loans. When a loan is placed in non-accrual status, previously accrued but unpaid interest is recorded against interest income. Loans in foreclosure are considered nonperforming. At December 31, 2017, there were \$378,000 of loans in the process of foreclosure.

The following is a summary of classes of loans on non-accrual status as of:

	(Amounts in thousands)	
	December 31,	
	2017	2016
Commercial	\$ —	\$ —
Commercial real estate	506	1,458
Residential real estate	247	1,265
Consumer:		
Consumer - home equity	129	55
Consumer - other	—	—
Total	<u>\$ 882</u>	<u>\$ 2,778</u>

Gross income that should have been recorded in income on nonaccrual loans was \$57,000, \$160,000 and \$293,000 for the years ended December 31, 2017, 2016 and 2015, respectively. Actual interest included in income on these nonaccrual loans amounts to \$16,000, \$41,000 and \$26,000 in 2017, 2016 and 2015, respectively.

#### Troubled Debt Restructuring

Nonperforming loans also include certain loans that have been modified in troubled debt restructurings (TDRs) where economic concessions have been granted to borrowers who have experienced or are expected to experience financial difficulties. These concessions typically result from the Company's loss mitigation activities and could include reductions in the interest rate, payment extensions, forgiveness of principal, forbearance or other actions. Certain TDRs are classified as nonperforming at the time of restructure and may only be returned to performing status after considering the borrower's sustained repayment performance for a reasonable period, generally six months.

There were no loans modified as TDRs during the years ended December 31, 2017 and 2016. The following presents, by class, information related to loans modified in a TDR during the periods ended December 31, 2015.

	(Dollar amounts in thousands)			
	December 31, 2015			
	Number of contracts	Pre-modification recorded investment	Post- modification recorded investment	Increase in the allowance
Commercial real estate	2	\$ 3,154	\$ 3,154	\$ —
Subsequently defaulted	—	\$ —		

In 2015, the two commercial real estate loans were to the same customer. There was no interest rate impact, only a change in loan terms to six months interest only. None of the loans that were classified as TDRs in 2015 have subsequently defaulted in the year ended December 31, 2016.

The following is an aging analysis of the recorded investment of past due loans as of the periods ended December 31, 2017 and 2016:

(Amounts in thousands)

	30-59 Days Past Due	60-89 Days Past Due	90 Days Or Greater	Total Past Due	Current	Total Loans	Recorded Investment > 90 Days and Accruing
<b>December 31, 2017</b>							
Commercial	\$ —	\$ —	\$ —	\$ —	\$ 113,341	\$ 113,341	\$ —
Commercial real estate	173	12	390	575	282,560	283,135	—
Residential real estate	240	29	216	485	61,586	62,071	—
<b>Consumer:</b>							
Consumer - home equity	—	82	28	110	25,908	26,018	—
Consumer - other	15	—	—	15	2,910	2,925	—
Total	<u>\$ 428</u>	<u>\$ 123</u>	<u>\$ 634</u>	<u>\$ 1,185</u>	<u>\$ 486,305</u>	<u>\$ 487,490</u>	<u>\$ —</u>

(Amounts in thousands)

	30-59 Days Past Due	60-89 Days Past Due	90 Days Or Greater	Total Past Due	Current	Total Loans	Recorded Investment > 90 Days and Accruing
<b>December 31, 2016</b>							
Commercial	\$ 377	\$ —	\$ —	\$ 377	\$ 95,904	\$ 96,281	\$ —
Commercial real estate	1,189	83	1,347	2,619	236,073	238,692	—
Residential real estate	58	9	1,184	1,251	55,757	57,008	—
<b>Consumer:</b>							
Consumer - home equity	—	46	55	101	24,960	25,061	—
Consumer - other	13	—	—	13	2,713	2,726	—
Total	<u>\$ 1,637</u>	<u>\$ 138</u>	<u>\$ 2,586</u>	<u>\$ 4,361</u>	<u>\$ 415,407</u>	<u>\$ 419,768</u>	<u>\$ —</u>

An impaired loan is a loan on which, based on current information and events, it is probable that a creditor will be unable to collect all amounts due (including both interest and principal) according to the contractual terms of the loan agreement. However, an insignificant delay or insignificant shortfall in amount of payments on a loan does not indicate that the loan is impaired.

When a loan is determined to be impaired, impairment should be measured based on the present value of expected future cash flows discounted at the loan's effective interest rate. However, as a practical expedient, the Company will measure impairment based on a loan's observable market price, or the fair value of the collateral if the loan is collateral dependent.

The following are the criteria for selecting individual loans / relationships for impairment analysis. Non-homogenous loans which meet the criteria below are evaluated quarterly.

- All borrowers whose loans are classified doubtful by examiners and internal loan review
- All loans on non-accrual status
- Any loan in foreclosure
- Any loan with a specific reserve
- Any loan determined to be collateral dependent for repayment
- Loans classified as troubled debt restructuring

Commercial loans and commercial real estate loans evaluated for impairment are excluded from the general pool of loans in the ALLL calculation regardless if a specific reserve was determined. If management determines that the value of the impaired loan is less than the recorded investment in the loan (net of previous charge-offs, deferred loan fees or costs and unamortized premium or discount), impairment is recognized through an allowance estimate or a charge-off to the allowance.

The following table presents the recorded investment and unpaid principal balances for impaired loans, excluding homogenous loans for which impaired analyses are not necessarily performed, with the associated allowance amount, if applicable, at December 31, 2017 and 2016. Also presented are the average recorded investments in the impaired balances and interest income recognized after impairment for the years ended December 31, 2017, 2016 and 2015.

	(Amounts in thousands)		
	Recorded Investment	Unpaid Principal Balance	Related Allowance
<b>December 31, 2017</b>			
With no related allowance recorded:			
Commercial	\$ 65	\$ 65	\$ —
Commercial real estate	4,664	4,742	—
With an allowance recorded:			
Commercial	5,516	5,516	625
Commercial real estate	—	—	—
Total:			
Commercial	<u>\$ 5,581</u>	<u>\$ 5,581</u>	<u>\$ 625</u>
Commercial real estate	<u>\$ 4,664</u>	<u>\$ 4,742</u>	<u>\$ —</u>

	(Amounts in thousands)		
	Recorded Investment	Unpaid Principal Balance	Related Allowance
<b>December 31, 2016</b>			
With no related allowance recorded:			
Commercial	\$ 106	\$ 106	\$ —
Commercial real estate	5,681	5,789	—
With an allowance recorded:			
Commercial	—	—	—
Commercial real estate	1,179	1,179	178
Total:			
Commercial	<u>\$ 106</u>	<u>\$ 106</u>	<u>\$ —</u>
Commercial real estate	<u>\$ 6,860</u>	<u>\$ 6,968</u>	<u>\$ 178</u>

	(Amounts in thousands)	
	Average Recorded Investment	Interest Income Recognized
<b>December 31, 2017</b>		
With no related allowance recorded:		
Commercial	\$ 85	\$ 6
Commercial real estate	5,062	291
With an allowance recorded:		
Commercial	460	—
Commercial real estate	527	—
Total:		
Commercial	<u>\$ 545</u>	<u>\$ 6</u>
Commercial real estate	<u>\$ 5,589</u>	<u>\$ 291</u>



	(Amounts in thousands)	
	Average Recorded Investment	Interest Income Recognized
<b>December 31, 2016</b>		
With no related allowance recorded:		
Commercial	\$ 146	\$ 8
Commercial real estate	6,072	335
With an allowance recorded:		
Commercial	279	—
Commercial real estate	1,209	85
Total:		
Commercial	\$ 425	\$ 8
Commercial real estate	\$ 7,281	\$ 420

	(Amounts in thousands)	
	Average Recorded Investment	Interest Income Recognized
<b>December 31, 2015</b>		
With no related allowance recorded:		
Commercial	\$ 322	\$ 13
Commercial real estate	4,842	181
With an allowance recorded:		
Commercial	1,341	—
Commercial real estate	1,160	84
Total:		
Commercial	\$ 1,663	\$ 13
Commercial real estate	\$ 6,002	\$ 265

#### NOTE 4 - PREMISES AND EQUIPMENT

The following is a summary of premises and equipment:

	(Amounts in thousands)	
	December 31,	
	2017	2016
Land	\$ 2,746	\$ 2,746
Premises	9,914	9,846
Equipment	9,711	9,312
Leasehold improvements	264	222
Total premises and equipment	22,635	22,126
Less accumulated depreciation	13,597	12,994
Net book value	\$ 9,038	\$ 9,132

Depreciation expense was \$880,000 in 2017, \$835,000 in 2016 and \$792,000 in 2015.

## NOTE 5 - DEPOSITS

The following is a summary of interest-bearing deposits:

	(Amounts in thousands)	
	December 31,	
	2017	2016
Demand	\$ 50,410	\$ 45,158
Money market	171,783	133,783
Savings	113,078	112,817
Time:		
In denominations \$250,000 or under	108,761	113,368
In denominations of over \$250,000	18,528	17,499
Total	\$ 462,560	\$ 422,625

Stated maturities of time deposits were as follows:

	(Amounts in thousands)	
	2017	
2018	\$ 80,665	
2019	9,557	
2020	9,699	
2021	13,301	
2022	6,353	
2023 and beyond	7,714	
Total	\$ 127,289	

The following is a summary of time deposits of \$100,000 or more by remaining maturities:

	(Amounts in thousands)		
	December 31, 2017		
	Certificates of Deposit	Other Time Deposits	Total
Three months or less	\$ 11,375	\$ 15,199	\$ 26,574
Three to six months	4,698	7,962	12,660
Six to twelve months	1,678	3,192	4,870
One through five years	13,527	4,587	18,114
Over five years	3,249	769	4,018
Total	\$ 34,527	\$ 31,709	\$ 66,236

## NOTE 6 - FEDERAL HOME LOAN BANK (FHLB) ADVANCES AND OTHER SHORT-TERM BORROWINGS

The following is a summary of FHLB advances and other short-term borrowings:

	Weighted Average Interest Rate	(Amounts in thousands)	
		December 31,	
		2017	2016
<b>FHLB advances - long-term:</b>			
Fixed rate payable and convertible fixed rate FHLB advances, with monthly interest payments:			
Due in 2017		\$ —	\$ 15,500
Due in 2018	1.22%	4,000	2,000
Due in 2019	1.60%	6,000	—
Due in 2020	1.70%	4,000	—
Total FHLB advances - long-term	1.51%	14,000	17,500
<b>FHLB advances - short-term:</b>			
Short-term	1.29%	12,000	6,000
Cash management	1.44%	20,000	17,000
Total FHLB advances - short-term	1.38%	32,000	23,000
Total FHLB advances	1.42%	46,000	40,500
<b>Other short-term borrowings:</b>			
Securities sold under repurchase agreements	0.34%	2,678	2,702
Total FHLB advances and other short-term borrowings	1.36%	\$ 48,678	\$ 43,202

The following is a summary of FHLB advances – short term:

	(Amounts in thousands)		
	2017	2016	2015
Average balance during the year	\$ 16,917	\$ 13,550	\$ 14,674
Average interest rate during the year	1.03%	0.54%	0.27%
Maximum month-end balance during the year	\$ 32,000	\$ 23,000	\$ 23,500
Weighted average interest rate at year end	1.38%	0.59%	0.37%

At December 31, 2017, FHLB advances were collateralized by FHLB stock owned by the Bank with a carrying value of \$2.4 million, a blanket lien against the Bank's qualified mortgage loan portfolio of \$64.7 million, \$19.8 million in mortgage-backed securities and \$9.7 million in U.S. Government-guaranteed small business administration pools. In comparison, in the prior year FHLB advances were collateralized by FHLB stock owned by the Bank with a carrying value of \$2.4 million, a blanket lien against the Bank's qualified mortgage loan portfolio of \$61.2 million, \$16.1 million in mortgage-backed securities and \$11.9 million in U.S. Government-guaranteed small business administration pools. Maximum borrowing capacities from FHLB totaled \$57.0 million and \$56.3 million at December 31, 2017 and 2016, respectively.

At December 31, 2017 and 2016, there were \$0 and \$11.5 million FHLB fixed rate advances that were putable on or after certain specified dates at the option of the FHLB.

The following is a summary of other short-term borrowings:

	(Amounts in thousands)		
	2017	2016	2015
Average balance during the year	\$ 2,018	\$ 2,249	\$ 4,082
Average interest rate during the year	0.33%	0.31%	0.10%
Maximum month-end balance during the year	\$ 2,678	\$ 3,608	\$ 7,541
Weighted average interest rate at year end	0.34%	0.33%	0.11%

Securities sold under repurchase agreements represent arrangements the Bank has entered into with certain deposit customers within its local market areas. These borrowings are collateralized with securities. At December 31, 2017 and 2016, securities allocated for this purpose, owned by the Bank and held in safekeeping accounts at independent correspondent banks, amounted to \$3.4 million and \$2.9 million, respectively.

The following table provides additional detail regarding other short-term borrowings:

	(Amounts in thousands)	
	Repurchase Agreements (Sweep)	
	Accounted for as Secured Borrowings	
	At December 31, 2017	At December 31, 2016
	Remaining Contractual Maturity of the Agreements	
	Overnight and Continuous	Overnight and Continuous
<b>Repurchase agreements:</b>		
U.S. Government-sponsored mortgage-backed securities	\$ 3,414	\$ 2,898
U.S. Government-sponsored collateralized mortgage obligations	—	—
Total collateral carrying value	\$ 3,414	\$ 2,898
Total short-term borrowings	\$ 2,678	\$ 2,702

#### NOTE 7 - SUBORDINATED DEBT

In July 2007, a trust formed by the Company issued \$5.0 million of floating rate trust preferred securities as part of a pooled offering of such securities due December 2037. The Company owns all \$155,000 of the common securities issued by the trust. The securities bear interest at the 3-month LIBOR rate plus 1.45%. The rates at December 31, 2017 and 2016 were 3.04% and 2.41%, respectively. The Company issued subordinated debentures to the trust in exchange for the proceeds of the trust preferred offering. The debentures represent the sole assets of this trust. The Company may redeem the subordinated debentures, in whole or in part, at par.

The trust is not consolidated with the Company's financial statements. Accordingly, the Company does not report the securities issued by the trust as liabilities, but instead reports as liabilities the subordinated debentures issued by the Company and held by the trust. The subordinated debentures qualify as Tier 1 capital for regulatory purposes in determining and evaluating the Company's capital adequacy.

#### NOTE 8 – COMMITMENTS AND CONTINGENCIES

The Bank occupies office facilities under operating leases extending to 2021. Most of these leases contain an option to renew at the then fair rental value for periods of five and ten years. These options enable the Bank to retain use of facilities in desirable operating areas. In most cases, management expects that in the normal course of business, leases will be renewed or replaced by other leases. Rental and lease expense was \$230,000 for 2017, \$183,000 for 2016 and \$168,000 for 2015.

The following is a summary of remaining future minimum lease payments under current non-cancelable operating leases for office facilities:

	(Amounts in thousands)	
<b>Years ending:</b>		
December 31, 2018	\$	175
December 31, 2019		124
December 31, 2020		116
December 31, 2021		62
December 31, 2022		—
Total	\$	477

At December 31, 2017, the Bank was required to maintain aggregate cash reserves amounting to \$5 million in order to satisfy federal regulatory requirements. The reserves are held in useable vault cash and interest-earning balances at the Federal Reserve Bank of Cleveland.

The Bank grants commercial and industrial loans, commercial and residential mortgage loans, and consumer loans to customers in Northeastern Ohio and Western Pennsylvania. Although the Bank has a diversified portfolio, exposure to credit loss can be adversely impacted by downturns in local economic and employment conditions. Approximately 0.30% of total loans are unsecured at December 31, 2017 and approximately 0.36% at December 31 2016.

The Bank is a party to financial instruments with off-balance sheet risk in the normal course of business to meet the financing needs of its customers. These financial instruments include commitments to extend credit, standby letters of credit and financial guarantees. Such instruments involve, to varying degrees, elements of credit risk in excess of the amount recognized on the Consolidated Balance Sheets. The contract or notional amounts on those instruments reflect the extent of involvement the Company has in particular classes of financial instruments.

In the event of nonperformance by the other party, the Company's exposure to credit loss on these financial instruments is represented by the contract or notional amount of the instrument. The Company uses the same credit policies in making commitments and conditional obligations as it does for instruments recorded on the balance sheet. The amount and nature of collateral obtained, if any, is based on management's credit evaluation.

The following is a summary of such contractual commitments:

	(Amounts in thousands)	
	December 31,	
	2017	2016
<b>Commitments to extend credit:</b>		
Fixed rate	<b>\$ 32,749</b>	\$ 18,709
Variable rate	<b>60,508</b>	57,176
Standby letters of credit	<b>3,600</b>	412

Commitments to extend credit are agreements to lend to a customer as long as there is no violation of any condition established in the contract. Generally, these financial arrangements have fixed expiration dates or other termination clauses and may require payment of a fee. Standby letters of credit are conditional commitments issued by the Company to guarantee the performance of a customer to a third party. Since many of the commitments are expected to expire without being drawn upon, the total commitment amounts do not necessarily represent future cash requirements. The Company evaluates each customer's creditworthiness on a case-by-case basis. The amount of collateral obtained, if deemed necessary by the Company upon extension of credit, is based on management's credit evaluation of the counterparty. Collateral held varies but may include accounts receivable, inventory, property, plant and equipment and income-producing commercial properties. The increase in commitments is in line with the Company's increased focus on commercial and industrial lending, and specifically lines of credit.

The Company also offers limited overdraft protection as a non-contractual courtesy which is available to businesses as well as individually/jointly owned accounts in good standing for personal or household use. The Company reserves the right to discontinue this service without prior notice.

The following table is a summary of overdraft protection for the periods indicated:

	(Amounts in thousands)	
	December 31,	
	2017	2016
<b>Overdraft protection available on depositors' accounts</b>	<b>\$ 9,637</b>	\$ 9,655
Balance of overdrafts included in loans	<b>103</b>	80
Average daily balance of overdrafts	<b>115</b>	105
Average daily balance of overdrafts as a percentage of available	<b>1.19%</b>	1.09%

Customer Derivatives - Interest Rates Swaps/Floors – The Company enters into interest rate swaps that allow our commercial loan customers to effectively convert a variable-rate commercial loan agreement to a fixed-rate commercial loan agreement. Under these agreements, the Company enters into a variable-rate loan agreement with a customer in addition to an interest rate swap agreement, which serves to effectively swap the customer's variable-rate into a fixed-rate. The Company then enters into a corresponding swap agreement with a third party in order to economically hedge its exposure through the customer agreement. The interest rate swaps with both the customers and third parties are not designated as hedges under FASB ASC 815 and are not marked to market through earnings. As the interest rate swaps are structured to offset each other, changes to the underlying benchmark interest rates considered in the valuation of these instruments do not result in an impact to earnings; however, there may be fair value adjustments related to

credit quality variations between counterparties, which may impact earnings as required by FASB ASC 820. There was no effect on earnings in any periods presented. At December 31, 2017 and 2016, the Company had one U.S. Government-sponsored mortgage-backed security pledged for collateral on its interest rate swaps with the third party financial institution with a fair value \$1.4 million and \$1.7 million, respectively.

Summary information regarding these derivatives is presented below:

	(Amounts in thousands)					
	Notional Amount		Interest Rate Paid	Interest Rate Received	Fair Value	
	December 31,				2017	2016
	2017	2016			2017	2016
<b>Customer interest rate swap</b>						
Maturing in 2020	\$ 2,504	\$ 2,594	1 Mo. Libor + Margin	Fixed	\$ (16)	\$ 15
Maturing in 2025	5,288	5,630	1 Mo. Libor + Margin	Fixed	36	101
Maturing in 2026	2,064	2,178	1 Mo. Libor + Margin	Fixed	(44)	(29)
Maturing in 2027	14,197	6,150	1 Mo. Libor + Margin	Fixed	209	210
Total	<u>\$ 24,053</u>	<u>\$ 16,552</u>			<u>\$ 185</u>	<u>\$ 297</u>
<b>Third party interest rate swap</b>						
Maturing in 2020	\$ 2,504	\$ 2,594	Fixed	1 Mo. Libor + Margin	\$ 16	\$ (15)
Maturing in 2025	5,288	5,630	Fixed	1 Mo. Libor + Margin	(36)	(101)
Maturing in 2026	2,064	2,178	Fixed	1 Mo. Libor + Margin	44	29
Maturing in 2027	14,197	6,150	Fixed	1 Mo. Libor + Margin	(209)	(210)
Total	<u>\$ 24,053</u>	<u>\$ 16,552</u>			<u>\$ (185)</u>	<u>\$ (297)</u>

The following table presents the fair values of derivative instruments in the balance sheet.

	(Amounts in thousands)			
	Assets		Liabilities	
	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value
<b>December 31, 2017</b>				
Interest rate derivatives	Other assets	\$ 185	Other liabilities	\$ 185
<b>December 31, 2016</b>				
Interest rate derivatives	Other assets	\$ 297	Other liabilities	\$ 297

## NOTE 9 – BENEFIT PLANS

The Bank has a contributory defined contribution retirement plan (401(k) plan) which covers substantially all employees. Total expense under the plan was \$361,000 for 2017, \$349,000 for 2016 and \$307,000 for 2015. The Bank matches participants' voluntary contributions up to 5% of gross pay. Participants were able to make voluntary contributions to the plan up to a maximum of \$18,000 with an additional \$6,000 catch-up deferral for plan participants over the age of 50. The Bank makes bi-weekly contributions to this plan equal to amounts accrued for plan expense.

The Company provides supplemental retirement benefit plans for the benefit of certain officers and non-officer directors. The plan for officers is designed to provide post-retirement benefits to supplement other sources of retirement income such as social security and 401(k) benefits. The benefits will be paid for a period of 15 years after retirement. Director Retirement Agreements provide for a benefit of \$10,000 annually on or after the director reaches normal retirement age, which is based on a combination of age and years of service. Director retirement benefits are paid over a period of 10 years following retirement. The Company accrues the cost of these post-retirement benefits during the working careers of the officers and directors. At December 31, 2017, the accumulated liability for these benefits totaled \$3.2 million, with \$2.7 million accrued for the officers' plan and \$500,000 for the directors' plan.



The following table reconciles the accumulated liability for the benefit obligation of these agreements:

	(Amounts in thousands)		
	Years Ended December 31,		
	2017	2016	2015
Beginning balance	\$ 2,957	\$ 2,760	\$ 2,549
Benefit expense	387	359	369
Benefit payments	(162)	(162)	(158)
Ending balance	<u>\$ 3,182</u>	<u>\$ 2,957</u>	<u>\$ 2,760</u>

Supplemental executive retirement agreements are unfunded plans and have no plan assets. The benefit obligation represents the vested net present value of future payments to individuals under the agreements. The benefit expense, as specified in the agreements for the entire year 2018, is expected to be approximately \$426,000. The benefits expected to be paid in the next year are approximately \$162,000.

The Bank has purchased insurance contracts on the lives of the participants in the supplemental retirement benefit plan and has named the Bank as the beneficiary. Similarly, the Company has purchased insurance contracts on the lives of the directors with the Bancorp as beneficiary. While no direct linkage exists between the supplemental retirement benefit plan and the life insurance contracts, it is management's current intent that the revenue from the insurance contracts be used as a funding source for the plan.

The Company accrues for the monthly benefit expense of postretirement cost of insurance for split-dollar life insurance coverage. The following table presents the changes in the accumulated liability.

	(Amounts in thousands)		
	December 31,		
	2017	2016	2015
Beginning balance	\$ 840	\$ 856	\$ 616
Expense recorded	50	23	132
Other comprehensive (income) loss recorded	(14)	(39)	108
Ending balance	<u>\$ 876</u>	<u>\$ 840</u>	<u>\$ 856</u>

#### NOTE 10 - FEDERAL INCOME TAXES

With the passage of the Tax Cuts and Jobs Act ("Tax Act"), tax law for corporations has several material changes effective beginning in 2018. The most significant change is the reduction in the corporate tax rate from 34% to 21%. Because this reduced rate was signed into law in December 2017, generally accepted accounting principles require recognition of the lower rate on the Company's deferred tax position as of December 31, 2017. As the Company is in a net deferred tax asset position, the reduction of this benefit resulted in a \$1.2 million additional charge to Federal Income Tax expense in the Company's 2017 Consolidated Statements of Income.

The composition of income tax expense is as follows:

	(Amounts in thousands)		
	Years Ended December 31,		
	2017	2016	2015
Current	\$ 1,199	\$ 1,256	\$ 916
Deferred	(28)	(129)	303
Change in corporate tax rate	1,246	—	—
Total	<u>\$ 2,417</u>	<u>\$ 1,127</u>	<u>\$ 1,219</u>

The ability to realize the benefit of deferred tax assets is dependent upon a number of factors, including the generation of future taxable income, the ability to carry back taxes paid in previous years, the ability to offset capital losses with capital gains, the reversal of deferred tax liabilities, and certain tax planning strategies. A valuation allowance of \$94,000 had been established to offset in its entirety the tax benefits associated with securities sold at a loss that management was able to offset in 2016. For years subsequent to 2017, the ability to carry back taxes paid in previous years has been eliminated by the Tax Act.

The following is a summary of net deferred taxes included in other assets:

	(Amounts in thousands)	
	December 31,	
	2017	2016
<b>Gross deferred tax assets:</b>		
Allowance for loan and other real estate losses	\$ 961	\$ 1,655
Deferred loan origination cost - net	234	303
Impairment loss on securities	29	48
Deferred compensation	668	1,006
AMT credit carryforward	904	904
Unrealized loss on available-for-sale securities	475	1,499
Other items	333	540
<b>Total gross deferred tax assets</b>	<b>3,604</b>	<b>5,955</b>
<b>Gross deferred tax liabilities:</b>		
Premises and equipment	(362)	(566)
Other items	(325)	(524)
<b>Total net deferred tax liabilities</b>	<b>(687)</b>	<b>(1,090)</b>
<b>Net deferred tax asset</b>	<b>\$ 2,917</b>	<b>\$ 4,865</b>

The Company had a deferred tax asset of \$904,000 for credits related to Alternative Minimum Taxes (AMT) as of December 31, 2017 and December 31, 2016. The AMT credits have an unlimited carry-forward period. No valuation allowance had been established for these deferred tax assets in view of the Corporation's ability to carry forward taxes paid and credits earned in previous years, to future years, coupled with the anticipated future taxable income as evidenced by the Corporation's earnings potential. The Tax Act eliminates the AMT for corporations beginning in 2018. The Company expects to offset its regular tax liability in 2018, utilizing the AMT credit in its entirety.

The following is a reconciliation of the valuation allowance for net deferred tax assets:

	December 31,	
	2017	2016
Valuation allowance at beginning of year	\$ —	\$ 94,000
Utilization of capital loss carryover	—	(94,000)
<b>Valuation allowance at end of year</b>	<b>\$ —</b>	<b>\$ —</b>

The following is a reconciliation between tax expense using the statutory tax rate of 34% and the income tax provision:

	(Amounts in thousands)		
	Years Ended December 31,		
	2017	2016	2015
Statutory tax expense	\$ 2,301	\$ 2,039	\$ 1,903
Tax effect of non-taxable interest income	(663)	(628)	(600)
Tax effect of earnings on bank-owned life insurance-net	(414)	(112)	(115)
Tax effect of deferred tax valuation reversal	—	(94)	—
Change in corporate tax rate	1,246	—	—
Tax effect of low income housing credit	(149)	(142)	(54)
Tax effect of non-deductible expenses	96	64	85
<b>Federal income tax expense</b>	<b>\$ 2,417</b>	<b>\$ 1,127</b>	<b>\$ 1,219</b>

The related income tax expense on investment securities gains amounted to \$3,000 for 2017, \$142,000 for 2016 and \$22,000 for 2015 and is included in the federal income tax expense.

The Company prescribes a recognition threshold and a measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. Benefits from tax positions should be recognized in the financial statements only when it is more-likely-than-not that the tax position will be sustained upon examination by the appropriate taxing authority that would have full knowledge of all relevant information. A tax position that meets the more-likely-than-not recognition

threshold is measured at the largest amount of benefit that is greater than fifty percent likely of being realized upon ultimate settlement. Tax positions that previously failed to meet the more-likely-than-not recognition threshold should be recognized in the first subsequent financial reporting period in which that threshold is met. Previously recognized tax positions that no longer meet the more-likely-than-not recognition threshold should be derecognized in the first subsequent financial reporting period in which that threshold is no longer met. The provision also provides guidance on the accounting for and disclosure of unrecognized tax benefits, interest and penalties. There were no significant unrecognized tax benefits at December 31, 2017 and the Company does not expect any significant increase in unrecognized tax benefits in the next twelve months. No interest or penalties were incurred for income taxes which would have been recorded as a component of income tax expense.

There is currently no liability for uncertain tax positions and no known unrecognized tax benefits. The Company's federal and state income tax returns for taxable years through 2013 have been closed for purposes of examination by the Internal Revenue Service and the Ohio Department of Revenue.

## NOTE 11 – FAIR VALUE

### Measurements

The Company groups assets and liabilities recorded at fair value into three levels based on the markets in which the assets and liabilities are traded and the reliability of the assumptions used to determine fair value. A financial instrument's level within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement (with level 1 considered highest and level 3 considered lowest). A brief description of each level follows:

- Level 1: Quoted prices are available in active markets for identical assets or liabilities as of the reported date.
- Level 2: Pricing inputs are other than quoted prices in active markets, which are either directly or indirectly observable as of the reported date. The nature of these assets and liabilities include items for which quoted prices are available but which trade less frequently, and items that are fair valued using other financial instruments, the parameters of which can be directly observed.
- Level 3: Assets and liabilities that have little to no pricing observability as of the reported date. These items do not have two-way markets and are measured using management's best estimate of fair value, where inputs into the determination of fair value require significant management judgment or estimation.

The following table presents the assets reported on the consolidated balance sheets at their fair value as of December 31, 2017 and December 31, 2016 by level within the fair value hierarchy. Financial assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement.

Description	December 31, 2017	(Amounts in thousands)		
		Fair Value Measurements at December 31, 2017 Using		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
<b><u>ASSETS</u></b>				
U.S. Government agencies and corporations	\$ 3,205	\$ —	\$ 3,205	\$ —
Obligations of states and political subdivisions	72,116	—	72,116	—
U.S. Government-sponsored mortgage-backed securities	67,668	—	67,668	—
U.S. Government-sponsored collateralized mortgage obligations	6,302	—	6,302	—
U.S. Government-guaranteed small business administration pools	9,655	—	9,655	—
Trust preferred securities	895	—	—	895
Regulatory stock	2,581	2,581	—	—
Loans held for sale	2,780	2,780	—	—
Interest rate derivatives	185	—	185	—
<b><u>LIABILITIES</u></b>				
Interest rate derivatives	\$ 185	\$ —	\$ 185	\$ —

Description	(Amounts in thousands)			
	December 31, 2016	Fair Value Measurements at December 31, 2016 Using Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
<b>ASSETS</b>				
U.S. Government agencies and corporations	\$ 7,988	\$ —	\$ 7,988	\$ —
Obligations of states and political subdivisions	66,770	—	66,770	—
U.S. Government-sponsored mortgage-backed securities	79,767	—	79,767	—
U.S. Government-sponsored collateralized mortgage obligations	9,349	—	9,349	—
U.S. Government-guaranteed small business administration pools	11,939	—	11,939	—
Trust preferred securities	825	—	—	825
Regulatory stock	2,581	2,581	—	—
Loans held for sale	4,554	4,554	—	—
Interest rate derivatives	297	—	297	—
<b>LIABILITIES</b>				
Interest rate derivatives	\$ 297	\$ —	\$ 297	\$ —

The following tables present the changes in the Level 3 fair value category for the years ended December 31, 2017, 2016 and 2015. The Company classifies financial instruments in Level 3 of the fair-value hierarchy when there is reliance on at least one significant unobservable input to the valuation model. In addition to these unobservable inputs, the valuation models for Level 3 financial instruments typically also rely on a number of inputs that are readily observable either directly or indirectly.

Description	(Amounts in thousands)		
	December 31,		
	2017	2016	2015
	Trust preferred securities	Trust preferred securities	Trust preferred securities
Beginning balance	\$ 825	\$ 778	\$ 779
Net realized/unrealized gains/(losses) included in:			
Noninterest income	—	—	—
Other comprehensive income	72	67	21
Discount accretion (premium amortization)	—	—	—
Sales	—	—	—
Purchases, issuance, and settlements	(2)	(20)	(22)
Ending balance	\$ 895	\$ 825	\$ 778
Losses included in net income for the period relating to assets held at period end	\$ —	\$ —	\$ —

The Company conducts OTTI analyses on a quarterly basis. The initial indication of other-than-temporary impairment for both debt and equity securities is a decline in the fair value below the amount recorded for an investment. A decline in value that is considered to be other-than-temporary is recorded as a loss within non-interest income in the Consolidated Statements of Income. In determining whether an impairment is other than temporary, the Company considers a number of factors, including, but not limited to, the length of time and extent to which the market value has been less than cost, recent events specific to the issuer, including investment downgrades by rating agencies and economic conditions of its industry, and a determination that the Company does not intend to sell those investments and it is not more-likely-than-not that the Company will be required to sell the investments before recovery of its amortized cost basis less any current period credit loss. Among the factors that are considered in determining the Company's intent and ability is a review of its capital adequacy, interest rate risk position and liquidity.

The Company also considers the issuer's financial condition, capital strength and near-term prospects. In addition, for debt securities the Company considers the cause of the price decline (general level of interest rates and industry- and issuer-specific factors), current ability to make future payments in a timely manner and the issuer's ability to service debt, the assessment of a security's ability to recover any decline in market value, the ability of the issuer to meet contractual obligations and the Company's intent and ability to retain the security. All of the foregoing require considerable judgment.

## Trust Preferred Securities

Trust preferred securities are accounted for under FASB ASC Topic 325 *Investments Other*. The Company evaluates current available information in estimating the future cash flows of securities and determines whether there have been favorable or adverse changes in estimated cash flows from the cash flows previously projected. The Company considers the structure and term of the pool and the financial condition of the underlying issuers. Specifically, the evaluation incorporates factors such as interest rates and appropriate risk premiums, the timing and amount of interest and principal payments and the allocation of payments to the various note classes. Current estimates of cash flows are based on the most recent trustee reports, announcements of deferrals or defaults, expected future default rates and other relevant market information.

For the currently held bank-issued trust preferred securities, the Company does not intend to sell the securities and it is more-likely-than-not that the Company will not be required to sell the securities before recovery of its amortized cost basis. There is a risk that subsequent evaluations could result in recognition of OTTI charges in the future. The securities had life-to-date impairment losses as presented below.

The following table details the breakdown of trust preferred securities for the periods indicated:

	(Dollar amounts in thousands)	
	December 31,	
	2017	2016
Total number of trust preferred securities	<b>2</b>	<b>2</b>
Par value	<b>\$ 1,939</b>	<b>\$ 1,970</b>
Number not considered OTTI	<b>1</b>	<b>1</b>
Par value	<b>\$ 903</b>	<b>\$ 940</b>
Number considered OTTI	<b>1</b>	<b>1</b>
Par value	<b>\$ 1,036</b>	<b>\$ 1,030</b>
Life-to-date impairment recognized in earnings	<b>\$ 140</b>	<b>\$ 140</b>
Life-to-date impairment recognized in other comprehensive income	<b>723</b>	<b>795</b>
Total life-to-date impairment	<b>\$ 863</b>	<b>\$ 935</b>

The following table details the one debt security with other-than-temporary impairment, its credit rating at December 31, 2017 and the related loss recognized in earnings:

		(Dollar amounts in thousands)					
	Moody's/Fitch Rating	Amount of OTTI related to credit loss at January 1, 2017	Additions in QTD March 31, 2017	Additions in QTD June 30, 2017	Additions in QTD September 30, 2017	Additions in QTD December 31, 2017	Amount of OTTI related to credit loss at December 31, 2017
Trapeza IX B-1	Caa2/CC	<b>\$ 140</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ 140</b>

The following table details the one debt security with other-than-temporary impairment, its credit rating at December 31, 2016 and the related losses recognized in earnings:

		(Dollar amounts in thousands)					
	Moody's/Fitch Rating	Amount of OTTI related to credit loss at January 1, 2016	Additions in QTD March 31, 2016	Additions in QTD June 30, 2016	Additions in QTD September 30, 2016	Additions in QTD December 31, 2016	Amount of OTTI related to credit loss at December 31, 2016
Trapeza IX B-1	Caa2/CC	<b>\$ 140</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ —</b>	<b>\$ 140</b>

The following table provides additional information related to the Company's trust preferred securities as of December 31, 2017 used to evaluate other-than-temporary impairments:

(Dollar amounts in thousands)

Deal	Class	Amortized Cost	Fair Value	Unrealized Gain/(Loss)	Moody's/ Fitch Rating	Number of Issuers Currently Performing	Deferrals and Defaults as a % of Current Collateral	Excess Subordination as a % of Current Performing Collateral
PreTSL XXIII	C-2	\$ 758	\$ 336	\$ (422)	Ba1/CCC	90	20.9%	7.12%
Trapeza IX	B-1	860	559	(301)	Caa2/CC	30	14.0	—
Total		\$ 1,618	\$ 895	\$ (723)				

The following table provides additional information related to the Company's trust preferred securities as of December 31, 2016 used to evaluate other-than-temporary impairments:

(Dollar amounts in thousands)

Deal	Class	Amortized Cost	Fair Value	Unrealized Gain/(Loss)	Moody's/ Fitch Rating	Number of Issuers Currently Performing	Deferrals and Defaults as a % of Current Collateral	Excess Subordination as a % of Current Performing Collateral
PreTSL XXIII	C-2	\$ 760	\$ 310	\$ (450)	B2/CCC	90	22.5%	5.33%
Trapeza IX	B-1	860	515	(345)	Caa2/CC	32	13.3	—
Total		\$ 1,620	\$ 825	\$ (795)				

The market for these securities at December 31, 2017 and December 31, 2016 is not active and markets for similar securities are also not active. The inactivity was evidenced first by a significant widening of the bid-ask spread in the brokered markets in which trust preferred securities trade and then by a significant decrease in the volume of trades relative to historical levels. The new issue market is also inactive as no new trust preferred securities have been issued since 2007. There are currently very few market participants who are willing and/or able to transact for these securities. The pooled market value for these securities remains very depressed relative to historical levels. Although there has been marked improvement in the credit spread premium in the corporate bond space, no such improvement has been noted in the market for trust preferred securities.

Given conditions in the debt markets today and the absence of observable transactions in the secondary and the new issue markets, the Company determined the following:

- The few observable transactions and market quotations that are available are not reliable for purposes of determining fair value at December 31, 2017;
- An income valuation approach technique (present value technique) that maximizes the use of relevant observable inputs and minimizes the use of unobservable inputs will be equally or more representative of fair value than the market approach valuation technique used at measurement dates prior to 2008; and
- The trust preferred securities will be classified within Level 3 of the fair value hierarchy because the Company determined that significant judgments are required to determine fair value at the measurement date.

The Company enlisted the aid of an independent third party to perform the trust preferred security valuations. The approach to determining fair value involved the following process:

1. Estimate the credit quality of the collateral using average probability of default values for each issuer (adjusted for rating levels).
2. Consider the potential for correlation among issuers within the same industry for default probabilities (e.g. banks with other banks).
3. Forecast the cash flows for the underlying collateral and apply to each trust preferred security tranche to determine the resulting distribution among the securities, including prepayment and cures.
4. Discount the expected cash flows to calculate the present value of the security.



The PreTSL XXIII cash flows are discounted at 14.74% through its maturity date of December 2036 and would have to experience an additional \$209 million of nonperforming collateral (of \$861 million performing) in order to incur any impairment. The aggregate cash flows for the C-2 tranche are estimated to be \$42.6 million on a current principal of \$26.1 million. The Trapeza IX cash flows are discounted at 9.10% through its maturity of January 2038 and would experience additional impairment upon further occurrence of nonperforming collateral of \$6.8 million (of \$200 million performing). The aggregate cash flows for the B-1 tranche are estimated to be \$41.6 million on a current principal of \$23.8 million.

The following table presents the assets measured on a nonrecurring basis on the Consolidated Balance Sheets at their fair value as of December 31, 2017 and December 31, 2016, by level within the fair value hierarchy. Impaired loans that are collateral dependent are written down to fair value through the establishment of specific reserves. Techniques used to value the collateral that secure the impaired loans include: quoted market prices for identical assets classified as Level 1 inputs; observable inputs, employed by certified appraisers, for similar assets classified as Level 2 inputs. In cases where valuation techniques include inputs that are unobservable and are based on estimates and assumptions developed by management based on the best information available under each circumstance, the asset valuation is classified as Level 3 inputs. Other real estate owned is carried at the lower of cost or fair value less estimated costs to sell.

		(Amounts in thousands)			
		December 31, 2017			
		Level 1	Level 2	Level 3	Total
<b>Assets measured on a nonrecurring basis:</b>					
Impaired loans		<u>\$ —</u>	<u>\$ —</u>	<u>\$ 9,620</u>	<u>\$ 9,620</u>
		(Amounts in thousands)			
		December 31, 2016			
		Level 1	Level 2	Level 3	Total
<b>Assets measured on a nonrecurring basis:</b>					
Impaired loans		<u>\$ —</u>	<u>\$ —</u>	<u>\$ 6,788</u>	<u>\$ 6,788</u>

### Financial Instruments

The Company discloses fair value information about financial instruments, whether or not recognized in the Consolidated Balance Sheets, for which it is practicable to estimate the value. In cases where quoted market prices are not available, fair values are based on estimates using present value or other estimation techniques. Those techniques are significantly affected by the assumptions used, including the discount rate and estimates of future cash flows.

Such techniques and assumptions, as they apply to individual categories of the financial instruments, are as follows:

Cash and cash equivalents – The carrying amounts for cash and cash equivalents are a reasonable estimate of those assets' fair value.

Investment securities – Fair values of securities are based on quoted market prices, where available. If quoted market prices are not available, fair values are based on quoted market prices of comparable securities. Prices on trust preferred securities were calculated using a discounted cash-flow technique. Cash flows were estimated based on credit and prepayment assumptions. The present value of the projected cash flows was calculated using a discount rate equal to the current yield used to accrete the beneficial interest.

Loans held for sale – Loans held for sale consist of residential mortgage loans originated for sale. Loans held for sale are recorded at fair value based on what the secondary markets have offered on best efforts commitments.

Loans, net of allowance for loan losses – Market quotations are generally not available for loan portfolios. The fair value is estimated by discounting future cash flows using current market inputs at which loans with similar terms and qualities would be made to borrowers of similar credit quality.

Bank-owned life insurance – The fair value is based upon the cash surrender value of the underlying policies net of any split dollar obligation and matches the book value.

Accrued interest receivable – The carrying amount is a reasonable estimate of these assets' fair value.

Interest rate derivatives – The fair value is based on settlement values adjusted for credit risks associated with the counter parties and the Company and observable market interest rate curves.

Demand, savings and money market deposits – Demand, savings, and money market deposit accounts are valued at the amount payable on demand.

Time deposits – The fair value of certificates of deposit is based on the discounted value of contractual cash flows. The discount rates are estimated using market rates currently offered for similar instruments with similar remaining maturities.

Short term borrowings – Short term borrowings generally have an original term to maturity of one year or less. Consequently, their carrying value is a reasonable estimate of fair value.

FHLB advances - short term – Short term borrowings generally have an original term to maturity of one year or less. Advances of one month or less are considered to be at fair value. The fair value of notes with one to twelve month terms is based on the discounted value of contractual cash flows. The discount rates are estimated using market rates currently offered for similar instruments with similar remaining maturities.

FHLB advances - long term – The fair value for fixed rate advances is estimated by discounting the future cash flows using rates at which advances would be made to borrowers with similar credit ratings and for the same remaining maturities. The fair value for the fixed rate advances that are convertible to quarterly LIBOR floating rate advances on or after certain specified dates at the option of the FHLB and the FHLB fixed rate advances that are putable on or after certain specified dates at the option of the FHLB are priced using the FHLB of Cincinnati's model.

Subordinated debt – The floating issuances curves to maturity are averaged to obtain an index. The spread between BBB-rated bank debt and 25-year swap rates is determined to calculate the spread on outstanding trust preferred securities. The discount margin is then added to the index to arrive at a discount rate, which determines the present value of projected cash flows.

Accrued interest payable – The carrying amount is a reasonable estimate of these liabilities' fair value. The fair value of unrecorded commitments at December 31, 2017 and December 31, 2016 is not material.

In addition, other assets and liabilities of the Company that are not defined as financial instruments are not included in the disclosures, such as property and equipment. Also, non-financial instruments typically not recognized in financial statements nevertheless may have value but are not included in the above disclosures. These include, among other items, the estimated earning power of core deposit accounts, the trained work force, customer goodwill and similar items. Accordingly, the aggregate fair value amounts presented do not represent the underlying value of the Company.

The carrying amounts and estimated fair values of the Company's financial instruments are as follows:

	Carrying Amount	(Amounts in thousands)			Fair Value
		Level 1	Level 2	Level 3	
ASSETS:					
Cash and cash equivalents	\$ 19,125	\$ 19,125	\$ —	\$ —	\$ 19,125
Investment securities available-for-sale	162,422	2,581	158,946	895	162,422
Loans held for sale	2,780	2,780	—	—	2,780
Loans, net of allowance for loan losses	482,912	—	—	486,230	486,230
Bank-owned life insurance	17,650	17,650	—	—	17,650
Accrued interest receivable	2,193	2,193	—	—	2,193
Interest rate derivatives	185	—	185	—	185
LIABILITIES:					
Demand, savings and money market deposits	\$ 458,562	\$ 458,562	\$ —	\$ —	\$ 458,562
Time deposits	127,289	—	—	128,624	128,624
Short-term borrowings	2,678	2,678	—	—	2,678
Federal Home Loan Bank advances - short term	32,000	—	—	31,982	31,982
Federal Home Loan Bank advances - long term	14,000	—	—	13,880	13,880
Subordinated debt	5,155	—	—	4,785	4,785
Accrued interest payable	325	325	—	—	325
Interest rate derivatives	185	—	185	—	185

(Amounts in thousands)  
December 31, 2016

	Carrying Amount	Level 1	Level 2	Level 3	Fair Value
<b>ASSETS:</b>					
Cash and cash equivalents	\$ 15,351	\$ 15,351	\$ —	\$ —	\$ 15,351
Investment securities available-for-sale	179,219	2,581	175,813	825	179,219
Loans held for sale	4,554	4,554	—	—	4,554
Loans, net of allowance for loan losses	414,900	—	—	418,532	418,532
Bank-owned life insurance	17,376	17,376	—	—	17,376
Accrued interest receivable	2,041	2,041	—	—	2,041
Interest rate derivatives	297	—	297	—	297
<b>LIABILITIES:</b>					
Demand, savings and money market deposits	\$ 408,983	\$ 408,983	\$ —	\$ —	\$ 408,983
Time deposits	130,867	—	—	133,108	133,108
Short-term borrowings	2,702	2,702	—	—	2,702
Federal Home Loan Bank advances - short term	23,000	17,000	—	5,998	22,998
Federal Home Loan Bank advances - long term	17,500	—	—	17,580	17,580
Subordinated debt	5,155	—	—	4,363	4,363
Accrued interest payable	288	288	—	—	288
Interest rate derivatives	297	—	297	—	297

The following table presents quantitative information about the Level 3 significant unobservable inputs for assets and liabilities measured at fair value on a recurring and nonrecurring basis at December 31, 2017.

	(Amounts in thousands)		Valuation Technique	Significant Unobservable Input	Description of Inputs
	Fair value at December 31, 2017				
Trust preferred securities	\$	895	Discounted Cash Flow	Projected Prepayments	<p>1) Trust preferred securities issued by banks subject to Dodd-Frank's phase-out of trust preferred securities from Tier 1 Capital. All fixed rate within one year; variable rate at increasing intervals depending on spread.</p> <p>2) Trust preferred securities issued by healthy, well capitalized banks that have fixed rate coupons greater than 8%.</p> <p>3) 1% annually for all other fixed rate issues and all variable rate issues.</p> <p>4) Zero for collateral issued by REITs and 2% for insurance companies.</p>
				Projected Defaults	<p>1) All deferring issuers that do not meet the criteria for curing, as described below, are projected to default immediately.</p> <p>2) Banks with high, near team default risk are identified using a CAMELS model, and projected to default immediately. Healthy banks are projected to default at a rate of 2% annually for 2 years, and 0.36% annually thereafter.</p> <p>3) Insurance and REIT defaults are projected according to the historical default rates exhibited by companies with the same credit ratings. Historical default rates are doubled in each of the first two years of the projection to account for current economic conditions. Unrated issuers are assumed to have CCC- ratings.</p>
				Projected Cures	1) Deferring issuers that have definitive agreements to either be acquired or recapitalized.
				Projected Recoveries	1) Zero for insurance companies, REITs and insolvent banks, and 10% for projected bank deferrals lagged 2 years.
				Discount Rates	1) Ranging from ~9.10% to ~14.74%, depending on each bond's seniority and remaining subordination after projected losses.
Impaired loans		4,891	Cash Flow	Discount Rates	<p>Range 4.50% to 5.38%</p> <p>Weighted average 4.88 %</p>

The following table presents quantitative information about the Level 3 significant unobservable inputs for assets and liabilities measured at fair value on a recurring and nonrecurring basis at December 31, 2016.

(Amounts in thousands)					
	Fair value at December 31, 2016		Valuation Technique	Significant Unobservable Input	Description of Inputs
Trust preferred securities	\$ 825		Discounted Cash Flow	Projected Prepayments	1) Trust preferred securities issued by banks subject to Dodd-Frank's phase-out of trust preferred securities from Tier 1 Capital. All fixed rate within one year; variable rate at increasing intervals depending on spread. 2) Trust preferred securities issued by healthy, well capitalized banks that have fixed rate coupons greater than 8%. 3) 1% annually for all other fixed rate issues and all variable rate issues. 4) Zero for collateral issued by REITs and 2% for insurance companies.
				Projected Defaults	1) All deferring issuers that do not meet the criteria for curing, as described below, are projected to default immediately. 2) Banks with high, near team default risk are identified using a CAMELS model, and projected to default immediately. Healthy banks are projected to default at a rate of 2% annually for 2 years, and 0.36% annually thereafter. 3) Insurance and REIT defaults are projected according to the historical default rates exhibited by companies with the same credit ratings. Historical default rates are doubled in each of the first two years of the projection to account for current economic conditions. Unrated issuers are assumed to have CCC- ratings.
				Projected Cures	1) Deferring issuers that have definitive agreements to either be acquired or recapitalized.
				Projected Recoveries	1) Zero for insurance companies, REITs and insolvent banks, and 10% for projected bank deferrals lagged 2 years.
				Discount Rates	1) Ranging from ~9.69% to ~15.11%, depending on each bond's seniority and remaining subordination after projected losses.
Impaired loans	1,001		Appraisal of Collateral (1)	Appraisal Adjustments (2)	(20)% Weighted average (20)%
				Liquidation Expenses (2)	Range (8)% to (12)% Weighted average (10)%

(1) Fair value is generally determined through independent appraisals of the underlying collateral, which generally include various Level 3 inputs which are not identifiable.

(2) Appraisals may be adjusted by management for qualitative factors such as economic conditions and estimated liquidation expenses. The range and weighted average of liquidation expenses are presented as a percent of the appraisal. The adjustment of appraised value is measured as the effect on fair value as a percentage of unpaid principal.

## NOTE 12 - ACCUMULATED OTHER COMPREHENSIVE (LOSS) INCOME

The following table presents the changes in accumulated other comprehensive loss or income by component net of tax for the years ended December 31, 2017 and 2016.

	(Amounts in thousands)	
	Unrealized gains (losses) on available-for-sale securities (a)	Change in pension and postretirement obligations (a)
Balance as of December 31, 2015	\$ (147)	\$ (91)
Other comprehensive (loss) income before reclassification	(2,454)	39
Amount reclassified from accumulated other comprehensive loss	(308)	—
Total other comprehensive loss	(2,762)	39
Balance as of December 31, 2016	\$ (2,909)	\$ (52)
Other comprehensive income before reclassification	1,420	14
Reclassification of certain income tax effects from accumulated other comprehensive income	(294)	—
Amount reclassified from accumulated other comprehensive loss	(4)	—
Total other comprehensive income	1,122	14
Balance as of December 31, 2017	\$ (1,787)	\$ (38)

(a) All amounts are net of tax. Amounts in parentheses indicate debits.

The following table presents significant amounts reclassified out of each component of accumulated other comprehensive loss or income for the years ended December 31, 2017 and 2016.

	(Amounts in thousands)		Affected line item in the statement where net income is presented
	December 31, 2017		
	Amount reclassified from accumulated other comprehensive loss (a)		
Details about other comprehensive income or loss:			
Unrealized gains on available-for-sale securities	\$ 7		Investment securities available-for-sale gains, net
	(3)		Federal income tax expense
	<u>\$ 4</u>		
	(Amounts in thousands)		Affected line item in the statement where net income is presented
	December 31, 2016		
	Amount reclassified from accumulated other comprehensive loss (a)		
Details about other comprehensive income or loss:			
Unrealized gains on available-for-sale securities	\$ 466		Investment securities available-for-sale gains, net
	(158)		Federal income tax expense
	<u>\$ 308</u>		

(a) Amounts in parentheses indicate debits to net income.



## NOTE 13 - REGULATORY MATTERS

The Company and the Bank are subject to regulatory capital requirements administered by federal banking agencies. Capital adequacy guidelines and prompt corrective action regulations involve quantitative measures of assets, liabilities, and certain off-balance-sheet items calculated under regulatory accounting practices. Capital amounts and classifications are also subject to qualitative judgments by regulators about components, risk weightings, and other factors, and the regulators can lower classifications in certain cases. Failure to meet various capital requirements can initiate regulatory action that could have a direct material effect on the financial statements.

The prompt corrective action regulations provide five categories, including well capitalized, adequately capitalized, undercapitalized, significantly undercapitalized, and critically undercapitalized, although these terms are not used to represent overall financial condition. If a bank is only adequately capitalized, regulatory approval is required to, among other things, accept, renew or roll-over brokered deposits. If a bank is undercapitalized, capital distributions and growth and expansion are limited, and plans for capital restoration are required.

In July 2013, the Board of Governors of the Federal Reserve Board and the FDIC approved the final rules implementing the Basel Committee on Banking Supervision's capital guidelines for U.S. banks and their holding companies (commonly known as Basel III). Under the final rules, which began for the Company and the Bank on January 1, 2015 and are subject to a phase-in period through January 1, 2019, minimum requirements will increase for both the quantity and quality of capital held by the Company and the Bank. The rules include a new common equity Tier 1 capital to risk-weighted assets ratio (CET1 ratio) of 4.5% and a capital conservation buffer of 2.5% of risk-weighted assets, which when fully phased-in, effectively results in a minimum CET1 ratio of 7.0%. Basel III raises the minimum ratio of Tier 1 capital to risk-weighted assets from 4.0% to 6.0% (which, with the capital conservation buffer, effectively results in a minimum Tier 1 capital ratio of 8.5% when fully phased-in), effectively results in a minimum total capital to risk-weighted assets ratio of 10.5% (with the capital conservation buffer fully phased-in), and requires a minimum leverage ratio of 4.0%. Basel III also makes changes to risk weights for certain assets and off-balance-sheet exposures. Management expects that the capital ratios for the Company and the Bank under Basel III will continue to exceed the well capitalized minimum capital requirements, as they currently exceed the fully phased in 2019 requirements.

In addition to the capital requirements for bank holding companies generally, financial holding companies are also required to meet "well-capitalized" requirements of the Federal Reserve Board. A bank holding company or financial holding company that is covered by the Federal Reserve's Small Bank Holding Company Policy is not required to comply with the consolidated capital requirements, although its bank subsidiaries still must comply with the applicable capital requirements. As a bank holding company with assets of less than \$1 billion and meeting certain other requirements, the Company is covered by the Small Bank Holding Company Policy.

At December 31, 2017 and December 31, 2016, actual capital levels and minimum required levels for the Company, if it were not covered by the Small Bank Holding Company Policy, were:

	(Amounts in thousands)			
	Actual		Minimum required for capital adequacy purposes	
	Amount	Ratio	Amount	Ratio
December 31, 2017				
CET1 capital (to risk-weighted assets)	\$ 63,455	12.37%	\$ 23,082	4.5%
Tier 1 capital (to risk-weighted assets)	68,455	13.35%	30,776	6.0%
Total capital (to risk-weighted assets)	73,116	14.26%	41,033	8.0%
Tier 1 capital (to average assets)	68,455	10.77%	25,416	4.0%

	(Amounts in thousands)			
	Actual		Minimum required for capital adequacy purposes	
	Amount	Ratio	Amount	Ratio
December 31, 2016				
CET1 capital (to risk-weighted assets)	\$ 60,631	12.97%	\$ 21,033	4.5%
Tier 1 capital (to risk-weighted assets)	65,631	14.04%	28,044	6.0%
Total capital (to risk-weighted assets)	70,583	15.10%	37,392	8.0%
Tier 1 capital (to average assets)	65,631	10.46%	25,086	4.0%

Approximately \$5.0 million of trust preferred securities outstanding at December 31, 2017 and December 31, 2016, respectively, qualified as Tier 1 capital. Refer to Note 7, "Subordinated Debt."

The Bank met all capital requirements to be categorized as "well capitalized" at December 31, 2017 and December 31, 2016.

#### NOTE 14 - RELATED PARTY TRANSACTIONS

Certain directors, executive officers and companies with whom they are affiliated were loan customers during 2017. The following is an analysis of such loans:

	(Amounts in thousands)	
Total related-party loans at December 31, 2016	\$	4,283
New related-party loans		<b>3,038</b>
Repayments or other		<b>(3,091)</b>
Total related-party loans at December 31, 2017	<u>\$</u>	<u><b>4,230</b></u>

Deposit balances of executive officers, directors, and their affiliates at December 31, 2017 and 2016 were \$2.8 million and \$2.9 million, respectively.

The banking relationships were made in the ordinary course of business with the Bank.

#### NOTE 15 - CONDENSED FINANCIAL INFORMATION – PARENT COMPANY

Below is condensed financial information of Cortland Bancorp (parent company only). In this information, the Parent's investment in subsidiaries is stated at cost, including equity in the undistributed earnings of the subsidiaries, adjusted for any unrealized gains or losses on available-for-sale securities.

#### BALANCE SHEETS

(Amounts in thousands)

	December 31,	
	2017	2016
<b>ASSETS</b>		
Cash	\$ 261	\$ 320
Investment in bank subsidiary	58,028	53,759
Subordinated note from subsidiary bank	6,000	6,000
Other assets	3,489	3,700
<b>Total assets</b>	<u>\$ 67,778</u>	<u>\$ 63,779</u>
<b>LIABILITIES</b>		
Other liabilities	\$ 993	\$ 954
Subordinated debt (Note 7)	5,155	5,155
<b>Total liabilities</b>	<u>6,148</u>	<u>6,109</u>
<b>SHAREHOLDERS' EQUITY</b>		
Common stock	23,641	23,641
Additional paid-in capital	20,928	20,878
Retained earnings	24,403	21,485
Accumulated other comprehensive loss	(1,825)	(2,961)
Treasury stock	(5,517)	(5,373)
<b>Total shareholders' equity</b>	<u>61,630</u>	<u>57,670</u>
<b>Total liabilities &amp; shareholders' equity</b>	<u>\$ 67,778</u>	<u>\$ 63,779</u>

## STATEMENTS OF COMPREHENSIVE INCOME

(Amounts in thousands)

	Years ended December 31,		
	2017	2016	2015
Dividends from bank subsidiary	\$ 1,900	\$ 1,400	\$ 3,310
Interest and dividend income	153	121	97
Other income	58	60	63
Interest on subordinated debt	(138)	(112)	(91)
Other expenses	(568)	(497)	(513)
<b>Income before income tax and equity in undistributed earnings of subsidiaries</b>	<b>1,405</b>	<b>972</b>	<b>2,866</b>
Income tax benefit	106	265	133
Equity in undistributed earnings of subsidiaries	2,839	3,634	1,379
<b>Net income</b>	<b>\$ 4,350</b>	<b>\$ 4,871</b>	<b>\$ 4,378</b>
<b>Comprehensive income</b>	<b>\$ 5,780</b>	<b>\$ 2,148</b>	<b>\$ 3,764</b>

## STATEMENTS OF CASH FLOWS

(Amounts in thousands)

	Years ended December 31,		
	2017	2016	2015
<b>Cash flow from operating activities</b>			
Net income	\$ 4,350	\$ 4,871	\$ 4,378
Adjustments to reconcile net income to net cash flow from operating activities:			
Equity in undistributed net income of subsidiaries	(2,839)	(3,634)	(1,379)
Deferred tax benefit	62	(15)	(6)
Equity compensation	143	75	—
Change in other assets and liabilities	188	138	(35)
Net cash flow from operating activities	1,904	1,435	2,958
<b>Cash deficit from financing activities</b>			
Dividends paid	(1,726)	(1,237)	(1,082)
Treasury shares purchased	(237)	—	(1,850)
Net cash deficit from financing activities	(1,963)	(1,237)	(2,932)
Net change in cash	(59)	198	26
<b>Cash</b>			
Beginning of year	320	122	96
End of year	<u>\$ 261</u>	<u>\$ 320</u>	<u>\$ 122</u>

### NOTE 16 - DIVIDEND RESTRICTIONS

The Bank is subject to a dividend restriction that generally limits the amount of dividends that can be paid by an Ohio state-chartered bank. Under the Ohio Banking Code, cash dividends may not exceed net profits as defined for that year combined with retained net profits for the two preceding years less any required transfers to surplus. Under this formula, the amount available for payment of dividends in 2018 is \$6.7 million plus 2018 profits retained up to the date of the dividend declaration.

### NOTE 17 – LITIGATION

The Bank is involved in legal actions arising in the ordinary course of business. In the opinion of management, the outcomes from these other matters, either individually or in the aggregate, are not expected to have any material effect on the Company.

## NOTE 18 – STOCK REPURCHASE PROGRAM

On January 26, 2016, the Company's Board of Directors approved a program which allowed the Company to repurchase up to 100,000 shares, or approximately 2.3% of the 4,404,783 shares outstanding at January 26, 2016, of the Company's outstanding common stock. This program terminated on December 31, 2016. The Company did not purchase any shares under this program. On January 24, 2017, the Company's Board of Directors approved a new program which allowed the Company to repurchase up to 100,000 shares, or approximately 2.3% of the 4,420,055 shares outstanding at January 24, 2017, of the Company's outstanding common stock. This program terminated on December 31, 2017. The Company purchased 12,863 shares under this program. On January 23, 2018, the Company's Board of Directors approved a new program which allowed the Company to repurchase up to 100,000 shares, or approximately 2.3% of the 4,420,136 shares outstanding at January 23, 2018, of the Company's outstanding common stock. This program will terminate on December 31, 2018 or upon purchase of 100,000 shares if earlier or at any time without prior notice. Repurchased shares are designated as treasury shares, available for general corporate purposes, including possible use in connection with the Company's dividend reinvestment program, employee benefit plans, acquisitions or other distributions. Based on the value of the Company's stock on December 31, 2017, the remaining authorization to repurchase the stock for the program is approximately \$2.1 million.

## NOTE 19 – EQUITY COMPENSATION

During 2015, the Company, created the 2015 Omnibus Equity Plan and The Director Equity Plan.

The Omnibus Equity Plan permits the award of up to 340,000 shares to the Company's employees to promote the long-term financial success of the Company, increasing shareholder value by providing employees the opportunity to acquire an ownership interest in the Company and enabling the Company and its related entities to attract and retain the services of those upon whom the successful conduct of business depends. There were 12,976 restricted Board approved shares granted under the plan in March 2017 and 13,683 restricted Board approved shares granted under the plan in April 2016. The Company is expensing the grant date fair value of all share-based compensation over the requisite vesting periods on a prorated straight-line basis. In 2017 and 2016, compensation expense of \$123,000 and \$48,000, respectively, was recorded in the Consolidated Statements of Income. As of December 31, 2017, there was \$253,000 of total unrecognized compensation expense related to the non-vested shares granted under the Plan. Shares awarded under this plan vest in equal thirds on the first three anniversaries of the award date if the employee remains employed with Cortland Bancorp. The remaining cost is expected to be recognized over 27 months, which is the remainder of the three-year tiered vesting period.

Granted shares are awarded upon meeting achievement of performance objectives derived from one or more of the performance criteria. The main metrics used for the periods presented were three-year earnings per share growth and three-year total shareholder return ranked versus a peer group.

The Director Equity Plan permits the award of up to 113,000 shares to nonemployee directors to promote the long-term financial success of the Company, increasing shareholder value by enabling the Company and its related entities to attract and retain the services of those directors upon whom the successful conduct of business depends. There were 1,656 Board approved shares granted under the plan in March 2017 with immediate vesting, and 1,789 Board approved shares granted under the plan in April 2016 with immediate vesting. In 2017, expense of \$30,000 was recorded in the Consolidated Statements of Income.

The following is the activity under the two plans during the period ended December 31, 2017:

	Restricted Stock Units	
	Units	Price at Grant Date
Nonvested at January 1, 2017	13,683	\$ 15.25
Granted	12,976	18.25
Vested	(4,556)	15.25
Forfeited	(1,289)	16.93
Nonvested at December 31, 2017	20,814	\$ 17.02

**NOTE 20 – EXTINGUISHMENT OF DEBT**

In January of 2016, the Company paid off two FHLB convertible fixed rate advances totaling \$4.5 million with an average rate of 4.01% due in 2017. The Company incurred prepayment penalties of \$242,000, or \$160,000 after tax. The Earnings per Share effect of (\$.04) was offset by gains generated on investment securities sales during the same month. The Company used a combination of alternative wholesale borrowings at a rate of 1.44% and current liquidity to fund the early payoff, for an estimated annual interest expense savings of \$130,000.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosures - None

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures. With the supervision and participation by management, including the Company's principal executive officer and principal financial officer, the effectiveness of disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934 (the "Exchange Act")) has been evaluated as of the end of the period covered by this report. Based upon that evaluation, the Company's principal executive officer and principal financial officer have concluded that these controls and procedures were effective.

Management's Annual Report on Internal Control Over Financial Reporting. The report on management's assessment of internal control over financial reporting is included in Item 8.

Changes in Internal Control Over Financial Reporting. Our Chief Executive Officer and Chief Financial Officer have concluded that there have been no changes during the fourth quarter of 2017 in the Company's internal control over financial reporting (as defined in Rules 13a-13 and 15d-15 of the Exchange Act) that have materially affected, or are reasonably likely to materially affect, internal control over financial reporting.

Item 9B. Other Information – Not applicable.



### PART III

#### Item 10. Directors, Executive Officers and Corporate Governance

Information relating to this item will be set forth in the Company's definitive proxy statement to be filed on or about March 29, 2018 in connection with the Annual Meeting of Shareholders to be held May 22, 2018 (the "Proxy Statement"). The information contained in the Proxy Statement under the following captions is incorporated herein by reference: "Board Nominees," "Continuing Directors," "The Board of Directors and Committees of the Board," and "Section 16(a) Beneficial Ownership Reporting Compliance."

Information relating to executive officers of the Company is set forth in Part I of this Form 10-K.

#### Item 11. Executive Compensation

Information relating to this item is incorporated herein by reference to the information in the Proxy Statement that is set forth under the following captions of "Executive Compensation" and "Director Compensation in 2017."

#### Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Shareholders Matters

Information relating to this item is incorporated herein by reference to the information in the Proxy Statement that is set forth under the caption "Share Ownership of Directors and Executive Officers."

Information relating to equity compensation is incorporated herein by reference to the information in the Proxy Statement that is set forth under the caption "Outstanding Equity Awards."

#### Item 13. Certain Relationships and Related Transactions, and Director Independence

Information relating to this item is incorporated herein by reference to the information in the Proxy Statement that is set forth under the captions of "Transactions with Related Persons" and "The Board of Directors and Committees of the Board."

#### Item 14. Principal Accountant Fees and Services

Information relating to this item is incorporated herein by reference to the information in the Proxy Statement that is set forth under the caption "Ratification of Independent Auditors."

PART IV

Item 15. Exhibits, Financial Statement Schedules

(a) 1. Financial Statements

Included in Part II of this report:

Item 8. Financial Statements

Consolidated Financial Statements included in this Annual Report:

Management's Annual Report on Internal Control Over Financial Reporting .....	52
Report of Independent Registered Public Accounting Firm .....	53
Consolidated Balance Sheets as of December 31, 2017 and 2016 .....	54
Consolidated Statements of Income for the Years Ended December 31, 2017, 2016 and 2015 .....	55
Consolidated Statements of Comprehensive Income for the Years Ended December 31, 2017, 2016 and 2015 .....	56
Consolidated Statements of Shareholders' Equity for the Years Ended December 31, 2017, 2016 and 2015.....	57
Consolidated Statements of Cash Flows for the Years Ended December 31, 2017, 2016 and 2015.....	58
Notes to Consolidated Financial Statements .....	59

(a) 2. Financial Statement Schedules

Financial statements schedules are omitted because the required information is either not applicable, not required or is not shown in the respective financial statements or in the notes thereto.

(a) 3. Exhibits Required by Item 601 of Regulation S-K

The exhibits filed or incorporated by reference as a part of this report are listed in the Index to Exhibits.

## INDEX TO EXHIBITS

The following exhibits are filed or incorporated by reference as part of this report:

Exhibit No.	Exhibit Description	Incorporated by Reference			Filed Herewith
		Form**	Exhibit	Filing Date	
3.1	Restated Amended Articles of Cortland Bancorp reflecting amendment dated June 25, 1999. Note: filed for purposes of SEC reporting compliance only. This restated document has not been filed with the State of Ohio.	10-K(1)	3.1	03/16/06	
3.2	Code of Regulations, as amended.	8-K	3.2	05/30/17	
4.1	The rights of holders of equity securities are defined in portions of the Articles of Incorporation as referenced in Exhibit 3.1	10-K(1)	4.1	03/16/06	
	and the Code of Regulations as referenced in Exhibit 3.2	8-K	4.1	05/30/17	
4.2	Agreement to furnish instruments and agreements defining rights of holders of long-term debt				✓
*10.1	Group Term Carve Out Plan dated February 23, 2001, by The Cortland Savings and Banking Company with each executive officer other than Rodger W. Platt and with selected other officers, as amended by the August 2002 letter amendment	10-K(1)	10.1	03/16/06	
*10.1.1	Amendment of Group Term Carve Out Plan, dated October 28, 2014	8-K	10.1.1	11/03/14	
10.2	[Reserved]				
10.3	[Reserved]				
*10.4	Amended Director Retirement Agreement between Cortland Bancorp and David C. Cole, dated as of December 18, 2007	10-K	10.4	03/17/08	
10.5	[Reserved]				
10.6	[Reserved]				
*10.7	Amended Director Retirement Agreement between Cortland Bancorp and James E. Hoffman III, dated as of December 18, 2007	10-K	10.7	03/17/08	
*10.8	Amended Director Retirement Agreement between Cortland Bancorp and Neil J. Kaback, dated as of December 18, 2007	10-K	10.8	03/17/08	
10.9	[Reserved]				
*10.10	Amended Director Retirement Agreement between Cortland Bancorp and Richard B. Thompson, dated as of December 18, 2007	10-K	10.10	03/17/08	
*10.11	Amended Director Retirement Agreement between Cortland Bancorp and Timothy K. Woofter, dated as of December 18, 2007	10-K	10.11	03/17/08	
*10.12	Form of Split Dollar Agreement entered into by Cortland Bancorp and each of Directors David C. Cole, James E. Hoffman III, and Timothy K. Woofter as of February 23, 2001, as of March 1, 2004, with Director Neil J. Kaback, and as of October 1, 2001, with Director Richard B. Thompson;	10-K(1)	10.12	03/16/06	
	as amended on December 26, 2006, for Directors Cole, Hoffman, Thompson, and Woofter;	10-K	10.12	03/15/07	
*10.13	Director's Retirement Agreement between Cortland Bancorp and Director Joseph E. Koch, dated as of April 19, 2011	8-K	10.13	04/22/11	
*10.14	Split Dollar Agreement and Endorsement between Cortland Bancorp and Director Joseph E. Koch, dated as of April 19, 2011	8-K	10.14	04/22/11	

Exhibit No.	Exhibit Description	Incorporated by Reference			Filed Herewith
		Form**	Exhibit	Filing Date	
*10.15	Form of Indemnification Agreement entered into by Cortland Bancorp with each of its directors	10-K(1)	10.15	03/16/06	
*10.16	Endorsement Split Dollar Agreement between The Cortland Savings and Banking Company and David J. Lucido, dated as of March 27, 2012	10-K	10.16	03/29/12	
*10.17	Seventh Amended Salary Continuation Agreement between The Cortland Savings and Banking Company and Timothy Carney, dated as of November 24, 2015	8-K	10.17	12/01/15	
*10.18	Third Amended Salary Continuation Agreement between The Cortland Savings and Banking Company and Lawrence A. Fantauzzi, dated as of December 3, 2008	8-K	10.18	12/12/08	
*10.19	Seventh Amended Salary Continuation Agreement between The Cortland Savings and Banking Company and James M. Gasior, dated as of November 24, 2015	8-K	10.19	12/01/15	
10.20	[Reserved]				
10.21	[Reserved]				
10.22	[Reserved]				
*10.23	Amended Salary Continuation Agreement between The Cortland Savings and Banking Company and David J. Lucido dated as of November 24, 2015	8-K	10.23	12/01/15	
*10.24	Fourth Amended Split Dollar Agreement and Endorsement between The Cortland Savings and Banking Company and Timothy Carney, dated as of April 19, 2011	8-K	10.24	04/22/11	
*10.25	Amended Salary Continuation Agreement between The Cortland Savings and Banking Company and Stanley P. Feret dated as of November 24, 2015	8-K	10.25	12/01/15	
*10.26	Fourth Amended Split Dollar Agreement and Endorsement between The Cortland Savings and Banking Company and James M. Gasior, dated as of April 19, 2011	8-K	10.26	04/22/11	
10.27	[Reserved]				
10.28	[Reserved]				
10.29	[Reserved]				
*10.30	Endorsement Split Dollar Agreement between The Cortland Savings and Banking Company and Stanley P. Feret, dated as of July 23, 2013	10-Q	10.30	08/13/13	
*10.31.1	Severance Agreement between Cortland Bancorp and Tim Carney, dated as of September 28, 2012, as amended November 24, 2015	8-K	10.31.1	12/01/15	
*10.31.2	Severance Agreement between Cortland Bancorp and James Gasior, dated as of September 28, 2012, as amended November 24, 2015	8-K	10.31.2	12/01/15	
*10.31.3	Severance Agreement between Cortland Bancorp and David J. Lucido, dated as of September 28, 2012, as amended November 24, 2015	8-K	10.31.3	12/01/15	
10.32	[Reserved]				
10.33	[Reserved]				
*10.34	Severance Agreement between Cortland Bancorp and Stanley P. Feret, dated as of September 28, 2012, as amended November 24, 2015	8-K	10.34	12/01/15	
*10.35	Annual Incentive Plan for Executive Officers	8-K	10.35	08/03/15	

Exhibit No.	Exhibit Description	Incorporated by Reference			Filed Herewith
		Form**	Exhibit	Filing Date	
*10.36	2015 Omnibus Equity Plan	10-Q	10.36	08/11/15	
10.36.1	Form of incentive stock option award under the 2015 Omnibus Equity Plan	10-Q	10.36.1	08/11/15	
10.36.2	Form of nonqualified stock option award under the 2015 Omnibus Equity Plan	10-Q	10.36.2	08/11/15	
10.36.3	Form of restricted stock award under the 2015 Omnibus Equity Plan	10-Q	10.36.3	08/11/15	
*10.37	2015 Director Equity Plan	10-Q	10.37	08/11/15	
10.37.1	Form of nonqualified stock option award under the 2015 Director Equity Plan	10-Q	10.37.1	08/11/15	
10.37.2	Form of incentive stock option award under the 2015 Director Equity Plan	10-Q	10.37.2	08/11/15	
11	Statement of re-computation of per share earnings	See Note 1 of Financial Statements			
14	Code of Ethics	10-K	14	3/17/08	
21	Subsidiaries of the Registrant				✓
23	Consents of experts and counsel – Consent of independent registered public accounting firm				✓
31.1	Certification of the Chief Executive Officer under Rule 13a-14(a)				✓
31.2	Certification of Chief Financial Officer under Rule 13a-14(a)				✓
32	Section 1350 Certification of Chief Executive Officer and Chief Financial Officer required under section 906 of the Sarbanes-Oxley Act of 2002				✓
101	The following materials from Cortland Bancorp's Annual Report on Form 10-K for the year ended December 31, 2017, formatted in Extensible Business Reporting Language (XBRL): (a) Consolidated Balance Sheets; (b) Consolidated Statements of Income; (c) Consolidated Statements of Comprehensive Income; (d) Consolidated Statements of Changes in Shareholders' Equity; (e) Consolidated Statements of Cash Flows; and (f) the Notes to Consolidated Financial Statements tagged as blocks of text and in detail (included with this filing)				✓

(1) Film number 06691632

\* Management contract or compensatory plan or arrangement

\*\* SEC File No. 000-13814

Copies of any exhibits will be furnished to shareholders upon written request. Requests should be directed to Lance A. Morrison, Secretary, Cortland Bancorp, 194 West Main Street, Cortland, Ohio 44410.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

CORTLAND BANCORP

Date: March 22, 2018

By: /s/ James M. Gasior

James M. Gasior  
President, Chief Executive Officer, Director  
(Principal Executive Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<u>/s/ Timothy K. Woofter</u> Timothy K. Woofter	Director and Chairman of the Board	<u>March 22, 2018</u> Date
<u>/s/ James M. Gasior</u> James M. Gasior	President, Chief Executive Officer and Director (Principal Executive Officer)	<u>March 22, 2018</u> Date
<u>/s/ Timothy Carney</u> Timothy Carney	Director	<u>March 22, 2018</u> Date
<u>/s/ David C. Cole</u> David C. Cole	Director	<u>March 22, 2018</u> Date
<u>/s/ J. Martin Erbaugh</u> J. Martin Erbaugh	Director	<u>March 22, 2018</u> Date
<u>/s/ James E. Hoffman, III</u> James E. Hoffman, III	Director	<u>March 22, 2018</u> Date
<u>/s/ Neil J. Kaback</u> Neil J. Kaback	Director	<u>March 22, 2018</u> Date
<u>/s/ Joseph E. Koch</u> Joseph E. Koch	Director	<u>March 22, 2018</u> Date
<u>/s/ Joseph P. Langhenry</u> Joseph P. Langhenry	Director	<u>March 22, 2018</u> Date
<u>/s/ Thomas P. Perciak</u> Thomas P. Perciak	Director	<u>March 22, 2018</u> Date
<u>/s/ Richard B. Thompson</u> Richard B. Thompson	Director	<u>March 22, 2018</u> Date
<u>/s/ Anthony R. Vross</u> Anthony R. Vross	Director	<u>March 22, 2018</u> Date
<u>/s/ David J. Lucido</u> David J. Lucido	Chief Financial Officer (Principal Financial and Accounting Officer)	<u>March 22, 2018</u> Date



# **CORTLAND BANCORP AND THE CORTLAND SAVINGS AND BANKING COMPANY**

## **BOARD OF DIRECTORS**

**TIMOTHY K. WOOFER**  
Chairman of the Board  
President and Chief Executive Officer, Stan-Wade Metal Products  
Tank Manufacturer and Oil Equipment Distributor

**NEIL J. KABACK**  
Vice President, Cohen & Company, Ltd.  
Accounting Firm

**ANTHONY R. VROSS**  
Executive, Simon Roofing  
Commercial Roofing and Industrial Roof Maintenance

**DAVID C. COLE**  
Partner and President, Cole Valley Motor Company  
Automobile Dealership

**J. MARTIN ERBAUGH**  
President, JM Erbaugh Co.  
Investment Firm

**JAMES E. HOFFMAN, III**  
Attorney, Hoffman and Walker  
Law Firm

**TIMOTHY CARNEY**  
Executive Vice President and Chief Operating Officer  
Cortland Bancorp and The Cortland Savings and Banking Company

**JAMES M. GASIOR**  
President and Chief Executive Officer  
Cortland Bancorp and The Cortland Savings and Banking Company

**JOSEPH E. KOCH**  
President, Joe Koch Construction  
Homebuilding, Developing and Remodeling Company

**JOSEPH P. LANGHENRY**  
Managing Principal, Langhenry Venture Partners  
Investment Firm

**THOMAS P. PERCIAK**  
Mayor, Strongsville, OH  
Government

**RICHARD B. THOMPSON**  
Executive, Therm-O-Link, Inc.  
Electrical Wire and Cable Manufacturer

## **DIRECTOR EMERITUS**

**K. RAY MAHAN**

## **CORTLAND BANCORP**

### **EXECUTIVE OFFICERS**

**JAMES M. GASIOR**  
President and Chief Executive Officer

**TIMOTHY CARNEY**  
Executive Vice President and Chief Operating Officer

**DAVID J. LUCIDO**  
Senior Vice President and Chief Financial Officer

**STANLEY P. FERET**  
Senior Vice President and Chief Lending Officer

# THE CORTLAND SAVINGS AND BANKING COMPANY

## OFFICERS

JAMES M. GASIOR President and Chief Executive Officer	DAVID J. LUCIDO Senior Vice President and Chief Financial Officer
TIMOTHY CARNEY Executive Vice President and Chief Operating Officer	STANLEY P. FERET Senior Vice President and Chief Lending Officer
JOSEPH G. JOHNSON Senior Vice President Credit Administration Officer	MICHAEL LIPKE Senior Vice President Special Assets/Loan Review
ROCCO PAGE Senior Vice President Retail Mortgage Banking Managing Officer	LANCE A. MORRISON Vice President General Counsel/Corporate Secretary and Director of Human Resources
MARK CHUEY Vice President Retail Mortgage Banking Officer	J. MICHAEL BRAINARD Vice President Commercial Banking Officer
DEBORAH L. EAZOR Vice President Operations Manager	KELLY EBERLY Vice President Retail Mortgage Banking Officer/Hudson
JOAN M. FRANGIAMORE Vice President Controller	KEITH MROZEK Vice President Special Assets and Loan Review
MELANIE CHRISTIE Assistant Vice President BSA/Compliance Officer/Director of Security	JOHN HEWITT Vice President Credit Manager
KAREN JINDRA Vice President Retail Mortgage Banking Officer	MICHAEL KANE Assistant Vice President Private Bank Officer/Hudson
KEITH STINSON Vice President Retail Mortgage Banking Officer	MICHELLE REILLY Vice President, Assistant Treasurer Mortgage Banking/ Funds Management
PETER OPPERMAN Vice President Private Bank Officer/Summit County	BARBARA R. SANDROCK Vice President Information Systems Manager
MARK E. TAYLOR Vice President Commercial Banking Officer	KAREN SHARP Vice President Mortgage Manager/Fairlawn
JACQUELINE TREHARNE Vice President Mortgage Operations Manager	ROBERT MEEK Vice President Treasury Management/Sales Representative
HEATHER J. BOWSER Assistant Vice President Collection Officer	CARRIE STACKHOUSE Vice President Commercial Banking Officer
BRENT MARAKAS Assistant Vice President Commercial Banking Portfolio Manager	JANET K. HOUSER Assistant Vice President Electronic Banking Specialist
KAREN MILLER Assistant Secretary Retail Operations Manager/Retail Training	DARLENE MACK Assistant Vice President Human Resources Manager
SHIRLEY A. WADE Assistant Vice President Executive Secretary	JAMES E. WELLINGTON Vice President Retail Mortgage Banking Officer
NATHANIEL J. MARSHALL Vice President Manager of Consumer and Private Bank Services	STANLEY MAGIELSKI Vice President Senior Commercial Banking Officer/Mahoning Valley Team Lead
NICOLE WHITSEL Assistant Vice President Risk Manager/Compliance	JULIANNA BEGALLA Assistant Vice President Marketing and Communications Officer